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Table Rock Fire, Boise, Idaho, July, 2016

**Planning for Wildfire in the Wildland-Urban Interface:
A Resource Guide for Idaho Communities
Discussion Draft v 1.0 (September, 2016)**

Stephen R. Miller, Thomas Wuerzer, Jaap Vos, Eric Lindquist, Molly Mowery, Tyre Holfeltz,
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Cover photo of Table Rock fire occurring in Boise, Idaho on July 1, 2016. Photo taken from the Harris Ranch subdivision. Courtesy of Lee Dillion.

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About This Report

In 2015, the U.S. Forest Service and the Idaho Department of Lands provided a grant to scholars at the University of Idaho and Boise State University to address planning for wildland-urban interface (WUI) wildfires throughout Idaho's varied terrain and communities. In the first phase of the project, law students in the Economic Development Clinic at the University of Idaho College of Law's Boise campus contacted all 200 Idaho cities and 44 Idaho counties to determine the status of existing wildfire regulations and incentives. In addition, the Clinic also collected and reviewed all 44 of Idaho's county wildfire protection plans, which were generally written between 2003 and 2007, as well as updates to those plans currently underway in several counties.

At the same time, Boise State University's Public Policy Research Center conducted a risk perception study to understand how Idahoans relate to wildfire risk. In the second and third years of the grant, the University of Idaho's Bio-regional Planning and Community Design program will join the effort, coordinating workshops around the State to assist local communities to find locally appropriate approaches to planning for wildfire in the WUI. As these conversations evolve, it is expected that this guide will also evolve. As such, this guide should be considered a discussion draft intended to provoke conversation about the best way to address wildfire throughout the outreach process. The vision of the collaborators is that the final guide will be completed in the third and final year of the grant, and will reflect the best solutions arising from the needs and conditions of local communities discovered over the next several years of conversations with those communities.

II. Executive Summary

The price of wildfire in Idaho has never been higher. Why? And what can Idaho communities do about it?

One way to measure the price of wildfire is the dollars spent on suppression alone. In 1995, fire made up 16 percent of the U.S. Forest Service's annual appropriation budget; in 2015, wildfire consumed more than 50 percent of the agency's budget, a benchmark reflective of steadily rising costs. A recent study of wildfires in Wyoming found that protecting just one isolated home can add \$225,000 to the overall cost of fighting a fire. But the price of fire is also told in lost recreational opportunities, scarred landscapes adjacent to city centers, loss of wildlife habitat, presence of invasive species, and increasingly, after-effects such as flood and landslides, that can cause even greater long-term harm to a community than the initial fire.

Wildfires occur in a variety of terrain, fuels, and weather. This guide is focused on wildfires that occur in the wildland-urban interface, or WUI (pronounced "WOO-ee"). The WUI is both a sociological and legal term that is fluid based upon context; however, a common definition used is that the WUI is where "humans and their development meet or intermix with wildland fuel." In 2006, the Forest Service adopted a similar policy definition, which states that "[t]he WUI is the area where structures and other human development meet or intermingle with undeveloped wildland."

Although fewer wildfires occur in the WUI compared to timberlands or rangelands, they are of increasing concern for several reasons. First, WUI fires are expensive to fight. Six of the ten most expensive fires in the past 100 years were WUI fires. Further, the WUI is relatively undeveloped. By one account, just 14 percent of the WUI is developed, leaving a vast potential region of growth that, if developed without wildfire in mind, could yield staggering costs as the West, and Idaho, grow. Finding ways to prevent "locking in" long-term, high cost development patterns, while still encouraging such development and growth, is a threshold issue facing Idaho property owners, taxpayers, and governments.

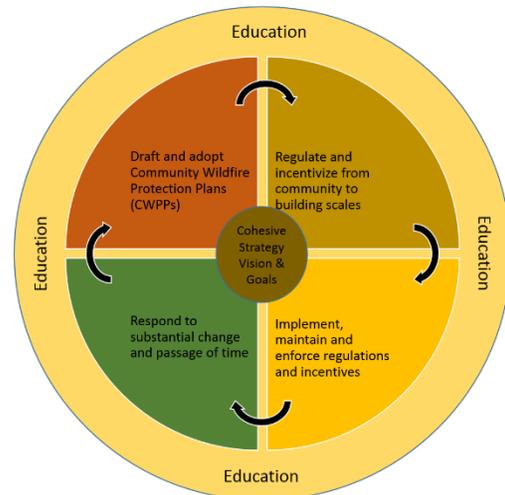
The amount of science and technology dedicated to addressing wildfire in the WUI issues is substantial: decades of research provide a rich array of knowledge about fire from which to draw. The missing piece of the puzzle is the planning and legal framework that would apply that knowledge to protect property and lives from fire. How can we use planning, law and incentives to implement what we already know about wildfire and keep our communities safe?

The proposal offered by this guide is a conceptual framework that local communities—governmental and non-governmental—can use over time. The framework, which this guide calls the "WUI Wildfire Planning Process," consists primarily of a four-step, cyclical planning process that revolves around the inter-governmental National Cohesive Strategy Vision and Goals for wildfire, and is supported at all times by education and outreach.

Although little known outside of the fire community, the National Cohesive Strategy Goals are simple, but important, goals established through a five year planning process (2009 to 2014) in which federal agencies, state, tribal and local governments, as well as non-governmental partners,

built a common vision of how the country could address wildfire. The three goals of the Cohesive Strategy are maintaining landscapes; developing fire-adapted communities; and developing a multi-jurisdictional wildfire response based upon risk-based decisionmaking. These Cohesive Strategy Goals are the core around which the WUI Wildfire Planning Process revolves.

The four active steps of the WUI Wildfire Planning Process are illustrated below (also Figure 6 in body of text). They are: draft and adopt a community wildfire protection plan (CWPP); regulate and incentivize the built environment at all scales; implement, maintain and enforce regulations and incentives; and respond to substantial changes such as wildfires or the passage of time. The conceptual framework illustrates a progression of planning that leads to successful and well-informed results; however, wildfire experts know well that variations on these components and order can also yield successful wildfire planning results. For purposes of beginning a dialogue about best practices for wildfire planning, the framework forms the backbone of the guide from which other discussions grow.



Community wildfire protection plans are an excellent place to begin wildfire planning for several reasons. A creature of federal law, CWPPs actually permit local communities to have a say in how wildfire on federal lands is maintained, which is a major concern for many Idaho communities. Further, CWPPs make communities eligible for federal funding opportunities; such opportunities will grow as CWPPs are increasingly integrated into county All Hazard Mitigation Plans and, if properly updated every five years, will make wildfire hazards eligible for even more funds. CWPPs are also important because they provide a framework for identifying wildfire risk at an ecological scale that permits local communities to think beyond their jurisdictional boundaries precisely because the process includes federal, state, tribal, and local government and non-governmental participants. One of the limiting factors in the success of CWPPs in Idaho in the past has been that they have been conducted solely at the county level and by a select group of fire community individuals. While county CWPPs are clearly still valuable, Idaho Department of Lands seeks to encourage the preparation of CWPPs at multiple scales, as contemplated by federal law and practiced in other Western states. For instance, a county-wide CWPP may be supplemented by a city CWPP and even a neighborhood CWPP conducted by a homeowner’s association that has a particular wildfire hazard. Each scale permits a different level of preparedness and analysis that is valuable. CWPPs could also be more valuable by increasing the scope of participation to include others that will facilitate wildfire decisions in other parts of the process. This would mean including local officials, local staff, and a proposed citizens’ advisory board, in addition to the traditional fire staff, in the CWPP process.

The second step in the process is for a local jurisdiction—a city or county—to decide on the package of regulations and incentives it will utilize to address the identified wildfire risk. Doing so requires local governments to decide whether to allow development in areas of high

wildfire risk and, if they do so, to decide how to respond with local values related to regulatory versus incentive-based approaches and the successes of each in relation to the risk. The guide discusses several approaches that have worked well in other communities, which include: seeking co-benefits, such as open space, that may matter locally; seizing upon interest that often arises after a wildfire; choosing an approach that the community can support; and anticipating for wildfire's after-effects, especially flood, landslide, aesthetic harm, and economic development issues. There is no one-size-fits-all approach to wildfire. For some communities, a simple approach could be to focus on the basics: defensible space, metal roofs, and weed ordinances to reduce fuels. This simple, effective solution can work very well in rural areas. More urban areas will likely want a solution that fits the complexity of the built environment. Regulatory tools are discussed at the community scale, such as comprehensive plans, specific plans, and land use zoning overlay districts; the neighborhood and subdivision scale; the individual site or project scale; and the building scale. Non-regulatory tools are equally important and can supplement regulatory tools, or stand-alone. They include the popular Firewise program, which is a valuable educational tool but which often yields uncertain results; insurance, which has a role to play in pricing fire risk; and homeowner's associations, which are increasingly popular in Idaho and have served as a vehicle for local communities to provide enhanced wildfire security for their community independent of government regulation.

Once regulations and incentives have been adopted, they must be applied to specific projects and enforced over time; similarly, incentive programs must be implemented and examined to determine efficacy. This third step may be the most important—it is where ideas yield results—but it is also an especially hard step for wildfire. That is because many of the factors associated with wildfire risk reduction require maintenance—of buildings, of landscaping, of cleanliness near structures—that collides with the entitlement-driven development process that prioritizes one-time, up-front conditions of approval. This section of the guide begins by discussing the importance of communication between local government departments to address precisely this issue. The section then turns to the types of enforcement mechanisms that are being tried by some Idaho communities, but also communities throughout the West. These include homeowner association CC&Rs that make local governments the third-party beneficiaries of wildfire-related maintenance agreements; using the development agreement process to plan for wildfire upfront; using zoning to require maintenance; as well as re-tooling nuisance ordinances to address wildfire. The section also discusses some non-enforcement mechanisms, such as disclosure techniques that prioritize informing property owners of the wildfire risk on their lands, and how to mitigate it. Other approaches include cities that conduct wildfire fuel reduction work for private property owners so long as they sign a maintenance agreement for on-going upkeep of the mitigation.

The fourth, and final step in the process occurs when there is a substantial event, such as a wildfire, or even a secondary effect like a flood or landslide, that causes the local community to realize that it needs to re-evaluate, and re-visit its wildfire planning strategy. In addition to such an event, the passage of time becomes its own reason to revisit a wildfire planning strategy, if only because WUI demographics change quickly; an exurban community one year could be a bona fide bedroom community in a decade. In addition, as Idaho moves to integrate CWPPs into All Hazard Mitigation Plans, the CWPPs will need to be reviewed every year and revised every five years for compliance with AHMP regulations. The combination of wildfire events and the passage of time

give local communities a number of reasons to revisit their approach to planning, determine what has worked and what has faltered, and create an amended plan going forward.

Although a community's planning process may not follow this conceptual framework precisely, the frame provides a way to contemplate how to use all of the tools available to maximize wildfire preparedness. Along the way, education remains a vital component of wildfire planning, both to communicate the nature of wildfire risk but also what it means to be prepared to face that risk. To that end, Appendix A to this guide provides significant excerpts of codes from Idaho local governments, and some other local governments from throughout the West, to serve as models for similarly-situated communities.

This discussion is also enriched by the inclusion of a robust risk perception survey, which was conducted by surveying nearly 20,000 Idaho households in wildfire priority areas throughout the state in Fall, 2015 and Winter, 2016. The guide provides significant helpful data worthy of review. The most telling questions, however, may be those that reflect sentiment toward local regulation of fire. Approximately 55% of respondents stated that WUI codes should differ from other areas that are less fire prone. Support for more restrictive code and regulation exists with 46% answering yes, 23% maybe, and 30% no. When asked whether they would be willing to pay a premium to be more "Firewise," about 15% stated yes, about 36% maybe, and probably not combined with definitely not are almost 49%. When asked whether they would support legislation to be more "Firewise," about 37% stated yes, about 27% maybe, and probably not combined with definitely not are almost 35%.

A strong majority (68%) of respondents stated that they see themselves responsible to protect home and property. A small minority (18%) of respondents stated that they see the local fire department as responsible to protect their home and property. About 43% believe that the city or county government is responsible to protect home and property, whereas 37% do not believe this is the city or county's role, and about 18% are not sure. About 63% believe that the city or county government is responsible to protect public lands, whereas 23% do not believe this is the case, and about 19% are not sure about it.

The survey data indicates that there is a political base for both regulation- and incentive-based approaches to wildfire, but local communities will have to make the case to those who are on the fence and unsure that all would be better off with some wildfire planning. This is redoubled by the fact that additional survey results indicate that many believe that their own homes are safe despite acknowledging nearby fire risk to others.

Making the case for wildfire planning requires understanding the problem and the methods we have to solve it. This guide is a place to start, but it is just a beginning. This version is labeled a discussion draft. Over the next several years, the research team will host a variety of educational engagements across the state. The guide will change in response to local feedback and the conversations that evolve about fire over time. The goal will be simple: to find local answers that keep wildfire from exacting the price that is inevitable in the status quo, something none of us can afford.

III. The Risk of Wildfire in Idaho

Wildfire is a part of life for almost all Idaho communities; some of Idaho's communities are especially prone to wildfire. A recent study found that Boise had thirty-two wildfires within just two miles of the city's border between 2000 and 2015, which ranked fourth in the country for prevalence of wildfires near larger American cities. Pocatello ranked eighth with twenty-two wildfires in the same time frame.¹ Many of Idaho's smaller communities face similarly daunting wildfire challenges. A map of the last fifteen years of wildfires around McCall show the city almost ringed by a legacy of fire.

Idaho's communities must also address wildfire occurring on and near federal and state public lands, both of which bring fire-fighting resources to communities but also potentially conflicting priorities. These potentials for collaboration, and conflict, are on further display as wildfire prevalence has increased, and as development patterns in the State edge further into the WUI.

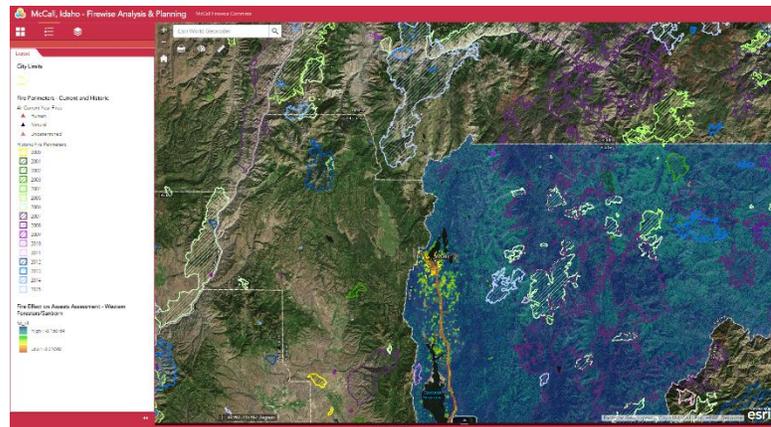


Figure 1. GIS Map of Wildfires from 2000-2015 Near McCall, Idaho.

This tension is evident in the federal government's unprecedented spending on wildfire. In 1995, fire made up 16 percent of the U.S. Forest Service's annual appropriated budget; in 2015, wildfire consumed more than 50 percent of the agency's budget, a benchmark reflective of steadily rising costs.² At the same time, while 91 percent of federal appropriations for wildfire management are allocated to protect federal lands, it is increasingly clear that federal funds are being used to protect private homes and other structures "adjacent to federal lands [that] can significantly alter fire control strategies and raise costs."³ In a survey of Forest Service land managers, estimates were that "[fifty] to [ninety-five] percent of firefighting costs were attributable to protection of private property."⁴ Moreover, a study conducted for the Montana legislature found that firefighting costs are "highly correlated

¹ Ella Koeze, *Cities In Southern California Can't Escape The Fire At Their Door*, FIVETHIRTYEIGHT.COM (July 29, 2016), http://fivethirtyeight.com/features/cities-in-southern-california-cant-escape-the-fire-at-their-door/?ex_cid=538email.

² U.S. FOREST SERVICE, *The Rising Cost of Wildfire Operations: Effects on the Forest Service's Non-Fire Work 2* (2015), <http://www.fs.fed.us/sites/default/files/2015-Fire-Budget-Report.pdf>.

³ Ross Gorte, Headwaters Econs., *The Rising Cost of Wildfire Protection* 7, 14 (2013), <http://perma.cc/W4GX-PNGF>.

⁴ OFFICE OF THE INSPECTOR GENERAL, U.S. DEP'T OF AGRIC. AUDIT REPORT: FOREST SERVICE LARGE FIRE SUPPRESSION COSTS ii (2006), <http://www.usda.gov/oig/webdocs/08601-44-SF.pdf>, archived at <http://perma.cc/9YDE-LS2P>; see also *Urban Wildland Interface Communities Within the Vicinity of Federal Lands That Are at High Risk from Wildfire*, 66 Fed. Reg. 752,753 (Dep't of Agric. Jan. 4, 2001) (notices) (defining the WUI as "where humans and their development meet or intermix with wildland fuel").

with the number of homes threatened.”⁵ A recent study of wildfires in Wyoming found that protecting just one isolated home added as much as \$225,000 to the overall cost of fighting a fire.⁶

The rising cost of fighting fires and, in particular, those that threaten private property, has many factors including terrain, fuels, and weather.⁷ Increasingly, though, attention is being directed to the rapid growth of remote developments—especially those not designed or maintained with wildfire in mind—at the urban periphery often referred to as the “wildland-urban interface,” or WUI (pronounced “Woo-E”). An example of WUI development patterns in Idaho include those residential developments in the Boise foothills, an area which Ada County includes in its definition of the county’s WUI.⁸ There is good reason why attention is turning to these types of developments: six of the 10 most expensive fires in the past 100 years were WUI fires despite the fact that WUI fires account for just a small fraction of overall fires fought in any given year.⁹

According to one widely used WUI definition, only 14 percent of the WUI is developed.¹⁰ If current development patterns continue, development in the WUI will almost certainly grow substantially, resulting in even further increases in wildfire protection costs. With the Mountain West perennially ranking as one of the country’s fastest growing regions, this WUI development is certain to grow over time. As this growth occurs, certain mismatches in process will be exacerbated. Local governments retain authority to approve WUI development through applications of local zoning, building, fire, and subdivision codes even though it is typically the federal government that bears the greatest burden in protecting—and has the greatest resources to protect—those developments from wildfire. A few local governments in the West are integrating a deep knowledge of wildfire protection policy into their planning and development processes. More collaboration is necessary to build an enduring solution to wildfire near development.

⁵ HEADWATERS ECONS., MONTANA WILDFIRE COST STUDY TECHNICAL REPORT 18 (2008), <http://perma.cc/D7U5-BBUA>; see also PATRICIA H. GUDE ET AL., HEADWATERS ECONS., EVIDENCE FOR THE EFFECT OF HOMES ON WILDFIRE SUPPRESSION COSTS 14 (2011), <http://perma.cc/Y9CB-R3AY> (finding the same in a similar study conducted in California).

⁶ Anna M. Scofield, *Residential Development Effects on Firefighting Costs in the Wildland-Urban Interface* 3 (2015), <http://wyoextension.org/agpubs/pubs/B-1268.pdf>.

⁷ William E. Mell et al., *The wildland-urban interface fire problem – current approaches and research needs*, 19 INT’L J. OF WILDLAND FIRE 238, 239 (2010).

⁸ COUNTY OF ADA, IDAHO, *Wildland Urban Fire Interface* (July 21, 2011), https://adacounty.id.gov/Portals/0/DVS/Bld/Map/Map_WUFI.pdf.

⁹ See HEADWATERS ECONS., *The Rising Cost of Wildfire Protection* 1 (2013), <http://headwaterseconomics.org/wphw/wp-content/uploads/fire-costs-background-report.pdf>.

¹⁰ HEADWATERS ECONS., *Solutions to the Rising Costs of Fighting Fires in the Wildland Urban Interface* 5 (Dec. 2009), <http://headwaterseconomics.org/wphw/wp-content/uploads/HeadwatersFireCosts.pdf>.

IV. The Perception of Wildfire Risk in Idaho

Along with the review and analysis of Idaho local government wildfire codes, researchers in this study conducted a Risk Perception Survey (RPS) of Idaho communities to better understand the relationship of Idahoans to wildfire. The RPS is integral part of analyzing and setting a baseline on risk perception among households across the State of Idaho. The RPS used a social science-based approach in evaluating and assessing the current status in risk perception and related hazard readiness on the issues of wildfires in Idaho. A planned follow-up survey in 2018 will present the great opportunity in measuring the potential changes in perception and behavior among residents concerning wild fires and related hazards.

A. About the Risk Perception Survey

To fulfill the statewide and regional perspective, the survey aims at five of Idaho's 13 Priority Landscape Areas (PLAs) across the 44 counties and 200 cities. These five areas are designated as the highest areas of need, and, are exemplar of many other Idaho rural landscapes that are at high risk for development and wildfire yet lack planning capacity to deal with these issues.

These regions follow the coverage of five Priority Landscape Areas (PLAs) as noted in the Idaho Forest Action Plan. They represent Idaho's landscapes in topography, vegetation, and pattern of human settlement, and create a basis to easily transfer results from the RPS' PLAs to comparable regions in Idaho as well to other fire prone states in the Intermountain West and U.S. West coast.

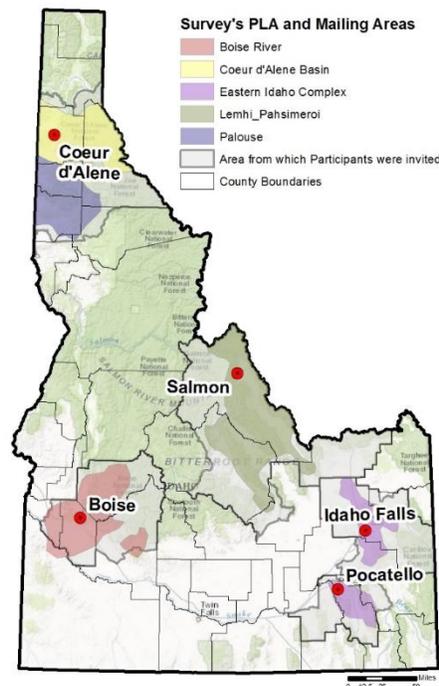


Figure 2. Selected Priority Landscape Areas and Survey Coverage.

For the purpose of this project, an invite-by-mail-online-questionnaire process was selected. This means that participants for the survey are invited via postcard and asked to participate in the survey using a link to an online questionnaire. For sampling and mailing purposes, the larger Coeur d'Alene area (Coeur d'Alene Basin and Palouse PLA) is aggregated into one region. Figure 3 shows the PLAs and the mailing areas. For each area, a random sample of registered mailing addresses was taken and controlled for primary residences. In sum, a total of 19,599 Idaho households (mailing addresses) were invited via a postcard-invitation in the beginning of December 2015. A reminder postcard was mailed a few weeks later encouraging participation.

The questionnaire asked across 59 questions about the characteristics of a participant's house, their interaction with neighbors and community, their actions and activities of mitigation efforts (done and planned), and sets of demographic and socio-economic questions, as well as question sets that measure attitude and trust towards i.e. mitigation actions by state or federal agencies.

B. Survey Response Statistical Representation

A total of 634 responses were recorded and error-checked by the RPS team. As a result, from cleaning and validation, and removal of redundant responses due to multiple attempts, the final dataset contains 593 valid and unique responses. It is important to note that most respondents actually finished the questionnaire and therefore increasing the general strength of following statistics. For example, the last questions received a completion above 80%, meaning that respondents viewed the question and clicked an answer. These questions contain information about age, gender, political affiliation, and critical assessment about trust. These are questions on which participants are usually hesitant to answer.

This RPS delivers 593 responses providing a strong statistical dataset that presents a relative high completion rate and statistical significance. The RPS shows with 593 responses a confidence interval of 95% +/- 4.02% (using 585,259 households as base; reported by the US Census for 2014) and, therefore, results are generalizable for all Idaho households.

C. Demographics of the RPS Respondents

The average duration of living in the current residence for the 552 respondents that answered the question was 14 years. Most RPS respondents were homeowners (92%), and about one-fourth were organized within an HOA (24%). About one-third of the sample held a college degree, while those with college (17%) and master's degrees (18%) were also well represented. Respondents vary in age with approximately one-third younger than 55 years (35%), one-third 55-64 years, and about one-third over 65 years. The respondents were primarily White (88%) and Native American (11%). Incomes varied, with the most frequent household income ranges stated being between \$50,000 and \$74,999 (20.8%), followed by incomes between \$75,000 and \$99,999 (17.7%), and \$100,000 and \$150,000 (16.5%). About two-fifths (38.2%) of the RPS reported their combined household income below \$50,000. Respondents were 44% female and 66% male. With regard to political affiliation, 25% noted that they consider themselves moderate liberal to strong

liberal, about 20% noted being moderate, and 55% stated that they are moderate conservative to strong conservative.

D. Experience and Knowledge of Wildfire

Approximately one in eight respondents (13.8%) had a home impacted by a wildfire in the past, while one in ten (10%) indicated their current home had been impacted. About two-fifths of respondents (38.2%) knew about the existing fire-prone area by themselves, while very few received information about wildfires from cities and counties (2.3%). Nearly three-quarters of respondents never talked to their neighbors about wildfire prevention activities. The Firewise program was known by just 35% of the participants, and fewer than one-in-ten (8.6%) ever attended a workshop regarding wildfire hazards. The most prominent information services for wildfire were websites (17%), brochures (16.1%), radio/tv (15.4%), and recommendations (14.0%).

E. Perception and Awareness of Wildfire

About half of the respondents believe they do not live in an area vulnerable to wildfire. In the *general area*, about 21% rank risk of fire in their area as very low to low, 28% as 'moderate', and more than 51% rank as high and very high. In the *neighborhood area*, about 60.5% rank risk of fire as very low to low, 22.6% as 'moderate', and 17% rank as high and very high. For respondents *home or property*, about 70.5% rank risk of fire as very low to low, about 19.8% as 'moderate', whereas about 9.5% rank as high and very high.

At the point of purchasing, 19.1% noted that they have been not at all aware of wildfire risks for their home. At the point of purchasing, 31.8% noted that they have been very aware of wildfire risks overall.

Today, 6.7% noted that they have been not at all aware of wildfire risks, while 47.1% noted that they have been very aware of wildfire risks

Respondents tend to believe that the *general area* is somewhat prepared or very prepared (65.9%) for wildfire. There is a fair positive attitude that the *neighborhood/community* is somewhat prepared or very prepared (51.5%). There is an extreme positive attitude that *respondent's home* is somewhat prepared or very prepared (70.9%).

About half of the households have an emergency preparedness kit.

F. Home or Property Wildfire Preparedness

Approximately 29% reported that their house has a metal roof. When asked whether participants would plan to upgrade to current fire building codes, about 58% stated *no* and only 10% stated *yes*. Approximately 15% stated that they recently upgraded to current code, and 18% stated that their reason for not being upgraded to code is that they "Don't have time or money to do so." Common actions taken for wildfire season are *Raked the Leaves* (20%), *new roof installed* (20%), *cleaned chimneys* (12.6%), and *posted a clear visible address* (16%).

G. Attitudes toward Regulations

Approximately 55% of respondents stated that WUI codes should differ from other areas (less fire prone). Approximately 44% do not believe that living in fire-prone areas is somewhat of an entitlement, while 29% stated maybe, and 26.1% stated probably yes and definitely yes. Support for more restrictive code and regulation exists with 46% yes, 23% maybe, and 30% no. When asked whether they would be willing to pay a premium to be more “Firewise,” about 15% stated yes, about 36% maybe, and probably not combined with definitely not are almost 49%. When asked whether they would support legislation to be more “Firewise,” about 37% stated yes, about 27% maybe, and probably not combined with definitely not are almost 35%.

A strong majority (68%) of respondents stated that they see themselves responsible to protect home and property. A small minority (18%) of respondents stated that they see the local fire department as responsible to protect their home and property. About 43% believe that the city or county government is responsible to protect home and property, whereas 37% do not believe this is the city or county’s role, and about 18% are not sure. About 63% believe that the city or county government is responsible to protect public lands, whereas 23% do not believe this is the case, and about 19% are not sure about it.

V. Defining the Wildland-Urban Interface, and Why It Matters

The “wildland-urban interface” is a term commonly used but seldom precisely understood. There is good reason for that: the meaning of the term varies tremendously. There are at least three important ways to think about the WUI: as a policy definition; as a legal definition; and as a variable concept that changes along with development patterns over time. This variation does not indicate the term is “meaningless”; it does mean, however, that context matters and such context must be closely evaluated throughout the WUI wildfire planning process.

The WUI as a policy definition emerged primarily out of the work of demographers and sociologists that were trying to give form to a development phenomenon happening across the country. People were not just moving from the cities to suburbs, they were moving further out into agricultural lands and, in western states especially, onto the ridgelines of foothills and into areas adjacent to federal lands that previously had little habitation. Different approaches to defining the WUI emerged, which included prioritizing either a designated area on a map or a set of conditions which contributed to wildfire risk.¹¹ In 2001, a federal report adopted a definition of the WUI as “where humans and their development meet or intermix with wildland fuel.”¹² In 2006, the Forest Service adopted a similar policy definition that: “The WUI is the area where

¹¹ See OFFICE OF INSPECTOR GENERAL, U.S. DEP’T OF AGRIC., AUDIT REPORT: FOREST SERVICE LARGE FIRE SUPPRESSION COSTS i n. 1 (2006), <http://www.usda.gov/oig/webdocs/08601-44-SF.pdf>, archived at <http://perma.cc/9YDE-LS2P>; see also *Urban Wildland Interface Communities Within the Vicinity of Federal Lands That Are at High Risk from Wildfire*, 66 FED. REG. 752,753 (Dep’t of Agric. Jan. 4, 2001) (notices) (defining the WUI as “where humans and their development meet or intermix with wildland fuel”); HEADWATERS ECONS., *Solutions to the Rising Costs of Fighting Fires in the Wildland-Urban Interface* 5 (2009), <http://perma.cc/45TW-GLVU> (In the western states, “on average 3.2 acres per person are consumed for housing in the wildland-urban interface, compared to 0.5 acres per person on other western private lands.”).

¹² *Urban Wildland Interface Communities within the Vicinity of Federal Lands That Are at High Risk from Wildfire*, 66 Fed. Reg. 752,753 (Dep’t of Agric. Jan. 4, 2001) (notices).

structures and other human development meet or intermingle with undeveloped wildland. Wildland urban interface is any area containing human developments, such as a rural subdivision, that may be threatened by wildland fires.”¹³ Since that time, other researchers have sought to quantify that definition, with some researchers offering alternative WUI definitions, as illustrated in the graphic below:¹⁴

Table 1. Definition of interface, intermix, and occluded WUI communities and resulting land area from the Federal Register (2001), Stewart *et al.* (2003) and Theobald and Romme (2007)
For reference, the land area of the contiguous US is 808 million hectares; 1 ha = 2.47 acres. HU, housing units

	Description	Federal Register (2001)	Stewart <i>et al.</i> (2003)	Theobald and Romme (2007)
Interface	Clear demarcation between structural and wildland fuels	>7.5 HU ha ⁻¹ or >1 person ha ⁻¹	>1 HU per 16 ha and <50% vegetation	>1 HU per 2 ha and >10 ha patch
Intermix	Structures dispersed; continuous wildland fuels	>1 HU per 16 ha or 11 < people ha ⁻¹ < 96	>1 HU per 16 ha and >50% vegetation	1 HU per 2 ha to 1 HU per 16 ha
Occluded	Structures surround wildland fuel area	<400 ha wildlands	Not considered	Not considered
Distance to untreated wildlands ^A		Not specified	2.4 km	0.8, 1.6 and 3.2 km
Extent of WUI			70 million ha	47 million ha

^ABy untreated wildlands, we mean no fuel treatments have been implemented to mitigate wildland fire risk to the WUI community.

Figure 3. Three Sociological Approaches to Classifying the WUI.

Independent of these policy definitions, there are additional legal definitions of the WUI that are especially important for wildfire planning. Many wildfire-related laws and regulations apply specifically to the WUI, but different laws can have different requirements for how the WUI is defined.

For instance, the Healthy Forest Restoration Act of 2003 (HFRA) provides a complicated definition of the WUI. On the one hand, if a community has adopted a WUI definition in a CWPP, federal agencies will abide by that determination. If no community has not done so, however, an alternative default definition is supplied.¹⁵

¹³ OFFICE OF INSPECTOR GENERAL, U.S. DEP’T OF AGRIC., AUDIT REPORT: FOREST SERVICE LARGE FIRE SUPPRESSION COSTS, at i n. 1 (2006), available at <http://www.usda.gov/oig/webdocs/08601-44-SF.pdf>.

¹⁴ Travis B. Paveglio et al, *Categorizing the Social Context of the Wildland Urban Interface: Adaptive Capacity for Wildfire and Community “Archetypes,”* 61(2) FOR. SCI. 298, 300 (2014).

¹⁵ The HFRA definition is as follows:

(16) Wildland-urban interface

The term “wildland-urban interface” means--

(A) an area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a community wildfire protection plan; or

(B) in the case of any area for which a community wildfire protection plan is not in effect--

(i) an area extending ½ -mile from the boundary of an at-risk community;

(ii) an area within 1 ½ miles of the boundary of an at-risk community, including any land that--

(I) has a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community;

(II) has a geographic feature that aids in creating an effective fire break, such as a road or ridge top; or

(III) is in condition class 3, as documented by the Secretary in the project-specific environmental analysis; and

(iii) an area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuel reduction to provide safer evacuation from the at-risk community.

This definition of WUI is very important to wildfire planning under HFRA; indeed, some funding through the law can only go to areas defined as the WUI. As a result, this legal definition of WUI has an important role to play in whether local communities are eligible for funding under HFRA. If a local community drafts a community wildfire protection plan (CWPP), that community can define the WUI for purposes of HFRA at a local level and in a manner generous to the community. If the community fails to complete a CWPP, this default definition will impose a very limited interpretation of the WUI. For this reason, Idaho has assisted every county in drafting a CWPP. Take, for example, the definition of the WUI from this recently-completed Teton County CWPP:

This CWPP map presents a legal WUI definition for Teton County that covers all of the private property—including urban areas, commercial properties, infrastructure and other community amenities—and some federal lands in the county. This illustrates that the legal definition of the WUI under HFRA can vary substantially from the default rule when a community undertakes to define the process. This map also illustrates that the legal definition of the WUI for purposes of HFRA provided by this map can also vary from policy definitions of the WUI, which would typically not include urban areas such as the cities within the county.

Further, it should be noted that legal definitions of the WUI can vary by statute or even executive order. For instance, in May, 2016, President Obama signed an executive order that required federal buildings in the WUI to meet certain wildfire standards defined by the order.¹⁶ However, the order also stated that, “[w]hen determining whether buildings are located within the wildland-urban interface, agencies shall use the U.S. Department of Agriculture Forest Service’s, ‘The 2010 Wildland-Urban Interface of the Conterminous United States,’ or an equivalent tool.”¹⁷ Here is how that map defines the WUI in Teton County:

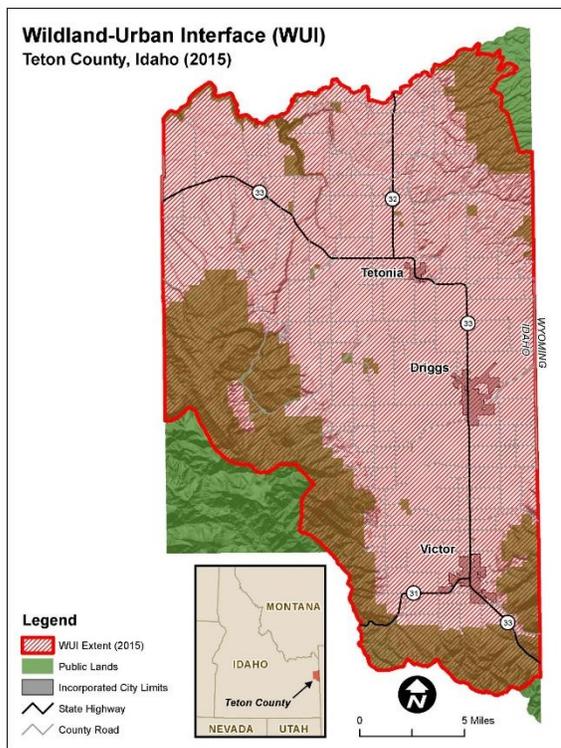


Figure 4. Map of WUI Designation in 2016 Teton County CWPP.

¹⁶ Ex. Order No. 13728, 81 Fed. Reg. 32223 (May 18, 2016), available at <https://www.whitehouse.gov/the-press-office/2016/05/18/executive-order-wildland-urban-interface-federal-risk-mitigation>.

¹⁷ Sebastián Martinuzzi et al., THE 2010 WILDLAND-URBAN INTERFACE OF THE CONTERMINOUS UNITED STATES (2015), <http://www.nrs.fs.fed.us/pubs/48642>.

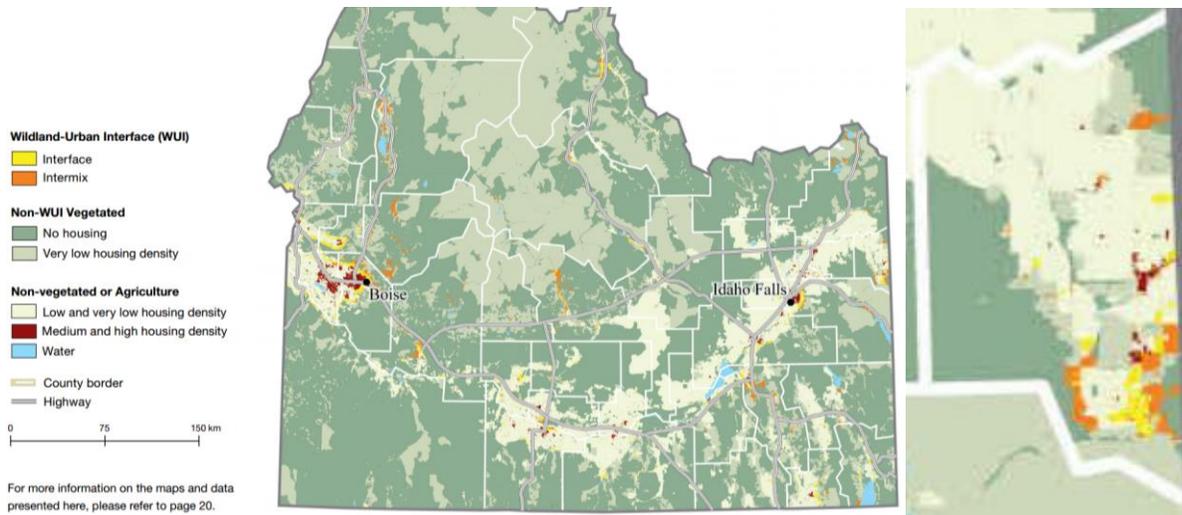


Figure 5. Map of WUI from the USDA's 2010 Wildland-Urban Interface of the Conterminous United States.

In this legal WUI definition that applies to the President's executive order, there is only a small portion of Teton County in the WUI even though, for purposes of HFRA, all private property in the county is within the WUI.

The purpose of investigating this difference is to illustrate that legal definitions of the WUI can vary, even among legal tools. In planning for wildfire, it is important to make sure that all relevant legal considerations are addressed in defining the WUI both for compliance with federal and state laws, but also for integrating with planning, building, and fire functions of local governments. For instance, coordinating the CWPP definition of the WUI with a local government's definition of the WUI in its comprehensive plan and development codes facilitates the alignment of federal, state and local policies. In particular, it ensures that different departments within larger local governments—such as fire departments, planning departments, and building departments—are working toward a common vision of the areas subject to WUI wildfire risk and thus necessitating additional wildfire preparedness.

Finally, it is important to remember that the concept of the WUI is a fluid one. As development occurs, an area that was once the WUI may become a bona fide suburb or even a town center of its own. Similarly, as properties undertake mitigation efforts such as hazardous fuel treatments or building construction changes, WUI risk levels can change. For this reason alone, WUI wildfire planning requires an ongoing process that responds to the pace and scale of development along the urban fringe.

VI. The WUI Wildfire Planning Process in Idaho

There are already a number of excellent guides to wildfire that exist, and many of them are readily applicable to Idaho communities. However, despite the knowledge of highly-effective, relatively simple solutions to prevent wildfire, there has been little implementation of these solutions both in Idaho and throughout the West. The goal of this guide is not to reinvent already proven techniques for wildfire planning; instead, the goal is to fashion a procedural approach to implementing effective, simple approaches to wildfire planning that also allows communities to choose specific tools that fit with local values. Larger communities, as well as those with higher property values, are more likely to favor regulatory or private contractual approaches, while rural communities are more likely to favor incentives or weed abatement ordinances. No matter the tools used, the procedure that is offered in this section will help all communities conceptualize an on-going, cyclical engagement with wildfire that can keep the community prepared.

VII. Procedural Principles

This proposed cycle of wildfire planning seeks to address existing procedural challenges by encouraging a process that embodies the following procedural principles:

Engage public and encourage public ownership of the WUI wildfire planning process. Even in areas of high wildfire threat, public meetings related to CWPPs or other fire planning often see low attendance. This should not be so. New approaches to engaging the public and encouraging the public to own and drive wildfire preparation and planning is vital to the on-going success of any fire effort.

Encourage different levels of government to speak with each other and, especially, in a way that mobilizes the public. Wildfire planning for the WUI has a history of strong collaboration between the fire communities in the federal, state and local governments. This process seeks to build on that collaboration by taking it further and encouraging collaboration beyond the fire community to include disaster preparedness at all levels of government, as well as planning and building departments, as well as local officials and the public.

Break “silos” at the federal and state level. At the federal and state levels, this inclusiveness requires participation not just of traditional wildfire participants like the U.S. Forest Service and the U.S. Bureau of Land Management, but also disaster preparedness staff from the U.S. Federal Emergency Management Agency, which oversees All Hazard Mitigation Plans. Respective Idaho state agencies should also have representation, such as the Idaho Department of Lands and the Idaho Office of Emergency Management. A good sign of cooperation here is a memorandum of understanding, already in place, between IDL and OEM to incorporate CWPPs into county All Hazard Mitigation Plans, which has significant benefits.

Break “silos” at the local government level. In our research, we repeatedly heard from cities that “the county took care of wildfire”; planning and building departments routinely told us that wildfire was the fire department’s job. This guide seeks to encourage both counties and cities to participate equally in WUI wildfire preparedness. The guide also seeks to encourage equal

participation by planning and building department staff, as well as local planning and zoning commissioners and other local officials, which are tasked with approving developments in the WUI subject to high wildfire risks.

Define an on-going and cyclical process. Since wildfire is an on-going part of the Idaho landscape, so too must wildfire planning be an on-going part of life in Idaho. Wildfire planning is a cycle that learns from mistakes, reevaluates changed circumstances, and puts in place a better strategy for the next time a wildfire threatens a local community.

Offer a range of alternatives for addressing wildfire. While this guide seeks to encourage an on-going, cyclical approach to wildfire planning, it offers a range of strategies, both regulatory and incentive-based, that fit the varied cultures of Idaho's big cities and small towns. The process of planning does not dictate the tools used or the implementation.

Prioritize knowledge-sharing among Idaho communities. Wherever possible, the proposed regulations and incentives are illustrated with examples from Idaho communities that are already engaging that wildfire tool. The purpose in doing so is to provide copious examples, and real-world text in Appendix A, that shows how an Idaho community made it happen. Where no Idaho community was known to be implementing a tool otherwise used throughout the West, an example from a non-Idaho community is included.

In accordance with these principles, we suggest that the wildfire planning process can be imagined as below:

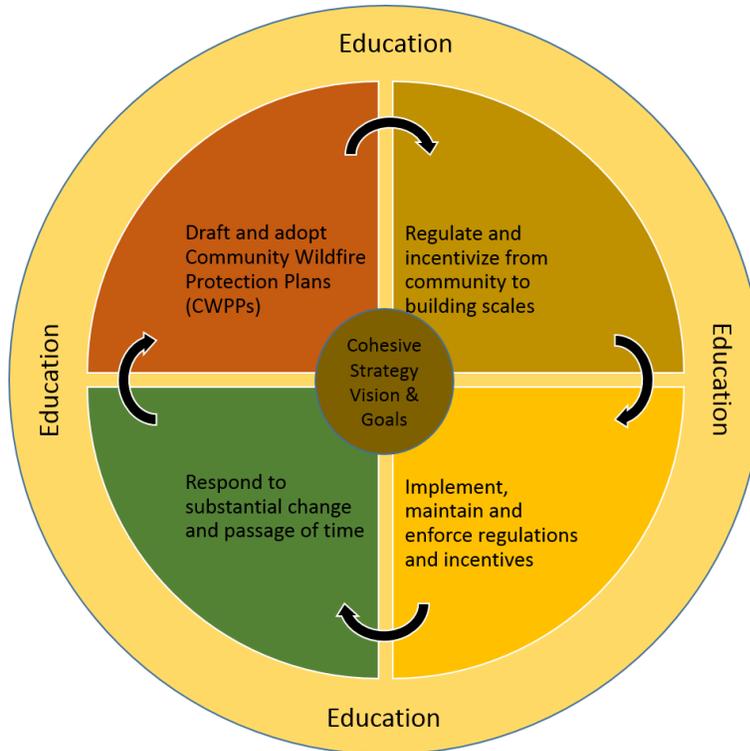


Figure 6. The Wildfire Planning Process.

This illustration, which we call the WUI Wildfire Planning Process, suggests that local planning for wildfires (i) consists primarily of a four-step, cyclical planning cycle that (ii) revolves around the inter-governmental National Cohesive Strategy Vision and Goals for wildfire, and (iii) is supported at all times by education and outreach. This guide now investigates each of these parts of the WUI Wildfire Planning Process.

This guide presents the WUI Wildfire Planning Process as a sequence of four steps. This should be viewed as a conceptual framework to facilitate learning the relationships between the components of wildfire planning. In practice, effective wildfire planning may not always progress in a steady march through these four steps; rather, implementation of a zoning regulation may yield new insights and require amendment, which could lead to revisiting and amending that ordinance. Alternatively, a comprehensive plan update may lead a community to realize they need to conduct a CWPP, or a wildfire may lead a community to adopt new voluntary measures immediately even if they have not conducted a CWPP. Practice requires adjustment to facts on the ground, and those real world factors will determine how wildfire planning happens in a community. Nonetheless, this conceptual framework is offered in an attempt to give form to the various aspects of a coherent wildfire planning program in a community, especially one that will respond to change over time and adapt accordingly.

VIII. The Goals of WUI Wildfire Planning: The Cohesive Strategy Goals

The Cohesive Strategy resulted from a five-year process (2009 to 2014) in which the federal agencies primarily responsible for fire—the Department of Interior, which includes the

Bureau of Land Management, and the Department of Agriculture, which includes the U.S. Forest Service—came together with other federal agencies, state, tribal and local governments, as well as non-governmental partners, with the idea of building one common vision of how the country would address wildfire.¹⁸ The process, mandated by the Federal Land Assistance, Management and Enhancement Act of 2009 (FLAME Act), ultimately resulted in the production of the *The National Strategy: The Final Phase in the Development of the National Cohesive Wildland Fire Management Strategy* (the “National Cohesive Strategy” or “Cohesive Strategy”).¹⁹ The Cohesive Strategy represents the collective approach to wildfire agreed upon by governmental and non-governmental stakeholders. The principles in the Cohesive Strategy are broad, but they are important to understand because these represent the current approach to wildfire planning.

The Cohesive Strategy established three goals:

Restore and maintain landscapes: Landscapes across all jurisdictions are resilient to fire related disturbances in accordance with management objectives.

Fire-adapted communities: Human populations and infrastructure can withstand a wildfire without loss of life and property.

Wildfire response: All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.²⁰

The WUI Wildfire Planning Process proposed by this guide literally “revolves” around these core principles. Most of the planning processes espoused seek to produce fire-adapted communities, but those communities must ultimately also be aware of the broader wildfire picture that affects timberlands, rangelands, as well as other important sectors such as wilderness and agricultural areas. Fire-adapted communities are of special important at the WUI because it is there that urban populations—lives and high-value property—come face-to-face with the realities of wildfire in the West.

¹⁸ THE NATIONAL STRATEGY: THE FINAL PHASE IN THE DEVELOPMENT OF THE NATIONAL COHESIVE WILDLAND FIRE MANAGEMENT STRATEGY 1 (2014), <https://www.forestsandrangelands.gov/strategy/thestrategy.shtml> [hereinafter NATIONAL COHESIVE STRATEGY]: The National Cohesive Strategy provides:

In the past two decades, a rapid escalation of extreme wildfire behavior, accompanied by significant increases in risk to responders and citizens, home and property losses, costs, and threats to communities and landscapes have been observed. In the Federal Land Assistance, Management, and Enhancement Act of 2009 (FLAME Act), Congress mandated the development of a national cohesive wildland fire management strategy to comprehensively address wildland fire management across all lands in the United States. Shortly after enactment of the FLAME Act, a three-phased, intergovernmental planning and analysis process involving stakeholders and the public was initiated and is commonly referred to as the Cohesive Strategy effort. The culmination of three-phases of planning and analysis is this National Strategy and a companion National Action Plan. The National Strategy is the result of a collaborative effort by Federal, state, local, and tribal governments and nongovernmental partners and public stakeholders, in conjunction with scientific data analysis.

Id. at 1.

¹⁹ *Id.* at 3.

²⁰ *Id.*

A thorough knowledge of the Cohesive Strategy is not necessary for WUI wildfire planning; indeed, many aspects of the Cohesive Strategy relate to wildfire that occurs in places such as rangelands and timberlands that would not affect the wildland-urban interface. At the same time, a working understanding of how WUI wildfire planning fits into the spectrum of national wildfire policy is important. It helps to situate the WUI wildfire issues within their broader context, which helps the community to understand the competing interests in federal, state and local wildfire policy.

IX. Step One: Draft and Adopt Community Wildfire Protection Plans (CWPPs)

A community wildfire protection plan (CWPP) is a compliance document under HFRA; perhaps more importantly, it is a flexible framework that establishes a process of collaboration between different levels of government and local communities that allows those local communities to establish local priorities for wildfire planning that federal and state agencies agree to follow. The CWPP is the best place to begin planning for wildfire because the process:

- Permits local communities to influence how wildfire is managed on federal and state lands
- Identifies and maps wildfire hazards in the local community
- Identifies mitigation strategies that reflect the interests and values of the local community but also have the approval of federal and state agencies managing land near the community
- Creates and maintains a broad-based coalition to maintain fire-preparedness locally
- Enables community to receive federal HFRA funds
- Enables CWPPs integrated into All Hazard Mitigation Funds to access FEMA funds

One of the powers of the CWPP is that it allows local communities at risk from wildfire to coordinate with federal and state agencies in identifying and planning for fire risk in ways that the local community have the opportunity to guide.²¹ In Idaho, CWPPs must be approved by the applicable local government's fire department and the Idaho Department of Lands. County CWPPs must be approved by the county; for non-county CWPPs, Idaho recommends local government approval, but does not require it. Idaho also recommends, but does not require, that federal land management agencies, such as the U.S. Forest Service or the Bureau of Land Management, managing land in the vicinity of the community also approve the CWPP.²² In 2006, the Idaho Fire Plan established a precedent in Idaho of conducting CWPPs in the state through county governments; indeed, the plans in Idaho were renamed "county wildfire protection plans" to emphasize the State's reliance upon counties as bearing the responsibility for wildfire planning.²³ Engaging county governments in the CWPP process was an important regulatory step

²¹ It is worth noting statute exempts a CWPP from the National Environmental Policy Act of 1969. See 16 U.S.C.A. § 6513 (2016) ("Federal agency involvement in developing a community wildfire protection plan, or a recommendation made in a community wildfire protection plan, shall not be considered a Federal agency action under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).").

²² 16 U.S.C. § 6511(A) (2016).

²³ IDAHO STATEWIDE IMPLEMENTATION STRATEGY FOR THE NATIONAL FIRE PLAN 1-2 (2006), <http://idahofirewise.org/assets/library/National%20Fire%20Plan%20and%20Idaho%20Strategy/General/id%20nat%20fire%20plan%20implementation.pdf> [hereinafter IDAHO FIRE PLAN]. The Idaho Fire Plan provides a history of HFRA and CWPPs in greater context, as follows:

because it ensured that all of Idaho was covered by a CWPP and thus eligible for HFRA funding. On the other hand, it also limited the scope of participation by focusing so heavily on counties. As of this writing, there are no known CWPPs in Idaho written by cities or private entities, such as an HOA.

This guide suggests re-envisioning the State's CWPP process, a re-envisioning that is supported by the Idaho Department of Lands, to encourage broader use of CWPPs. The HFRA statute makes clear that a broad array of local governments, and even non-governmental communities, can draft CWPPs. For instance, the statute notes that a "community" at risk from wildfire can be defined as including even "a group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) within or adjacent to Federal land."²⁴ This illustrates that CWPPs can be conducted even by non-governmental entities, such as a homeowner's association, or even a non-associated community that had a common wildfire risk.

HFRA also permits plans to be written by multiple, overlapping levels of local government and non-governmental entities. For instance, a county could have a CWPP, the cities within the county could have their own individual CWPPs, and even individual neighborhoods or developments with special wildfire needs, such as a foothills community adjacent to federal lands with a history of fire, could have their own CWPPs. In other words, CWPPs can exist at different scales and have overlapping planning areas; in fact, the broad definition of community intended to permit precisely this kind of planning at different scales. Several other states have pursued such an approach. For instance, in Colorado, counties with high wildfire risk have written CWPPs, but so have cities within those counties as well as specific neighborhoods and subdivisions with particularly high wildfire risk.²⁵

In August of 2000, President Bill Clinton visited the Burgdorf Fire on the Payette National Forest in Idaho and directed the Secretaries of Agriculture and Interior to prepare a report that would recommend how best to respond to severe wildland fires, reduce the impact of such wildland fires on rural communities, and ensure sufficient firefighting resources in the future. This report, titled *Managing the Impacts of Wildfire on Communities and the Environment: A Report to the President In Response to the Wildfires of 2000* (approved September 2000), along with its associated budget is commonly known as the National Fire Plan.

In October of 2000, Congress passed the Disaster Mitigation Act (PL 106-390), which amended pre-disaster mitigation planning efforts. The Act requires that every state create a standard, FEMA-approved state hazard mitigation plan in order to remain eligible for grant funding in the event of a federally-declared disaster. The Disaster Mitigation Act of 2000 also requires that communities (or counties) develop a FEMA-approved local hazard mitigation plan in order to remain eligible for certain types of federal grant funding.

In December of 2003, Congress passed the Healthy Forests Restoration Act (PL 108-148) (HFRA). This legislation addresses many issues relevant and complementary to the National Fire Plan including expediting projects designed to reduce hazardous fuels in the wildland urban interface (WUI). The Healthy Forests Restoration Act also allows local entities could create Community Wildfire Protection Plans (CWPPs) if they so choose.

Id. at 1-2.

²⁴ 16 U.S.C. § 6511(1)(A)(ii) (2016).

²⁵ *Colorado Community Wildfire Protection Plans*, <http://csfs.colostate.edu/wildfire-mitigation/colorado-community-wildfire-protection-plans/>.

Idaho would benefit from continuing its practice of county-wide CWPPs to ensure coverage and availability of HFRA funds. However, Idaho’s local communities—governmental and even neighborhoods—should begin drafting their own CWPPs. These different scales of planning facilitate a richer and more detailed wildfire response plan. More importantly, they provide a planning process between governments and communities to agree on local strategies to wildfire that meet local needs. Especially for communities that face wildfire risks arising on federal lands, the CWPP process may be the best way to influence how those federal lands are managed to lessen the communities’ wildfire risk.

A. Drafting a CWPP That Guides the Wildfire Planning Process

The federal guide to CWPPs is *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland–Urban Interface Communities*.²⁶ That guide, however, provides only a basic overview of how to meet the technical requirements of CWPPs. Because this guide proposes that CWPPs should be the guiding document in a cyclical wildfire planning process, this guide offers here additional guidance on how to make the CWPP the kind of document that can create a working framework for local government wildfire planning.

B. Four Process Goals: Readable, Relevant, Integrated, and Updated

The process should create a CWPP that is readable, relevant, integrated and updated.

- **Readable.** The wildfire world is complex and full of jargon. While some of this is necessary to convey important ideas and relate to technical documents, the CWPP should aim to be a document that is readable by the non-fire community as well as the general public. Where technical terms must be used, they should be defined in a glossary to permit engagement with the document by the fire and non-fire communities. This is especially important in core parts of the CWPP that identify risk and offer proposed mitigations. If the non-fire community is to play a role in addressing wildfire before it happens, the non-fire community must be able to understand what those risks and mitigations are.
- **Relevant.** A CWPP is relevant when it proposes mitigations that the local community could actually support and achieve. For instance, a key component of CWPPs is creating a list of mitigation measures that the community prioritizes. However, if all of the mitigation measures in a CWPP are unfunded or contingent on obtaining a federal or other funding source to achieve, then the CWPP has not adequately identified ongoing measures that the community can do—such as inter- and intra-governmental coordination—that could assist wildfire preparedness. Further, the mitigation measures proposed should also be tailored to the proclivities of how that local community responds to regulations, incentives and voluntary programs. That will vary between CWPPs; a community of 250,000 persons, such as Boise, is very different than a rural community of 2,000 persons surrounded by federal lands. The mitigations must take this context into account to be relevant.

²⁶ See generally *supra* note 18, NATIONAL COHESIVE STRATEGY.

- Integrated. Many have viewed CWPPs as stand-alone documents solely for purposes associated with HFRA. However, creating the CWPP process intended much more; indeed, a key goal of the CWPP process was to build a coalition around wildfire protection that was responsive to those risks faced by the local community and the types of responses that the local community preferred. Two types of integration are especially important with CWPPs.

First, CWPPs should be integrated with each county's All Hazard Mitigation Plan. The Disaster Mitigation Act of 2000,²⁷ required that every state create a standard, FEMA-approved state hazard mitigation plan in order to remain eligible for grant funding in the event of a federally-declared disaster. The Disaster Mitigation Act also requires that communities develop a FEMA-approved local hazard mitigation plan in order to remain eligible for certain types of federal grant funding. AHMPs require an analysis of wildfire and planning for such wildfire-related hazards. With the approval of FEMA, Idaho has been a leader in seeking to avoid redundancy, and integrate planning efforts, in wildfire by permitting counties to fulfill their wildfire analysis requirement under the AHMP through completion of a CWPP. A memorandum of understanding between Idaho by the Office of Emergency Management, which oversees AHMPs for the State, and the Idaho Department of Lands, which oversees CWPPs for the State formalizes the understanding that such integration will occur. This integration links wildfire planning to broader hazard planning efforts, as well as a much broader pool of funding available for AHMP-compliant counties through FEMA.

Second, communities should seek to integrate the risks and mitigations identified in the CWPPs into the community's operative comprehensive plan, local codes, and selected incentives and voluntary efforts publicized. The CWPP is the best place to engage in risk and mitigation identification precisely because it is designed to convene managers of federal and state lands, which are often significant in Idaho communities, along with counties, cities and private property owners. While over states may engage such risk and mitigation identification in the comprehensive plan process, in Idaho that would miss the opportunity the CWPP affords to bring federal and state land managers to the table to craft a local solution to fire risks. That said, a robust CWPP that identifies fire and mitigation risks must then become integrated into the community's land use planning, building regulation, and voluntary and incentive-based plans. It is through this integration that the agreed upon local solution to managing federal, state and private property in the CWPP becomes realized in the kinds of development the local community prioritizes with its attendant local risks. Because the local fire department cannot implement this kind of land use and building code regulation and incentives, it is especially important that there be representatives from those officials and staff that govern local development.

- Updated. Most first-generation CWPPs in Idaho are more than a decade old; only a handful have been meaningfully updated since the mid-2000s. Because conditions and development patterns change—Idaho continues to be one of the fastest-growing population states—CWPPs must also be updated to reflect these changes. In addition, CWPPs that are integrated into AHMPs must be reviewed yearly and fully re-written every five years,

²⁷ PL 106-390.

in accordance with the statutory requirements of AHMPs. Since Idaho’s Office of Emergency Management and Idaho Department of Lands have decided to integrate all CWPPs into AHMPs going forward, all CWPPs will eventually be subject to the five-year review cycle. This five-year cycle ultimately will drive the wildfire planning cycle in Idaho, encouraging a cyclical planning process that encourages review of not just the CWPP but also the codes, incentives and programs a community pursues to address wildfire.

C. CWPP Participation

One of the most important, and seldom achieved, goals of the wildfire planning process is to integrate federal, state and local wildfire policies. In the first generation of CWPPs in Idaho (and across most of the West), that integration of federal, state and local officials did occur *within the fire community*, but most CWPPs did not involve participation by local officials, whether in counties or cities, county and city staff not within the fire community, or residents. This made CWPPs an “inside baseball” document of the fire community; it also made them largely ineffective at achieving more broad-scale collaboration between levels of government.

Guidance from both the State of Idaho²⁸ and the federal government²⁹ has long encouraged broad participation in CWPPs; nonetheless, there has not been broad engagement of the non-fire

²⁸ The Idaho Fire Plan recommended that the CWPPs be drafted by a County Working Group that consisted of the following:

Composition: Each county in Idaho is requested to continue to utilize or reconvene a County Working Group. At a minimum, each County Working Group should contain at least one individual who represents each of the following interests: a. County Commissioner, Emergency Management Coordinator, Planning and Zoning representative, or other county employee (lead convener); b. Local Fire Chief (preferably a member of a Local Emergency Planning Committee); c. Idaho Department of Lands representative, as appropriate; d. Appropriate Federal Fire Management Representatives—includes the dominant federal land managers in a particular county. This may include individuals from one or several federal agencies.; e. Tribal Representative, as appropriate. (NOTE: Some areas may not have state or tribal representation.) 2. In addition, County Working Groups are encouraged to include individuals who are committed to the goals of the National Fire Plan in order to ensure that a number of stakeholder interests are represented. This may include those who represent the following interests: a. Local Emergency Planning Committee (LEPC) Chair; b. Bureau of Homeland Security Area Field Offices; c. State Fire Marshal’s Office; d. Resource Conservation and Development Council (RC&D); e. Idaho Department of Fish and Game; f. Environmental or Conservation Groups; g. Forest Products; h. Contractor or Consulting Forester; i. Interested Citizens and Community Leaders, as appropriate; j. Homeowners’ Associations; k. Other officials, as appropriate.

IDAHO FIRE PLAN at 5.

²⁹ PREPARING A COMMUNITY WILDFIRE PROTECTION PLAN 5 (2004), <https://www.forestsandrangelands.gov/communities/documents/cwpphandbook.pdf> [hereinafter PREPARING A CWPP]. The Preparing a CWPP guide recommends the following:

The initial step in developing a CWPP should be formation of an operating group with representation from local government, local fire authorities, and the state agency responsible for forest management. Together, these three entities form the core decision-making team responsible for the development of a CWPP as described in the HFRA. Once convened, members of the core team should engage local representatives of the USFS and BLM to begin sharing perspectives, priorities, and other information relevant to the planning process. [These include:] Existing collaborative forest management groups; City Council members;

community in Idaho or throughout most the West. In part, this is likely because there has not been a clear reason articulated for non-fire involvement in the CWPP process. This guide proposes that there are four necessary groups of individuals necessary to include in any CWPP process. The reason for including these groups is that every member of these groups will, at some point, take the lead in the Wildfire Planning Process Cycle. In order for these other officials to take the lead in their part of the Wildfire Planning Process Cycle, they must understand the origin of these ideas from the beginning and have a feeling of ownership in them.

- The Fire Group. This group represents the typical participants in CWPPs up to this day, including those statutory officers required to participate in CWPPs. This includes representatives of federal agencies, including the Bureau of Land Management and the U.S. Forest Service. In addition, a representative of the U.S. Federal Emergency Management Agency should also be invited since the new CWPPs in Idaho will be integrated into FEMA-approved county All Hazard Mitigation Plans. At the Idaho state level, this includes the Idaho Department of Lands, and also the Idaho Office of Emergency Management as the State agency charged with overseeing compliance with AHMPs. At the local level, this includes all of the local fire response teams. That could include county fire departments, city fire departments, rangeland fire protection associations, fire districts, and other paid and volunteer locally-focused fire protection entities.
- The Local Official Group. This group consists of local officials all levels that have jurisdiction in the area for which the CWPP is prepared. If it is a neighborhood CWPP, that may be just a city council member with a special tie to that neighborhood. If it is a city-wide CWPP, it may be several city council members. If it is a county-wide CWPP, it may be a county commissioner as well as city council members from each city. If it is a CWPP that crosses county lines, it may be county commissioners from each county and city council members from relevant cities. In all cases, appointed officials from relevant jurisdictions should also be invited; in fact, some county commissioners and city council members may wish to have appointed officials, such as those from the planning and zoning commission, attend in their place. It is very important, however, that local officials, both elected and appointed, that are responsible for approving new development and maintaining existing development are involved from the early stage and understand the basics of the CWPP. If they are not involved in this first phase, these local officials will not understand wildfire sufficiently to take the steps necessary to address wildfire through local regulatory documents like the comprehensive plan and codes, as well as through voluntary programs. Moreover, they will not understand how to apply those plans, codes, incentives and programs to individual projects.

Resource Advisory Committees; Homeowners Associations—particularly those representing subdivisions in the WUI; Division of Wildlife/Fish and Game—to identify locally significant habitats; Department of Transportation—to identify key escape corridors; Local and/or state emergency management agencies; Water districts—to identify key water infrastructure; Utilities; Recreation organizations; Environmental organizations; Forest products interests; Local Chambers of Commerce; Watershed councils; Wildland Fire Leadership Council.

Id. at 5.

- The Local Staff Group. In addition to local fire departments, representatives from the planning and building departments from all relevant cities and counties in the CWPP area should be involved from the earliest possible time. It should be made clear that they are equal participants in drafting the CWPP because it will fall primarily to these staff departments to implement many of the best wildfire prevention strategies available. If the planning and building departments do not understand the CWPP and do not understand how it supports and informs the regulations and voluntary programs that they implement, it is very unlikely that a community will move beyond just fighting wildfire and toward living with, and protection from, wildfire.
- The Citizen Advisors Group. Almost none of the CWPPs in Idaho, and seldom throughout the West, have any active engagement from those living within the community. This has to change for CWPPs to become effective planning mechanisms for both governments and communities. To that end, there should be a Citizen Advisors Group that would commit to regular attendance and participation in the wildfire meeting. This group could include locally prominent individuals, such as developers; builders; business people; homeowners threatened by wildfire; religious leaders; homeowner’s association presidents; and beyond. The goal, however, should be to create an ongoing citizen presence in the process that is encouraged not only to attend, but to ask questions and engage the wildfire process from its very beginning.

These four groups—fire, local officials, local staff, and citizens—together create a cross-section of the community that will live with the types of policies that the CWPP puts into place. Each group will help to implement the provisions of the agreed upon wildfire plan as the Wildfire Planning Process Cycle moves through its phases.

D. Identify and Map Wildfire Risks in Meaningful Ways

Perhaps the most important step in the CWPP process is identifying and mapping the wildfire risks. This identification and mapping exercise has two functions. The first is that it permits the local community to identify and map the wildland-urban interface for purposes of HFRA. As discussed previously, this is a legal definition of the WUI that influences the availability of funding under HFRA and thus is of great significance.

However, a second important reason to engage a robust mapping exercise in the CWPP process is that it permits the local community to better reflect fire risks in the next phase of regulations, incentives and programs that will apply to existing and new development. This requires a forward-looking process that will be assisted especially by the local officials, local staff, and citizens involved in the process.

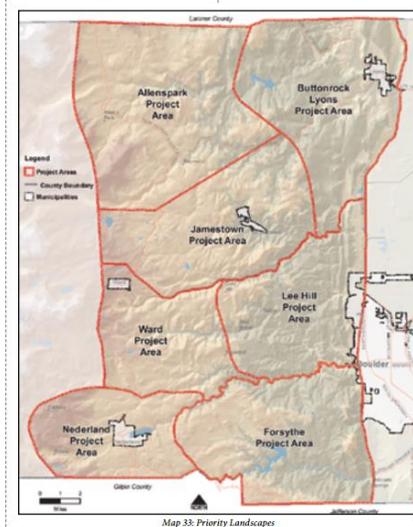


Figure 7. Map from Boulder, Colorado CWPP Illustrating Sub-Planning Project Areas.

Mapping of the wildfire risks can prove a valuable, and influential, mechanism for considering the impacts of wildfire on federal, state, and private lands. As an example of the kinds of wildfire risks that can be mapped, consider the Boulder County, Colorado CWPP, which had maps that included: a map of all previous wildfires in the county; a map of all of the local, sub-county CWPPs located within the county; maps of burn severity for recent fires; maps of land-ownership patters (federal, state, and private); maps of wildfire area concern, crown fire potential, flame length, wildfire intensity index, conditional burn probability, community values at risk, communities, homes, watersheds, historic areas, ecological areas, roads, major fire paths, and areas of wildfire concern.³⁰ Taking all of these factors into consideration, the county then created specific districts in which they would engage projects, as illustrated here.

Of course, this represents a highly advanced mapping project for an urbanized Western county. Not all CWPPs need such extensive mapping. However, the Idaho Department of Lands does provide mapping support for local communities—counties, cities and neighborhoods—that want to engage the CWPP process so local governments should think broadly about the types of mapping that would be useful given local risks and concerns. As of this writing, IDL is also in the process of developing a web-based mapping portal, similar to portals already available in Colorado (COWRAP)³¹ and Texas (TXWRAP)³² that can be used to map individual, local, county and state risk.

IDL recommends that local communities engage fire risks based upon watersheds rather than political boundaries. Watersheds are mapped in hydrological unit sub-regions.³³ IDL specifically recommends that local communities utilize a map of watersheds at a level of specificity called the “HUC12” level. Here is a map of counties in Idaho—outlined in black—and Idaho’s HUC 12 units—outlined in gray—showing major cities in red.

³⁰ BOULDER COUNTY, COLO., BOULDER COUNTY COMMUNITY WILDFIRE PROTECTION PLAN, <http://www.bouldercounty.org/doc/forest/cwppbooklowres.pdf> [hereinafter BOULDER COUNTY CWPP].

³¹ *Colorado Wildfire Risk Assessment Portal*, <https://www.coloradowildfirerisk.com/>.

³² *Texas Wildfire Risk Assessment Portal*, <https://www.texaswildfirerisk.com/>.

³³ See U.S. GEOLOGICAL SERVICES, *Hydrological Unit Maps*, <http://water.usgs.gov/GIS/huc.html>.

Mapping wildfire risk at the HUC12 level is important because it reflects ecological considerations of fire rather than arbitrary political subdivisions. It permits a more realistic account of the various ecologies of the watersheds—for instance, the relative prevalence of grasslands, timberlands, hydrology, and so on—that can permit a more nuanced approach to the WUI across a county or city. Local communities will often be able to group together HUC 12 watersheds for similar treatment as “grasslands” or “timberlands.” In those cases, the HUC 12 units give a rationale for where various wildfire treatments should begin and end that can then be implemented in districts, as illustrated by the Boulder County example. This regional approach to defining the WUI permits for a more fine-grained fire response that also can better be integrated into the types of regulations, incentives and programs that apply to existing and new development.

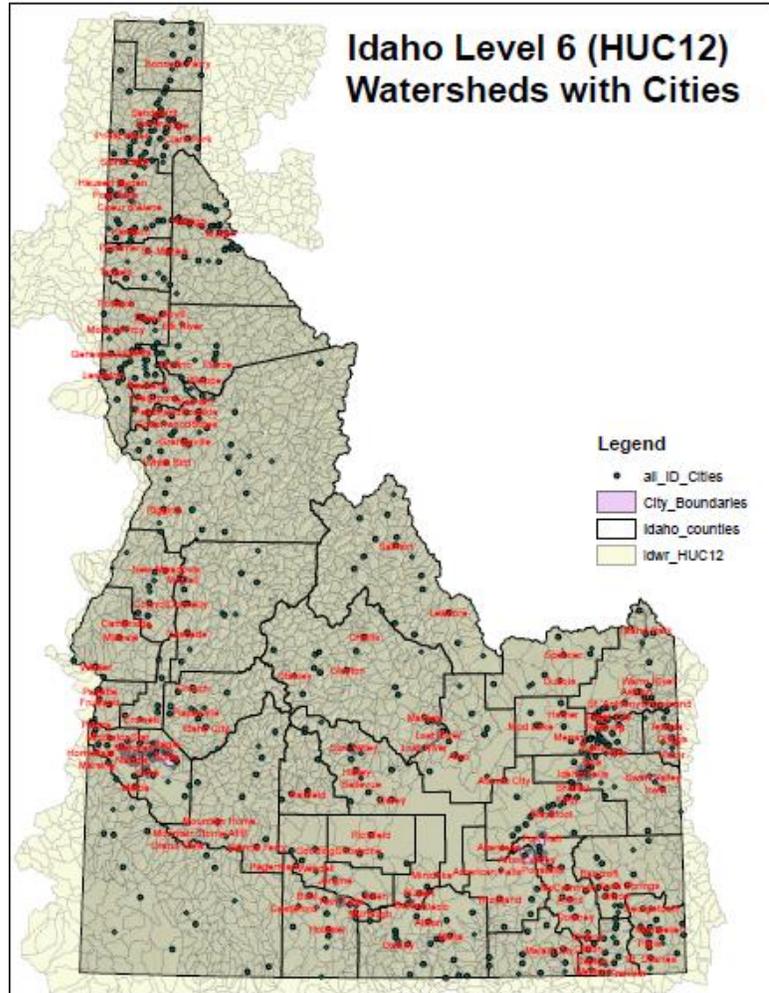


Figure 8. Idaho Watersheds at the HUC 12 Hydrological Unit Level.

In contemplating the kinds of information and data necessary to produce an effective cycle of wildfire planning, it is valuable to consider the types of regulations, incentives and programs the community might engage in response to wildfire risk. A recent California wildfire planning guide provides excellent guidance for contemplating a wide range of such risks.³⁴ Not all of these data points will be right for all communities, but a modified version of the California list, as relevant to Idaho, is provided here as a starting point for imagining the issues local communities face in planning for wildfire.

A list of potentially relevant data to collect related to wildfire risk in the CWPP process, as adopted and modified for Idaho from a California guide to wildfire planning, is provided in Appendix A.

³⁴ Cal. Governor’s Office of Planning and Research, Fire Hazard Planning: General Plan Technical Advice Series (April 2014 Draft), https://www.opr.ca.gov/docs/Fire_Hazard_Planning_Public_Review_Draft_June_24_2014.pdf.

focused on the broad-scale wildfire issues. A neighborhood CWPP, however, could address the fine-grained issues that affect high-risk communities. Countywide CWPPs may also seek to encourage this type of local engagement in the CWPP process by, for instance, drafting model regulatory language that could be adopted by cities; model CC&R provisions that could be adopted by HOAs; and guidance on voluntary programs that could be implemented at the neighborhood level.³⁵ For an example of CWPPs at the city and neighborhood level supported by a county-wide CWPP, consider this map of Boulder County in Colorado in the jurisdictions of sub-county CWPPs are outlined.³⁶

Links to Boulder County CWPPs are available in the footnotes; collectively, they illustrate one of the West's best examples of how CWPPs at different scales within the same county can be used to achieve a robust wildfire planning effort.³⁷

As another example, Deschutes County, Oregon adopted the Greater Bend CWPP through Project Wildfire, a community organization created by Deschutes County Ordinance 8.24.010, which helped coordinate and develop seven local CWPPs in central Oregon. The Greater Bend CWPP's last update in February, 2016, incorporated planning into the CWPP process. Facilitated through a multi-disciplinary stakeholder committee, including Project Wildfire, the Greater Bend CWPP identifies and assesses eight communities at risk (Core Bend, Greater Bend, North, Northeast, Northwest, Southeast, Southwest, and West). Core Bend is within city limits, and Greater Bend has a number of WUI areas within the City limits.

The Greater Bend CWPP identifies priorities and strategies for reducing hazardous wildland fuels while improving forest health, supporting local industry, and improving fire protection capabilities. The CWPP also references community planning throughout the document, including an overview of the Bend Area General Plan and Oregon's planning process, an update of the Urban Growth Boundary (UGB) expansion project, actions related to city planning coordination from the Deschutes County Multi-Jurisdictional Natural Hazards Mitigation Plan (NHMP), and references to the Community Planning Assistance for Wildfire program (of which Bend was a 2016 recipient).³⁸

³⁵ See Laguna Beach Community Wildfire Protection Plan and Other Natural Disasters § 1.1.4.5., <http://www.lagunacoastfiresafecouncil.org/images/Written%20Plan%2003-05-07.pdf>.

³⁶ BOULDER COUNTY CWPP at 18.

³⁷ Boulder County's CWPP was recently used as a model to other communities such as the Lake Tahoe Basin CWPP, which designed a similarly user-friendly layout full of explanatory images and illustrations. See LAKE TAHOE BASIN COMMUNITY WILDFIRE PROTECTION PLAN (Aug. 2015), http://tahoe.livingwithfire.info/wp-content/uploads/2015/03/LTBCWPP__01-07_BasinWideNarrative.pdf; East Canyon Community Wildfire Protection Plan, <http://csfs.colostate.edu/media/sites/22/2015/02/East-CanyonCWPP-0215.pdf>; West Region Wildfire Council CWPPs, <http://www.cowildfire.org/cwpps/>.

³⁸ Project Wildfire, http://www.projectwildfire.org/?page_id=44; <http://www.projectwildfire.org/wp-content/uploads/2016/02/chapter-8.24-9-05.pdf>; http://www.projectwildfire.org/?page_id=26.

X. Step Two: Draft and Adopt Wildfire Regulations, Programs and Initiatives at the Community, Neighborhood-Subdivision, Project-Site, and Building Scales

Once a local community has engaged the CWPP process in a robust fashion as described above, the wildfire risks, and mitigations available to reduce those risks, should be identified for federal, state, and private lands in the community. The community then faces four main questions:

- Will the local community permit new development in the WUI where there is an identified wildfire risk? It may be that a community, on a policy level, will decide that wildfire risk is too high to permit development in the WUI. For most communities, that will not be the case, however, and in those cases, additional questions must then be asked.
- If the local community decides to permit development in the WUI where there is wildfire risk, is the community willing to adopt and enforce regulations related to wildfire? Regulations are often the most clear-cut way to ensure that a development is built to withstand wildfire. However, building a consensus for regulation takes work; moreover, the local community must also be willing to enforce those regulations.
- If the local community decides to permit development in the WUI where there is wildfire risk, what incentives or voluntary programs does the community want to offer or encourage to support, or stand in place of, regulations? Even if a community decides to embrace a regulatory structure to wildfire planning, that community may also seek to compliment those regulations through a collection of incentives and voluntary programs. In some local communities where regulation is not preferred, such communities may choose instead to offer a robust collection of incentives and voluntary programs, and perhaps even templates for private contractual agreements that could be used by private parties, such as homeowner's associations, that are particularly sensitive to wildfire.
- If there is existing development in the WUI subject to wildfire risk, what regulations, incentives and programs should the local community adopt or offer that would reflect the local community's values? In many communities, there is already a substantial amount of existing building in the WUI. In those cases, local communities will need to decide what, if any, regulation, incentives or programs should be offered.

This four-part framework does not tell any local community what measures to adopt; however, it can be a useful rubric for thinking through the myriad variety of potential approaches to wildfire. As communities engage this, they should keep in mind several key goals of local community regulation, incentives and programs learned by communities throughout the West.

- Seek co-benefits. Almost all local communities throughout the West that have adopted robust wildfire planning—whether regulatory, incentive or voluntary in nature—have coupled wildfire planning with co-benefits that matter to the local community. This could be enhancing and protecting natural features that provide wildlife corridors or open space that matter locally, but it could also mean tying educational efforts to efforts that draw community involvement, such as farmers' markets or HOA meetings.

- Seize upon interest after wildfires. Research indicates that there is special interest in wildfire-related programs approximately the first six months after a wildfire occurs. Local communities should be ready to seize upon that opportunity if—and when—it occurs. In communities where wildfire recurs often, that can mean being prepared in advance of fire season with the types of programs that the community wants to propose. Once a wildfire occurs and the heightened sense of awareness is present, the local community can then present the prepared options for discussion at the time when the community interest is high.
- Choose an approach the local community will support. The most important aspect of wildfire planning is community support; a wildfire regulatory approach that is not supported by the community will not be enforced. A broad-based discussion with the local community about wildfire risks and what mitigation measures make sense is important is essential to the viability of even volunteer or incentive programs.
- Anticipate and plan for wildfire’s after-effects, especially flood, landslide, aesthetic harm, and economic development issues. As devastating as a wildfire can be for a community, the after effects can be even worse and longer-lasting. For instance, many wildfires are followed by substantial floods and landslides. An excellent case study of the after-effects of wildfire is *A September to Remember*, which illustrates how numerous Colorado communities suffered devastating floods and landslides resulting from a summer of extreme wildfires in 2013. Anticipating and planning for the foreseeable after-effects of wildfire is equally important to planning for wildfire itself. This is true even in non-landscape effects, such as the loss of tourism that can result after wildfires affect regions with tourism-based economies.

A. The Simple Effective Solution

There are numerous things that local communities can do to protect property in the WUI from wildfires. Many of these, however, are necessary in only the most dense and urban WUI areas. For remote and rural places, taking simple steps can be extremely effective in protecting against wildfire. The most basic approach: defensible space, fire-resistant roofs and a weed abatement ordinance.

- Defensible Space. Idaho Firewise is a great resource for understanding the concept of defensible space. That resource describes the three zone approach, which is standard in wildfire planning, as follows:

The defensible space of a Firewise landscape is divided into three treatment zones, which increase in fire resistance as you get closer to your home and structures. A minimum treatment area of 100 feet is recommended for homes and outbuildings on flat ground, and up to 200 feet or more on sloped sites. This is because fire behaves differently on slopes and in draws than it does on flat areas. For more information on fire behavior go to the Science of Fire section.

Your defensible space is the area that includes your home and its immediate surroundings, and is where you have made a concentrated effort to reduce the chance of an ignition by wildfire or flaming embers. Defensible space starts with your home and moves out into the landscape from there. In areas with homes that are close enough to each other, defensible spaces may overlap to provide added protection for the subdivision.

- Zone 1. Your Home (The Red Zone). In zone 1, steps have been taken to decrease and/or eliminate the ignition potential of your home. Particular attention is paid to non-flammable roofing, enclosing soffits and overhangs, removing debris from roofs and gutters, and identifying flammable items such as patio furniture, brooms, flowerboxes, doormats, etc. For more information on how to make your home more fire resistant go to the Firewise Building Materials section.

- Zone 2. Your Landscape (The Yellow Zone). In zone 2, the home is surrounded by a greenbelt of well-watered and maintained plant materials. Perennials, ground-covers, and annuals are planted in groups with individual trees and shrubs. These islands of vegetation are surrounded by rock or brick retaining walls and well-watered turf. Firewood and propane tanks are placed on gravel or concrete pads. This zone requires yearly removal of overgrowth and dry debris on the ground, as well as pruning trees.



Figure 10. Three Zones of Defensible Space as Illustrated by Idaho Firewise.

- Zone 3. Beyond 100 feet (the green zone). Zone 3 is composed of native vegetation that has been thinned. If possible, highly flammable species of trees and shrubs are removed and replaced with less-fire-prone species.³⁹

A simpler alternative to the vegetative zone approach is to adopt a “weed ordinance,” which is used in many Idaho communities and discussed below. Weed ordinances typically apply to all properties in the jurisdiction (or some defined area) and state not only that properties must be kept free of weeds but that vegetation is also not allowed to become a wildfire hazard. Vegetation that is deemed a wildfire hazard is typically declared a nuisance and the landowner will be given a warning or citation and given a fixed time to reduce their vegetation, usually consistent with the defensible space requirements above.

- Weed ordinances. A number of Idaho communities utilize weed ordinances as an easy means of addressing wildfire concerns in rural areas. For instance, the City of Fern Village, Idaho has a provision that provides:

³⁹ IDAHO FIREWISE, *Defensible Space*, <http://idahofirewise.org/home-safety/defensible-space-2/>.

Accumulations of noxious weeds and grasses and other growths upon property within the city limits constitute a source of fire hazard and shall be removed, cut and destroyed by the owner or agent of the ground or premises on which the same is located.⁴⁰

Similarly, Gem County has a fire hazard weed ordinance requiring owners or land managers to control weeds or grass determined to be a fire hazard within one hundred feet of an improved structure within platted townsites or subdivisions in unincorporated parts of the county.⁴¹ Sometimes development agreements will also provide for vegetation management that reduces wildfire hazards, such as the Sun Valley Company's development agreement with the City of Ketchum.⁴²

- **Fire-Resistant Roof.** *The NFPA Guide* notes that many wildfires are spread by embers landing on flammable roofs that ignite structures. Wood shingle roofs are particularly flammable and should be avoided. A good practice is to require Class A or B roofs in the highest risk areas, Class B in moderate risk areas, and Class C in lowest risk areas. Some communities ban all wood roofing materials even though Class A wood shake roofs are available. Several Idaho jurisdictions that have drafted substantial code provisions related to roofs include Boise and Blaine County, both of which are included in Appendix A.

B. Regulatory Tools

Sometimes the simple approach—defensible space and a metal roof—is not enough. That is particularly true in areas with high property values, or in the case of larger rural or foothills developments where wildfires would be too large for urban fire departments to protect all buildings and structures. In these cases, the NFPA Guide suggests that communities consider regulations at the community, neighborhood/subdivision, site/project, and building scales. Regulations at each of these scales serve different purposes and produce differing results. They can also be used in combination, or separately, depending on the approach that the local community finds most compelling.

⁴⁰ FERN LAKE VILLAGE, OR., Ord. No. 168, <http://www.fernsvillage.org/wp-content/uploads/2010/01/Adopted-Ordinance-Nuisance-5-3-2010.pdf>.

⁴¹ Gem County, Idaho, County Code §§ 4-3-1 – 4-3-2 (2016), http://www.sterlingcodifiers.com/codebook/index.php?book_id=411. The Code provides:

It shall be unlawful for any owner or person in control of land upon which any weeds or grass determined to be a fire hazard are present within one hundred feet (100') of an improved structure, within any platted townsites or subdivisions in unincorporated areas of the county to fail to remove such weeds not later than ten (10) days after service of notice upon such owner or person in control of said land by the sheriff's office or the county weed department.

...

A violation of this chapter shall, upon conviction, be punishable by a fine of not more than three hundred dollars (\$300.00), or by incarceration of up to six (6) months in the county jail, or by both such fine or incarceration.

⁴² River Run Annexation and Development Agreement, By and Between City of Ketchum and Sun Valley Company: Exhibit I: Vegetation Management Plan/Agreement (July, 2010), <http://ketchumidaho.org/DocumentCenter/View/1474>.

1. Community Scale Regulations

The *NFPA Guide* recommends the following community scale WUI tools.⁴³

Community Scale WUI Tools	
Hazard mapping	Conduct hazard assessment (risk of wildfire) and risk assessment (risk of loss of structures or life).
Zoning overlays	Consider using existing zoning overlays for wildfire purpose or develop new overlays applicable to known wildfire areas.
Restriction of sensitive or hazardous uses	Restrict land uses with vulnerable populations (hospitals), large populations (stadiums), or flammable materials (gas stations) in wildfire risk areas.

In Idaho, as in most states, there are two primary tools for implementing community-scale wildfire regulations: comprehensive plans and zoning codes.

a. Comprehensive Plans

Comprehensive plans may be the most important, if underutilized, planning process to address wildfire in Idaho. Comprehensive plans are important for two reasons. First, comprehensive plans are the mandated policy planning tool required under the Local Land Use Planning Act. Idaho Code section 67-6508 requires that all local governments produce and update a comprehensive plan that contains the following elements: an analysis of how land use regulations contemplated by the plan do not violate private property rights; a population analysis; a school facilities and school-related transportation analysis; an economic development analysis; a land use analysis and a map indicating suitable project land uses for the jurisdiction; an analysis of natural resources; an analysis of hazardous areas; an analysis of public services, facilities and utilities; a general transportation analysis; an analysis of recreational opportunities; an analysis of special sites, such as historical or archeologically significant locations; a housing analysis; a community design analysis; and an agricultural analysis.

Of these analyses required, the most logical place for an analysis of wildfire would occur in the “hazardous areas” analysis. Notably, that section of the Idaho Code does not require an analysis of wildfire even though the code explicitly requires the discussion of other far less common hazards in the state including “hazards as may result from susceptibility to surface ruptures from faulting, ground shaking, ground failure, landslides or mudslides; avalanche hazards resulting from development in the known or probable path of snowslides and avalanches, and floodplain hazards.”⁴⁴ Also, in the discussion of public services and facilities, there is a

⁴³ NAT’L FIRE PROTECTION ASS’N, COMMUNITY WILDFIRE SAFETY THROUGH REGULATION: A BEST PRACTICES GUIDE FOR PLANNERS AND REGULATORS 23 (2013), <http://catalog.nfpa.org/Community-Wildfire-Safety-Through-Regulation-A-Best-Practices-Guide-for-Planners-and-Regulators-P552.aspx> [hereinafter NFPA GUIDE].

⁴⁴ Idaho Code § 67-6508(g) (2016) (“Hazardous Areas -- An analysis of known hazards as may result from susceptibility to surface ruptures from faulting, ground shaking, ground failure, landslides or mudslides; avalanche

requirement to discuss “fire stations and fire fighting equipment,” but there is no mention or requirement to plan for wildfires. This oversight in the code may be why few Idaho local governments have extensive discussions of wildfire in their comprehensive plans especially given the prevalence, and importance, of wildfire to the state. Nonetheless, these statutory requirements are a minimum of compliance, and there is nothing preventing Idaho governments from discussing, or planning for, wildfire in comprehensive plans.

Despite the requirement of comprehensive plans, many people in the development world tend to discount their importance. This is because a line of Idaho case law, similar to many other states with a comprehensive plan requirement, are deemed advisory. For instance, in *Evans v. Teton County*, the Idaho Supreme Court held that, “[a] comprehensive plan is not a legally controlling zoning law, it serves as a guide to local government agencies charged with making zoning decisions.”⁴⁵ As a result, many discount the importance of the comprehensive plan viewing it as a chore without relevance. That is mistaken, especially in the wildfire realm.

While deemed only advisory documents in Idaho, almost all cities in Idaho require discretionary permits, such as conditional use permits, for the types of development that are at the highest risk of wildfire. Conditional use permits in most Idaho jurisdictions, as well as in most local governments around the country, require the local planning and zoning commission to make a finding of compliance with a local government’s comprehensive plan. As a result, comprehensive plans can prove especially powerful with regard to those permits. For instance, the Boise City Zoning Code requires conditional use permit decisions to include a finding that “the proposed use is in compliance the Comprehensive Plan.”⁴⁶ Similarly, a Kootenai County planned unit development requires a finding that “the facts submitted with the application establish that: [t]he proposal is compatible with the goals, policies and future land use map of the Kootenai County comprehensive plan.”⁴⁷ These finding requirements embedded in conditional use permits and planned unit development approvals are not advisory; rather, the findings of compliance and compatibility are legal requirements that must be met in order for the local government to grant the permit. The importance of this distinction is often overlooked, but its importance cannot be overstated: while the comprehensive plan itself is an advisory document, findings of compliance or compatibility for issuing of non-ministerial permits are legal in nature. That means that a failure to show compliance with the comprehensive plan in general is not an actionable legal claim; however, failure to show that a project complies with the comprehensive plan when it is a legal requirement for issuance of a permit is an actionable legal claim. In the latter case, the local government would be said to have failed to exercise its responsibility to exercise reasoned decisionmaking because it has not stated what constitutes compliance.

The importance of the legal requirement of compliance or compatibility becomes very important where a local government has integrated its findings of identified wildfire risks and mitigations from the CWPP into the comprehensive plan. If a local government has done so, then

hazards resulting from development in the known or probable path of snowslides and avalanches, and floodplain hazards.”).

⁴⁵ *Evans v. Teton County*, 139 Idaho 71, 76, 73 P.3d 84, 89 (2003).

⁴⁶ Boise City Zoning Code § 11-03-04(6)(C)(7)(a)(v) (2016).

⁴⁷ Kootenai County § 9-15-9 (2016), http://www.sterlingcodifiers.com/codebook/index.php?book_id=505.

there must be a finding of compliance or compatibility with those wildfire risks and mitigations as evidenced by the goals, policies, and land use map of the local government’s comprehensive plan.

For these reasons, comprehensive plans can play an important role in signaling the long-term development goals of a community and, in particular, its intention to address the risk of wildfire in the planning process.⁴⁸ For instance, Bonner County, Idaho has used its comprehensive plan as an opportunity to describe its fire history, identify characteristics of the WUI, and outline techniques for reducing the risk of wildfire to development in the WUI.⁴⁹ Bonner County’s comprehensive plan recognizes that clear road signage and fire resistant building materials reduce WUI fire hazards by respectively decreasing firefighter response time and improving home and neighborhood fire resistance.⁵⁰

Idaho local governments exhibit a wide-range of discussions of wildfire in their comprehensive plans, as would be expected given the varied size and population across the state. Boise has perhaps the most extensive discuss of wildfire in its comprehensive plan, Blueprint Boise. Blueprint Boise discusses wildfire in several sections.⁵¹ The most significant discussion arises from the “principle” to “protect life and property from nature hazards.” A goal related to this principle is to “[m]inimize the degree of risk to life and property from wildfire.” This goal is then supported by a number of policies, such as “[i]mplement development standards such as a mitigation measures matrix, access standards, noncombustible roofs, sprinklers, clear space, and other measures in areas prone to wildfire.” In addition, the Boise comprehensive plan also addresses wildfire in sections dedicated to particular parts of the city, such as the foothills, where wildfire is especially common and destructive.

⁴⁸ While deemed only advisory documents in Idaho, many cities also require discretionary permits, such as conditional use permits, to include a finding of compliance with a local government’s comprehensive plan. As a result, comprehensive plans can prove especially powerful with regard to those permits. *Evans v. Teton Cty.*, 139 Idaho 71, 76, 73 P.3d 84, 89 (2003) (“A comprehensive plan is not a legally controlling zoning law, it serves as a guide to local government agencies charged with making zoning decisions.”); *but see, e.g.*, Boise City Zoning Code § 11-03-04(6)(C)(7)(a)(v) (2016) (requiring conditional use permit decisions to include a finding that “the proposed use is in compliance the Comprehensive Plan”).

⁴⁹ COUNTY OF BONNER, IDAHO, BONNER COUNTY COMPREHENSIVE PLAN, *Hazardous Areas Component*, Chapter 4, 1-2 (2002), <http://bonnercounty.us/wp-content/uploads/Planning/Comp%20Plan/Plan.haz-1.pdf>.

⁵⁰ *Id.* at 2.

⁵¹ BOISE CITY, IDAHO, BLUEPRINT BOISE, http://pds.cityofboise.org/media/114868/blueprint_boise-51414.pdf. See excerpts in Appendix A.

Couder d’Alene’s comprehensive plan integrates discussion of wildfire risk into discussions of specific neighborhoods alongside maps of those neighborhoods, as illustrated in this figure. By integrating the discussion of wildfire into the planning for individual communities, the Couder d’Alene comprehensive plan emphasizes the role of wildfire in the future of these communities and enhances the understanding of a need for a community-level response.

Elmore County, which has substantial federal lands within its jurisdiction, used its comprehensive plan to make clear its concerns for wildfire arising on those lands. For instance, the Elmore County plan “calls upon Federal land management agencies to better manage fuel loads on federal lands to prevent wildfires to ensure protection of private property rights.”⁵² The comprehensive plan makes an effort throughout to establish not only how the county can address wildfire, but also to provide a vision for how it would work with other federal and state partners to achieve a better wildfire response for the community. For example, one section suggests that that the county “[i]nsist that re-seeding and re-vegetation occurs on land affected by wildfire as soon as possible after the fire damage.”

In addition to these Idaho examples, the *California Fire Hazard Planning: General Plan Technical Advice Series* provides examples of other policy statements that could be relevant to some Idaho local governments. They are included, as modified to reflect Idaho laws and regulations, in Appendix A.

b. Zoning and Land Use Codes

In the general understanding, zoning and land use codes—sometimes referred to as development codes—are the implementing mechanisms that translate the goals and policies of comprehensive plans into legal requirements applicable to specific parcels of land. In the case of wildfire, zoning regulations are most often applied through overlay districts or zones that apply additional requirements—and incentives—related to wildfire management.

In Ada County,⁵³ the WUI fire overlay district applies primarily to new subdivisions and new private roads, mandates vegetation control requiring a minimum 50-foot defensible space around the perimeter of any habitable structure, and requires property owners to maintain the defensible space, unless such responsibility is transferred to another party through a binding

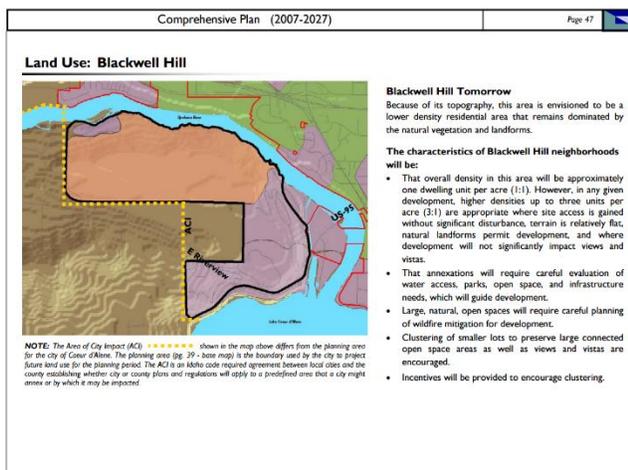


Figure 11. Excerpt from Couder d’Alene Comprehensive Plan for Blackwell Hill.

⁵² ELMORE COUNTY, IDAHO, ELMORE COUNTY 2014 COMPREHENSIVE PLAN, <http://www.elmorecounty.org/Land%20Use/Comp%20Plan%20Update/2014-01-20/Comp%20Plan%202014.pdf>. See excerpts in Appendix A.

⁵³ ADA COUNTY, IDAHO, ADA COUNTY CODE §§8-3B-1 – 8-3B-4 (2016). See excerpts in Appendix A.

contract. The overlay district provides a detailed description of how the defensible space must be maintained. New subdivisions must have fire hazards and emergency access roads evaluated by a licensed fire professional engineer to guarantee specified standards.

Similarly, Couer d’Alene’s Hillside Overlay District provides detailed wildfire protection standards, but also couples them with detailed standards related to potential secondary effects of wildfire like flood and landslide. These provisions cover grading and erosion control; surface and ground water drainage; and maintenance of the development that includes wildfire readiness.⁵⁴ Before developing in the hillside overlay zone, the city must determine wildfire mitigation goals for the area according to the Kootenai County WUI Fire Mitigation Plan and NFPA standards as guidelines.⁵⁵

In Lemhi County, the zoning code provides that any residence or structure located in a wooded area or an area of flammable brushy vegetation must provide a minimum of 30 feet of defensible space, which it defines as “one in which trees are thinned so that crowns do not overlap or touch, woody brush is removed or substantially thinned, and dead fuel is removed. Maintenance of the defensible space is a requirement for continuing compliance with this ordinance.”⁵⁶

2. Neighborhood/Subdivision Scale Regulations

A significant proportion of development in the WUI requires subdivision of land. For that reason, subdivision regulations—especially those that govern large-scale subdivisions that create wholly-new neighborhoods—can be a tremendous source of effective wildfire planning by essentially building in wildfire preparedness from the inception of the proposed project. The NFPA Guide suggests the following neighborhood/subdivision scale WUI tools:⁵⁷

Neighborhood/Subdivision Scale WUI Tools	
Residential clustering requirements	Require new lots in subdivisions to be located away from wildfire hazard areas, and allow smaller lots if necessary to avoid economic harm to the landowner.
Water supply	Require firefighting water supply. Provide hydrants with adequate pressure and volume or a year round water source of 4,000 – 5,000 gallons in the form of a dry well, cistern, pond, or swimming pool
Density reductions in high hazard areas	Reducing permitted development density in high wildfire hazard areas. Transfer of

⁵⁴ Coeur d’Alene, Idaho, City Code §§ 17.08.900 - 17.08.955 (2016). See excerpts in Appendix A.

⁵⁵ *Id.* at § 17.08.915.B (2016).

⁵⁶ Lemhi County, Idaho, Development Code § 5.5 (2016), http://lemhicountyidaho.org/bldgdept/Lemhi%20County%20Development%20code%20amended%2010_16_12_corrected.pdf.

⁵⁷ NFPA GUIDE at 23.

	Development Rights (TDR) programs may also be useful.
Tax districts to fund fire mitigation projects (vegetation clearance)	Establish special districts funded by homeowners to conduct wildfire mitigation services for the neighborhood (e.g., clear and maintain vegetation, install signage, develop evacuation plans).
Proper access	Require adequate road (20 to 28 ft.) and driveway (12 ft.) widths and clearance (13.5 ft. vertical and 10 ft. horizontal) to accommodate fire-fighting equipment. Limit grade of roads to 10-15% and require multiple access points for larger developments.
Signs	Require that street signs and address markers be noncombustible easy-to-read, and well-located. Dead-end roads should be clearly signed.

Most WUI development involves subdivision of land, which provides an opportunity to consider how that process can be altered to reduce wildfire threat. For instance, Flagstaff, Arizona reduced subdivision ignitability by respectively requiring firebreaks and clustering lots away from fire hazards.⁵⁸ Clustering can be balanced to preserve the desired density in a subdivision while avoiding high risk fire areas, which results in the developed area being denser than would otherwise be possible.⁵⁹ Communities seeking to improve fire response in subdivisions often require additional access roads and water supply.⁶⁰

The Lemhi County code provides that subdivisions or any other multiple unit development must thin timber on and remove dead fuel from the site, and provide appropriate perimeter and, in larger developments, internal fuel breaks.⁶¹ A fuel break is defined as a “strategically located strip of land in which the timber has been thinned and fuel removed to create an open ‘park-like’ appearance. Fuel breaks either include roads or are accessible to firefighting apparatus. Fuel breaks are generally at least twelve (12) feet in width, with the width increasing on slopes over ten (10) percent.”⁶²

Kootenai County offers a bonus density for conservation-oriented subdivision, which must preserve at least twenty percent of property within the subdivision. The use of this clustering, and its commensurate open space, is guided in part by compliance with the substantial wildfire preparedness terms in the section, which require substantial pre-planning of the community for

⁵⁸ *Id.* at 8.

⁵⁹ PLANNING FOR HAZARDS at 113.

⁶⁰ CLARION ASSOCIATES, *Addressing Community Wildfire Risk: A Review and Assessment of Regulatory and Planning Tools*, Fire Protection Research Foundation 14 (2011), <http://www.nfpa.org/~media/files/research/research%20foundation/rfwuiregulatoryassessment.pdf>.

⁶¹ LEMHI COUNTY, IDAHO, COUNTY CODE § 6.10.2 (2016).

⁶² *Id.*

wildfire. It also requires the subdivision proposal to show short and long term plans for eliminating dangerous vegetative and fuel conditions in and around proposed building sites and requires canopy cover in these areas to be less than 50 %, with lower branches pruned, the ground should be relatively free of debris, and ladder fuels and dead and dying trees removed. Further, the proposal must verify that power lines will be installed underground and confirm that there will be safe and adequate emergency access for residents.

3. Individual Sites or Project Scale Regulations

Some wildfire regulations are more appropriate to individual sites, especially those that perhaps apply only to the most extreme wildfire hazard areas. In such cases, while the regulations must still be generally applicable to all parcels that fit within the generally-applicable requirements, they can be drafted in such a way that there are alternatives for compliance that can be sensitive to specific needs of development on a site or the nature of the wildfire risk. The NFPA Guide recommends the following individual site scale WUI tools:⁶³

Individual Site Scale WUI Tools	
Site-specific hazard assessment	Require or allow landowners to perform wildfire hazard assessment of their own property to confirm or establish wildfire hazard level. Use that analysis as the basis for project site design.
Location of accessory structures and flammable materials	Require accessory structures to be separated from other structures (e.g., 30 ft.). Require wood piles and gas tanks to be located 20-30 ft. from primary structure. Fences must be of non-flammable material—or at least within a minimum distance from the structure
Fire-resistant landscaping	Ensure that only fire-resistant landscaping is allowed in hazard area.

The Power County Development Code⁶⁴ provides that individual structures, including single-family dwellings, that are located in or adjacent to forested areas, or areas of flammable brushy vegetation, must provide defensible space of at least 30 feet around the home or structure and maintain that defensible space, which is defined as one in which trees are thinned so that crowns do not overlap or touch, woody brush is removed or substantially thinned, and dead fuel is removed.

Bannock County and fire districts within the County employ use of the Wildlands Urban Interface Code. Additionally, Bannock County’s Building Ordinance and Subdivision Ordinance seeks to increase the ability for vehicular to access structures by requiring all buildings/structures which are more than 150’ feet from roads to be built as fire apparatus roads, meaning the

⁶³ NFPA GUIDE at 24.

⁶⁴ POWER COUNTY, IDAHO, DEVELOPMENT CODE §10-13-4 (2016), http://www.sterlingcodifiers.com/codebook/index.php?book_id=838.

roads/driveways must be at least 20’ wide, be constructed with all-weather surfaces, have fire code approved turnarounds, and be free from brush overhang.

4. Building Scale Regulations

While regulation at the community, neighborhood/subdivision, and lot/site scales is typically the duty of the planning department, regulation of the building scale typically falls to the building department and the building codes implemented therein, as well as the fire code and the provisions therein. The NFPA Guide recommends the following regulatory tools at the building scale.⁶⁵

Building Scale WUI Tools	
Siding	Require one-hour fire resistant materials, or brick, stone, stucco, or large timber siding, and generally prohibit metal siding in most fire hazard classifications.
Windows	Require or encourage double-paned or small-paned windows.
Eaves and soffits	Require eaves and soffits to be covered and boxed in or covered with mesh that will not allow embers into attic.
Gutters	Require designs that do not collect leaves/needles (and require regular cleaning)
Attic vents	Require mesh coverings with a maximum mesh size of 1/8 inch, or install approved ember-resistant vents
Chimney spark arresters	Require spark arresters on all chimneys.
Decks and porches	Require that under-deck areas of structures 3 ft. or less above the ground be enclosed with wire mesh or fire resistive material. Require that structures farther from the ground be enclosed with a solid fire-resistive skirt, and ensure that these features be constructed of heavy timber or other fire resistant material.

At the lot and building scale, communities often focus on building ignitability reduction by requiring 30 feet of defensible space (e.g., modifications to vegetation, such as tree removal, thinning and pruning). This may sometimes be enacted regardless of property boundaries, so neighbors may be required to cooperate to mitigate their shared fire hazard.⁶⁶ In addition to defensible space, Boise City, Idaho addresses structure ignitability by requiring fire resistant roofing, siding, exterior glazing, and doors in its WUI zones.⁶⁷ Blaine County, Idaho has written perhaps the state’s most extensive code aimed at wildfire protection at the lot and building scale.⁶⁸

⁶⁵ NFPA GUIDE at 24.

⁶⁶ *Id.* at 16.

⁶⁷ BOISE CITY, IDAHO, CITY CODE §§ 7-01-69 (2016).

⁶⁸ See Appendix A.

It's provisions are too numerous to recount here, but the entirety of the code is provided in the Appendix A. Eagle County, Colorado uses site-specific hazard assessments to specify mitigation requirements that the developer must satisfy as a condition before obtaining a building permit.⁶⁹

In Yakima County, Washington, informal discussions began in 1999 regarding who, why and how they could adopt a WUI code. In June, 2000, a fatal auto accident started a wildfire, which quickly threatened the Hanford nuclear reservation and burned at least 25 homes in neighboring Benton County. Stakeholders and citizens alike came forward to support the idea of a County WUI code, and elected officials adopted one in 2001. Yakima County's current International Wildland-Urban Interface Code (Chapter 13.12) adopts the 2015 International Code Council's International WUI Code with local amendments. These local amendments tailor it to the community – an important ingredient for maintaining buy-in. The county reviews the code every three years. Any proposed changes receive input, and adopting the newest version of the code is not always required. The county utilizes its inspectors and local contractors as boots on the ground to receive feedback on the how the WUI code is achieving its objectives.⁷⁰

In Wenatchee, Washington, some communities have unique land uses that require specialized ordinances or codes to mitigate WUI risks. Located in the Okanagan Valley, the City of Wenatchee has an economy that continues to include fruit-packing warehouses. Warehouses throughout the city store wooden crates and other combustible materials as part of their seasonal operations. During recent years, wildfires throughout the region have threatened or destroyed similar warehouses when firebrands landed on flammable materials and ignited. To mitigate the threat to these structures and nearby properties, Wenatchee requires that all empty wood boxes, bins, pallets, cartons or trays are stored a specified distance from buildings and electric lines. In addition, there are requirements to limit the height of piles and stacked bins.⁷¹

There are a number of standard codes that apply in whole or in part to the building scale that can prove useful for adoption, or reference. These include the following, all of which are readily available online:

- 2015 International Code Council International Wildland-Urban Interface Code
- NFPA 1141, Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas
- NFPA 1142: Standard on Water Supplies for Suburban and Rural Fire Fighting
- NFPA 1143: Standard for Wildland Fire Management
- NFPA 1144: Standard for Reducing Structure Ignition Hazards from Wildland Fire

C. Non-Regulatory Tools

In addition to regulatory tools, there are already a wide variety of incentives and voluntary programs well-established to prevent wildfire. Communities that engage in regulation may also use incentives or voluntary efforts while other communities may skip regulatory approaches

⁶⁹ PLANNING FOR HAZARDS at 160.

⁷⁰ *Fire Burns 25 Homes Near Hanford Nuclear Facility*, L.A. TIMES (June 29, 2000), <http://articles.latimes.com/2000/jun/29/news/mn-46198>; Annette Cary, *Rattlesnake Mountain burned to protect Hanford, Benton City*, TRI-CITY HERALD (Aug. 1, 2016), <http://www.tri-cityherald.com/news/local/hanford/article93065737.html>; YAKIMA COUNTY, WASH., COUNTY CODE § 13.12 (2016), <http://www.codepublishing.com/WA/YakimaCounty/>.

⁷¹ YAKIMA COUNTY, WASH., COUNTY CODE § 13.12 (2016), <http://www.codepublishing.com/WA/YakimaCounty/>.

altogether and instead rely just upon these measures. In either case, the local community should be sure to refer back to the wildfire hazards identified in the CWPP and the mitigation measures proposed there. The way that these incentives and voluntary programs are bundled and deployed should be tailored to address the particular kinds of risks that the local community is facing. For instance, one part of a community may face timberland fire risks while another may face grassland fire risks. These fires burn differently and require different types of preparation. Incentives and voluntary programs can also be tailored to areas of highest risk or, alternatively, to places where there is lower risk but where there are high-value properties or important infrastructure. This means that the useful deployment of incentives and voluntary programs requires planning to be effective, and that planning should be based upon the kinds of wildfire risks identified and mitigation measures discussed in the CWPP.

1. Firewise

Firewise Communities may be the best known non-regulatory wildfire prevention tool; it is also widely misunderstood. At its core, Firewise is a program for communities that focuses upon establishing a vegetation plan for the community that is fire-resistant, ensuring an ongoing presence of fire awareness in the community, and ensuring maintenance of the vegetation plan and development in the community over time. This on-going commitment program is known as the Firewise Communities program, which is administered by the non-governmental National Fire Protection Association.

Firewise is a voluntary program that encourages homeowners and neighbors to work together to minimize their wildfire risk. To become a recognized Firewise Community, a community goes through a five-step process.⁷² This often occurs at the time of project application and is conducted by the developer, but it can occur later on. First, the project applicant or community must obtain a wildfire risk assessment from the state forestry agency or a fire department.⁷³ Second, they must convene a working group and create an action plan based on the assessment.⁷⁴ Third, they or a subsequently created fire board must conduct community outreach events promoting wildfire education or the action plan on an ongoing basis.⁷⁵ Fourth, the community must invest two dollars per member annually in Firewise activities.⁷⁶ Fifth, the development must submit an application for approval to the state Firewise liaison.⁷⁷

There are very few Firewise Communities in Idaho; according to the Idaho Firewise website, there are just sixteen certified Firewise Communities in Idaho as of this writing.⁷⁸ Most of these Firewise Communities in Idaho, as is true throughout the West, are also governed by homeowner's associations that provide additional structure and regulation to the community beyond that required by the local government. That said, Firewise is not available only to private

⁷² *Firewise Communities USA/Recognition Program*, NAT'L FIRE PROTECTION ASS'N, <http://firewise.org/usa-recognition-program.aspx>.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ Firewise State Liaison List, NAT'L FIRE PROTECTION ASS'N, <http://firewise.org/usa-recognition-program/state-liaison-list>.

⁷⁸ Idaho Firewise, *Firewise Communities*, <http://idahofirewise.org/home-safety/firewise-communities/>.

common-interest developments; in fact, neighborhoods without homeowner’s associations, as well as entire cities, can become Firewise Communities. In Idaho, the City of McCall has taken this step: the entire city is certified as a Firewise Community.⁷⁹ For those cities that face consistent wildfire threat, becoming a certified Firewise Community at the city level may be a smart move independent of whether the city also pursues regulatory approaches.

At the same time, local governments will routinely hear developers tout their projects as “Firewise” when seeking a project approval. In most of those cases, what the developer means is that the developer plans to use Firewise-approved vegetation, which generally adheres to the three-zone strategy discussed above and prioritizes local fire-resistant plants. As a reference, the Idaho Botanical Garden maintains a “Firewise Garden,” which highlights the various fire-resistant plants that are appropriate for the three zones in Idaho. The important distinction for local communities to understand, however, is that the planting of Firewise vegetation at the outset of a project does not guarantee that the community will retain, or properly maintain, that Firewise vegetation over time. It also does not ensure that the community will maintain an on-going wildfire presence. That on-going maintenance and education component only arises in a certified Firewise community. As a result, while the initial planting of Firewise vegetation by a developer is a great beginning step, it does not guarantee that the community will have an on-going fire-resistant vegetation and maintenance plan.

In addition, local governments should be aware that even in a Firewise Community, there is no supervision of the fire board or the activities that they coordinate. For instance, one Firewise Community fire board may choose to spend its money on a “meet-and-greet” with hot dogs at the fire station, while another Firewise Community fire board may choose to spend its money on a chipper and sponsoring a brush-clean up day. As a result, if local governments approving projects want certainty as to how a community will maintain Firewise vegetation planted over time, or certainty with regard to the types of programming or activities that will occur to promote wildfire preparedness, they will need to do more than simply require Firewise vegetation at the outset of a development or that a community maintain a Firewise Community recognition.

This lack of certainty with Firewise is important for local governments to understand. At the same time, that lack of certainty should also not diminish the important role that Firewise has played as an educational tool in helping to popularize the important role of defensible space and how to achieve it relative to the varied ecosystems around the West.

Those contemplating using Firewise as a voluntary measure for new developments would do well to review *Safer from the Start: A Guide to Firewise-Friendly Developments*, which provides a number of model codes and CC&Rs from communities that have integrated Firewise into private management agreements.⁸⁰

⁷⁹ *A Message from the Mayor About Firewise*, McCall, Idaho, <http://www.mccall.id.us/home/firewise-community.html>.

⁸⁰ FIREWISE, SAFER FROM THE START, <http://www.firewise.org/~media/firewise/files/pdfs/booklets%20and%20brochures/bookletsaferfromthestart.pdf>.

2. Insurance

Using insurance to indirectly regulate wildfire development is attractive to those that favor a market-based approach to development. This theory argues that where there is high wildfire risk, insurance costs will be prohibitively high and that will prevent development in the most wildfire-prone areas. To the extent that development continues in spite of insurance costs, it could do so only if the insurance companies do not have accurate information about wildfire risk and thus are improperly calculating their risk.

While this theory is seductive, there are several major problems with it in practice. First, a recent study by Headwaters Economics indicates that insurance costs are increasing and more companies are requiring adherence to fire-safe standards; on the other hand, home-building on fire-prone lands continues at a rapid pace.⁸¹ The study notes that, according to one estimate, since 1990, 60 percent of new single-family homes in the United States have been built in the wildland-urban interface (WUI).⁸² This is because the cost of defending homes from wildfires is typically a state and federal burden; as a result, there is little incentive for local governments to build on safer lands. Further, the insurance company only bears the cost of damaged homes, while the cost of protecting homes is born by federal and state governments and their taxpayers. For instance, the recent wildfire that broke out in the foothills above Boise required substantial fire fighting resources, but only one home was lost to the fire. For the insurance companies, the only liability was the lost home, not any of the costs of fighting the wildfire, or any of the after-effects of the fire that may lessen the home's value or otherwise affect tourism or economic development in a community. For these reasons, the insurance market is unlikely to ever fully reflect the true cost of wildfire.

At the same time, some local governments are also looking at ways to provide additional incentives to property owners who perform mitigation. Boulder County, Colorado's Wildfire Partners program, which is administered by the county and run on state and federal grants, offers in-depth property assessments by mitigation specialists to help residents understand their structural and property vulnerabilities.⁸³ Property owners who successfully perform all required mitigation receive a certificate. The program has two unusual benefits: a financial rebate to cover mitigation costs (e.g., tree removal), the certificate's acceptance by several insurance companies as proof of adequate fire mitigation sufficient to reduce rates or retain coverage.⁸⁴

3. Homeowners Associations (HOAs)

Homeowner's associations, or HOAs, are private organizations of homeowners typically associated with the same development. Once a rarity of exclusive communities, by 2012, the number of units in some kind of HOA constituted roughly 24 percent of the national housing stock

⁸¹ HEADWATERS ECONS., *Does Insurance Affect Home Development on Wildfire-Prone Lands?*, (June 2016), <http://headwaterseconomics.org/wildfire/solutions/insurance-wildfire-home-development/>.

⁸² *Id.*

⁸³ Wildfire Partners, <http://www.wildfirepartners.org>; Ryan Maye Handy, *Boulder wildfire mitigation program could become template for state*, THE GAZETTE (Sept. 24, 2015), <http://gazette.com/boulder-wildfire-mitigation-program-could-become-template-for-state/article/1559989>.

⁸⁴ *Id.*

and more than 60 percent of all new construction.⁸⁵ Estimates of residents living in an HOA climbed from 2.1 million in 1970 to 63 million in 2012.⁸⁶ HOAs were relatively rare in Idaho until the last several decades. Notably, much of the development in the WUI includes an HOA.

The rise of HOAs has many valences. From the developer's perspective, an HOA placed on a development at its inception can be useful for several reasons. In a large subdivision, the developer wants to maintain a nice appearance in the first phases of a development to assist with the sale of the later phases. In such a case, the developer will maintain control of an HOA until such time as all or most of the lots in the subdivision are sold. In addition, developers like HOAs because they can make the HOA liable for assessments or fees that the city imposes to pay for infrastructure and maintenance that is mandated by the city. Since the property tax revolutions of the Seventies, most western cities cannot use property taxes to fully fund infrastructure and maintenance that serves a community. Without access to property taxes, the cities must demand that the new development pay its own way, and an easy way to do that is make the HOA responsible for upkeep of roads and infrastructure that, in the days of higher property taxes, were paid for by the city. In addition, despite some concern about the controlling nature of some overbearing HOAs, the majority of residents in HOAs appear to prefer the very local level of control of their living environment, perhaps in part because surveys show that homes in HOAs have higher re-sale value than comparable homes not in HOAs.

Regardless of their merits, HOAs are increasing part of life in Idaho communities and often accompany development in the most wildfire-prone areas. For that reason, where government regulations are not preferred, a local community may instead offer potential guidelines for private covenants that local communities can adopt themselves if they choose to do so.

There are several Idaho examples that offer examples of how HOAs can incorporate fire preparedness into their CC&Rs. For instance, Hidden Springs is a large planned community located well into the foothills above Boise and its urban core. The Town Plan, in the case of Hidden Springs, was adopted as part of the Ada County Zoning Ordinance.⁸⁷ With regard to wildfire, the ordinance provides extensive regulations of the community, which includes seven "primary criteria" used to establish a wildfire prevention program for the project. Available water requirements included a fire protection minimum storage of 550,000 gallons with fire flow to exceed the minimum 1,500 gallons per minute, as well as hydrant specifications.⁸⁸ A fire station had to be constructed on-site. Primary roads within the community had to be designed to provide access for emergency vehicles. Site planning at the perimeter of the residential neighborhoods as well as local protection for individual homesites required a comprehensive system of roads, trails, riparian greenways and open preserves to provide strategic emergency access points and firebreaks at the neighborhood perimeters that allow firefighters to confine a fire to a small area. Noncombustible materials, such as tile/slate, asphalt composition shingles, and standing seam metal, were required for roofing materials. Landscape planting guidelines for Hidden Springs

⁸⁵ Ron Cheung & Rachel Meltzer, *Why and Where Do Homeowners Associations Form?* 16(3) CITYSCAPE: A JOURNAL OF POLICY DEVELOPMENT AND RESEARCH 69, 71-72 (2014).

⁸⁶ *Id.*

⁸⁷ The Town Plan is located in the Ada County Zoning Ordinance. See Appendix A for excerpt; see also ADA COUNTY, IDAHO, COUNTY CODE § 8-21A-9-27 (2016),

http://www.sterlingcodifiers.com/codebook/index.php?book_id=447.

⁸⁸ *Id.*

included provisions for wildfire prevention to reduce fuel volume in the common and perimeter areas, and second, to provide individual homesites with a framework for fuel modification. These guidelines focused on planting fire resistant plant materials; establishing irrigated landscape envelopes within each homesite; developing vegetation buffers that provide transition to adjacent native vegetation and establishing criteria for clearance between buildings and plantings within each site. Finally, the Town Plan required that “ongoing maintenance, management and enforcement of the wildfire prevention program will be the responsibility of the community association and governed by the covenants, codes and restrictions for the Hidden Springs community.”⁸⁹

In turn, the CC&Rs for Hidden Springs provide as follows:

3.1.7.16 Wildfire Prevention. Establish, implement and enforce all programs, services, activities, restrictions, rules and regulations necessary or appropriate to achieve the "Wild Fire Prevention Strategy" identified in Section 3, 3-19, of the Town Plan, including any and all steps necessary to minimize disruption of wildlife habitat in the form of native ground cover vegetation and existing soil and drainage patterns.⁹⁰

Thus, Hidden Springs provides an example of how a zoning ordinance and HOA CC&Rs can work together to provide both standards for wildfire protection that are enforceable through the enforcement mechanism of the county’s zoning ordinance, while also permitting the HOA and the local community to bear the primary responsibility for ongoing maintenance without the necessity of governmental involvement.

Another HOA in Idaho, Wilderness Ranch, which is located in Idaho Highway 21 between Boise and Idaho City, has received significant attention for its efforts in wildfire prevention, which resulted in large part through the HOA choosing to become a Firewise Community. Before and after pictures on the HOA’s website illustrate the dramatic changes the community has made of its own volition without any government regulation.⁹¹ The CC&Rs for the Wilderness Ranch community provide as follows:

15) Fire Hazard:

Owners will not use the property, nor permit others to use said property, in any way that will increase the fire hazard on the property or surrounding property, or any parts thereof, nor shall owners maintain or permit to be maintained in or about the premises any article which may increase said fire hazard. Owners, at owners’ sole cost and expense, shall comply with any and all requirements pertaining to said property of any insurance organization or company, United States Forest Service, Boise County, or the State of Idaho

⁸⁹ *Id.*

⁹⁰ HIDDEN SPRINGS, IDAHO, MASTER DECLARATION OF COVENANTS, CONDITIONS & RESTRICTIONS, <http://www.hiddensprings.com/Documents%20and%20Settings/5/Site%20Documents/Master%20CCR's.pdf>; HIDDEN SPRINGS, IDAHO, DESIGN GUIDELINES, <http://www.hiddensprings.com/Documents%20and%20Settings/5/Site%20Documents/Gov%20Documents/HS%20Firewise%20Guidelines%20700%20April%202010.pdf>.

⁹¹ Wilderness Ranch HOA, *Wilderness Ranch Images of Fuel Reduction Projects*, http://www.wildernessranch.net/editor_upload/File/Firewise/Firewise%20Before%20and%20After%20Photos.pdf.

necessary for fire protection for use of said lands.⁹²

As the community recounts, since becoming a Firewise Community, it has seen the following results:

- Numerous homeowners have taken action to reduce the risk of wildfire causing damage to their property. (Take a look around; you really can tell which owners have taken measures to protect their homes from wildfire.)
- We have designated a deposit site where property owners can get rid of woody debris from their hazardous fuel reduction projects. . . . A sign marks the spot. Please use this area to deposit woody debris only. Trash belongs at the dump.
- We have limbed trees and thinned brush along Ranch Roads and escape routes to make it safer for residents to evacuate and fire suppression equipment to access the Ranch.
- We are in the midst of a multi-phase fire mitigation and forest management plan for the Common Area.
- Numerous homes have been evaluated for their ability to survive a wildfire, and grant money has been provided to homeowners to complete hazardous fuel reduction projects.
- We have thoroughly researched the risk/benefits of Stay and Defend in the event of a wildfire and have made recommendations for residents to consider.⁹³

In addition to these Idaho examples, the Firewise *Safer From the Start* publication also contains several examples of Firewise-friendly HOA CC&Rs.⁹⁴ In addition, Appendix A includes CC&R maintenance language from the community of Cordillera in Eagle County, Colorado, which has given thoughtful consideration for how to address ongoing maintenance needs.⁹⁵

XI. Step Three: Implementation, Maintenance and Enforcement

Step Three of the wildfire planning cycle is implementation and maintenance of the regulations, incentives and voluntary programs that the local community has chosen to adopt in Step Two in response to the identified wildfire risks and mitigations arising from the CWPP process in Step One. Of the entire wildfire planning cycle, this step has proven to be the hardest for several reasons. First, maintenance is on-going, whereas many processes, such as permitting, are intended to be one-time reviews. Second, enforcement of regulations requires confronting offenders that are creating wildfire hazards. If the community has not been trained to see the wildfire risk and understand its severity, enforcement may encounter resistance and push-back on the entire wildfire preparedness plan. This is why education is a constant need in the wildfire planning cycle, and why a citizen board is necessary for involvement as early as the Step One CWPP process. Enforcement and on-going maintenance is hard, requires vigilance, and requires

⁹² Declaration of Covenants, Conditions, and Restrictions for Wilderness Ranch No. 1, Wilderness Ranch No. 2, Wilderness Ranch No. 3, Wilderness Ranch No. 4, and Wilderness Ranch No. 5 at 8, http://www.wildernessranch.net/editor_upload/File/Legal_Policies/wroaccr.pdf.

⁹³ Guy Hand, Fireproofing Homes rather Than Forests, OPB (July 17, 2012), <http://www.opb.org/news/article/fireproofing-homes-rather-forests/>.

⁹⁴ FIREWISE, SAFER FROM THE START at 25-26.

⁹⁵ Cordillera Property Owners Ass'n, *Resolution No. 2009-09: A Resolution Affirming, Amending, and Restating the Association's Wildfire Mitigation Regulations*. See excerpts in Appendix A.

residents to take time from their lives to prepare for an abstract, but very real threat. While there is no easy solution to implementation, maintenance and enforcement, this section suggests several strategies that are potentially valuable in ensuring that wildfire preparedness goes from plan to implementation.

A. Improving Communication

When a project comes for approval to a planning and zoning commission, if it is located in an area of wildfire risk, it will typically have a letter from the local fire chief attached to the staff report stating that the project complies with the local government's fire requirements. The fire chief will typically offer up some standard conditions that the staff planner will incorporate into the conditions of approval. For most planning department staff, that letter fulfills their obligation to consult with the fire staff on wildfire for the project.

In practice, this process often yields little real coordination between the fire chiefs and the planners. Moreover, the fire chiefs are often applying codes that are primarily based upon urban fire needs, not wildfire needs, which may not appear in the code. Planners may not understand wildfire issues and thus defer to the fire chief. Planning and zoning commissions may simply defer to the planning staff or fire chief assuming that this complicated issue has been resolved. Seldom do commissions ever, of their own accord, decide to take up the wildfire issue, much less defer a hearing on the proposal to consider additional conditions of approval. Local governments should consider taking several steps to ensure a smoother planning process with regard to applying regulations, incentives and programs to specific projects.

First, local governments should follow the steps outlined in this wildfire planning cycle, which includes having planning and building staff, as well as local officials and citizens engage the wildfire process as early as possible, and in an ongoing manner. That means having all of those participants included in the CWPP process, as well as the creation of the local community's mix of regulations, incentives and programs.

Second, local governments should consider coordinating meetings at the beginning of an application process that would bring together planning, building and fire staff to meet with a project applicant that is considering a WUI project. Such meetings are already common in a number of jurisdictions; they should be extended, and they should specifically ensure that some portion of the meeting is not just about explaining compliance with regulations to the developer, but also how incentives or voluntary programs could increase wildfire preparedness while also permitting the developer to build a project that is in line with the community's land use regulations.

Third, the local government should consider some aspect of what is often referred to as a "chief resilience officer," a term that simply means a staff member that is charged with ensuring that all of the silos of a local government—in the particular case if wildfire, the fire, planning and building departments—are talking with each other and working towards a common vision of wildfire protection.

Fourth, the local governments should be sure to train volunteer officials, such as local planning and zoning commissioners, on the basics of wildfire regulation, incentives and programs.

Such commissioners often are the most visible decisionmakers in a community on whether to approve a wildfire-prone project; ironically, they often know the least about the issue. While such planning and zoning commissioners, and ultimately the local city council members and county commissioners, will always need to rely upon the expertise of staff, they must also be aware of, and have the capacity to, deploy the full range of regulations, incentives and voluntary programs that the local community has decided to adopt in accordance with the identified wildfire risks that the community faces.

B. Enforcement

As noted before, enforcement of wildfire provisions may be the hardest part of the wildfire planning cycle, but also the most important. Wildfire preparedness is not a one-time occurrence; rather it requires maintenance of conditions that can become hazardous on a yearly, or even twice-yearly basis. In cases where local communities are not engaging in the up-keep, the question of whether to enforce, and whether the local community has the power to enforce, compliance with wildfire-ready maintenance is an ongoing matter of concern. For those communities seeking alternatives, here are some in use throughout Idaho and the West.

1. HOA CC&Rs

Because so much of development is now subject to HOAs, perhaps the most common means of on-going enforcement remains the CC&Rs of those communities. As discussed previously, these terms often include both substantive standards that require certain vegetation management plans, as well as specifications related to materials in the built environment, that permit the HOA development to retain a level of wildfire preparedness without being subject to government overview.

2. Local Governments as Third-Party Beneficiaries of Maintenance Agreements

It is increasingly common for local governments to leave maintenance of vegetation and housing materials in wildfire-prone areas to HOAs that govern such WUI communities. However, some local governments, while ceding that responsibility to the HOAs as a primary source of enforcement, also want to retain the ability to enforce the agreed upon wildfire provisions at the time the HOA was approved if the HOA then fails to maintain the association's development in the agreed upon wildfire-ready manner. The easiest way for local governments to achieve this is to require, at the time of entitlement, that the city or county retain a "third part beneficiary status with right of enforcement" for the wildfire provisions in the CC&Rs. This legal term simply means that if the HOA fails to perform its obligations regarding wildfire in a community, the local government has the power to enforce the wildfire terms and then send the bill to the HOA.

As an example, the Laguna Beach, California CWPP included draft language for a third-party beneficiary with right of enforcement term that it suggested for adoption by local governments. The detailed provision covers a number of important points beginning with these terms, but at its core is defined by empowering the city to enforce the CC&Rs related to wildfire in these terms:

In furtherance thereof, the City shall have the right, but not the obligation, to enforce the performance by the Association of its duties and any other fire prevention requirements, which were imposed by the City or other Public Agency as a condition of approval for the Development (e.g., prohibition of parking in fire lanes, maintenance of the blue reflective markers indicating the location of fire hydrants, etc.) and shall also have the right, but not the obligation, to enforce compliance by any Owner with any Fuel Modification Zone or designated interior/manufactured slopes restrictions applicable to his Lot (or Condominium) as set forth in the Fuel Modification Plan.⁹⁶

For local governments that are serious about ensuring that HOAs wildfire provisions are maintained over time, this type of provision is invaluable. It gives the local government the opportunity to enforce, but still gives the HOA the primary obligation, and opportunity, to engage the wildfire preparedness.

⁹⁶ Laguna Beach Community Wildfire Protection Plan And Other Natural Disasters § 1.1.4.5., <http://www.lagunacoastfiresafecouncil.org/images/Written%20Plan%2003-05-07.pdf>. The provision further provides:

[Laguna Beach Fire District] will be designated as a third party beneficiary of a homeowners' association's duty to perform "Fire Prevention Maintenance" (as defined below) for all portions of the Association Property (or Common Area) that constitute Fuel Modification Zones and designated interior/manufactured slopes to be maintained by the homeowners' association, and of any Owner's duty to comply with any Fuel Modification Zone restrictions applicable to his Lot (or Condominium). Additionally, LBFD shall have the right, but not the obligation, to enforce the homeowners' association's duty to perform such Fire Prevention Maintenance, and to enforce compliance by any Owner with any Fuel Modification Zone restrictions applicable to his Lot (or Condominium). In furtherance of such right, LBFD shall be entitled to recover its costs of suit, including its actual attorneys' fees, if it prevails in an enforcement action against a homeowners' association and/or an individual Owner. (A sample third party beneficiary provision to be incorporated into the CC&Rs is attached hereto as Addendum "1"). . . .

ADDENDUM "1"

Enforcement by the City of Laguna Beach. The City of Laguna Beach (City) is hereby designated as an intended third party beneficiary of the Association's duties to perform Fire Prevention Maintenance for all portions of the Association Property (or Common Areas) consisting of Fuel Modification Zones or designated interior/manufactured slopes in accordance with the Fuel Modification Plan, and of each Owner's duty to comply with any Fuel Modification Zone or designated interior/manufactured slopes restrictions applicable to his Lot (or Condominium) as set forth in the Fuel Modification Plan. In furtherance thereof, the City shall have the right, but not the obligation, to enforce the performance by the Association of its duties and any other fire prevention requirements, which were imposed by the City or other Public Agency as a condition of approval for the Development (e.g., prohibition of parking in fire lanes, maintenance of the blue reflective markers indicating the location of fire hydrants, etc.) and shall also have the right, but not the obligation, to enforce compliance by any Owner with any Fuel Modification Zone or designated interior/manufactured slopes restrictions applicable to his Lot (or Condominium) as set forth in the Fuel Modification Plan. If, in its sole discretion, the City shall deem it necessary to take legal action against the Association or any Owner to enforce such duties or other requirements, and prevails in such action, the City shall be entitled to recover the full costs of said action, including its actual attorneys' fees, and to impose a lien against the Association Property, or an Owner's Lot (or Condominium), as the case may be, until said costs are paid in full.

Other cities facing severe wildfire risk have engaged similar tools. For instance, San Diego, California imposes fines, and liens, on properties that do not comply with regulatory requirements for defensible space, hires a contractor to do the mitigation work and sends the bill to the homeowner.

The State of Florida has a statewide law in effect that enables the Florida Forest Service to mitigate on any private property, without written consent, to reduce fire hazard.

3. Development Agreements

Many large-scale developments in the WUI are governed by development agreements. While development agreements must meet statutory requirements in some other states, in Idaho, they are largely deemed to be subject to the general rules of contracts.⁹⁷ Developers and local governments both like development agreements because they permit both private and public parties to negotiate for terms that are not otherwise addressed by existing codes and plans or that might otherwise be deemed exactions. Because of this, both developers and the local government can ask for, and potentially receive, valuable concessions that matter to the respective parties.

For local communities that are at a high wildfire risk, savvy negotiation in a development agreement negotiation may be the best way to ensure not only that a development meets wildfire preparedness goals for the identified wildfire risks in the community, but that the community maintains that wildfire preparedness, especially in its vegetation management and its building materials approved, over time. For instance, a city or county may require the reservation or dedication of land for public purposes and may include conditions and restrictions for subsequent discretionary actions. For example, the city or county may require dedication of emergency access easements, dedication of land for firefighting facilities, on-going maintenance of those facilities, and subsequent review of fire safety plans before later phases of development can begin.⁹⁸

For instance, a development agreement signed by the City of Boise and a developer including a number of terms related to wildfire hazards.⁹⁹ Such development agreements permit the city and the developer to reach an agreement on how to address particular wildfire hazards in a manner appropriate to the type of development the developer sought to build while also permitting the city to ensure that future residents would be protected from wildfire.

4. Zoning Maintenance Requirements

Several local governments in Idaho also have zoning ordinances that require an approved project to maintain wildfire preparedness. For instance, developments in the Coeur d'Alene Hillside Overlay District are subject to the following requirements outlined in the zoning code:

⁹⁷ Idaho does have a statutory provision related to “development agreements”; however, that section does not apply to most of the development agreements that increasingly govern large-scale development in Idaho.

⁹⁸ Cal. Governor’s Office of Planning and Research, *Fire Hazard Planning: General Plan Technical Advice Series* 49 (April 2014 Draft), https://www.opr.ca.gov/docs/Fire_Hazard_Planning_Public_Review_Draft_June_24_2014.pdf.

⁹⁹ Boise City, Idaho, *Development Agreement*, <http://pdsonline.cityofboise.org/pdsonline/Documents.aspx?id=200807141035161250>.

Maintenance requirements and responsibility shall be clearly identified for all projects where best management practices are employed, including those for erosion and sedimentation control, storm water management, and fuel modification for wildfire mitigation. When a storm water system is designed to service more than one lot, a maintenance agreement between all parties that benefit from the system must be established, including assurance of adequate funding. Easements across private property for maintenance access to community storm water systems shall also be required where necessary. All private maintenance agreements and required easements must be executed prior to issuance of certificate of occupancy, recordation of final plat, or similar approvals of the city.¹⁰⁰

Similarly, the City of Hauser also uses a zoning code to require maintenance.¹⁰¹ These zoning provisions require that individual homes and other principal structures provide a fire defensible space of at least 30 feet surrounding the home or structure and that “[m]aintenance of defensible space is a requirement for continuing compliance with this title.”¹⁰²

Power County’s Development Code provides that all developments in or adjacent to forested areas, or areas of flammable brushy vegetation shall provide a fire defensible space of at least 30 feet around the home or structure, where a “defensible space” is one in which trees are thinned so that crowns do not overlap or touch, woody brush is removed or substantially thinned, and dead fuel is removed. The code further requires that “[m]aintenance of the defensible space is a requirement for continuing compliance with this Title.”¹⁰³

The City of McCall has substantial requirements for mitigation fire hazards in its zoning codes, which include terms related to the maintenance of yards; requirements of homeowner’s associations to remove “woody material” from common spaces; and upkeep of vacant lots, among other requirements.¹⁰⁴

The virtue of placing on-going mitigation requirements in the zoning code is that they are subject to the enforcement provisions of zoning codes, which in most jurisdictions, offer the local government a number of ways to compel compliance all of which are well within the ambit of police power regulations.

5. Nuisance Abatement for Wildfire Hazards

Many communities have nuisance ordinances, and it’s important to ensure they support wildfire mitigation in addition to other public health and safety objectives. In 2014, Sisters, Oregon updated its Municipal Code with an ordinance that includes language to define a nuisance as including wildfire-related conditions and includes definitions for terms such as brush, fuel break, ladder fuel, and extreme risk land. For those properties subject to wildfire risk reduction

¹⁰⁰ COEUR D’ALENE, IDAHO, DEVELOPMENT CODE § 17.08.950 (2016).

¹⁰¹ HAUSER, IDAHO, MUNICIPAL CODE § 8-3A-7 (2016).

¹⁰² *Id.*

¹⁰³ POWER COUNTY, IDAHO, DEVELOPMENT CODE § 10-13-4 (2016), http://www.sterlingcodifiers.com/codebook/index.php?book_id=838.

¹⁰⁴ MCCALL, IDAHO, CITY CODE § 3.8.04 (2016), http://www.sterlingcodifiers.com/codebook/index.php?book_id=497.

requirements within city limits, they must create and maintain fuel breaks, remove ladder fuels, keep roofs free of leaf litter, and keep specified areas as fuel-free or be subject to nuisance abatement procedures.¹⁰⁵

Similarly, the City of Palm Coast, Florida has a nuisance ordinance where they impose fines, and liens, for property owners that do not comply with vegetation management requirements.

C. Disclosure

Another approach now popular, especially among jurisdictions that do not have the inclination or resources to engage in wildfire regulation is simply to use a disclosure of wildfire risk. As one example, the City of McCall has created a GIS mapping system that permits users to see the last fifteen years' worth of fires, which show how the city has been virtually encircled by fire within that time frame. This map image, previously shown above, is an evocative way to convey fire danger to build a community awareness and willingness to act.¹⁰⁶

Similarly, Nez Perce County provides an informational report on all hazards, including wildfire, to all applicants. This informational report, while not affecting regulation, does make it clear to applicants when they are about to build in a high wildfire risk area. That disclosure of risk then permits the county to begin a conversation about what incentives and voluntary programs the developer may choose to reduce the risk that the development will face in that location.¹⁰⁷

D. City Work for Private Owners with Maintenance Agreements

As part of Kootenai County's FireSmart program, the county will assist property owners in creating fuel breaks designed to protect themselves and their community from wildfire. For landowners whose property qualifies for treatment as a fuel break, the initial hazardous fuel treatment work is paid for through the FireSmart program. Participants agree to maintain the work for a period of 10 years, or until they sell the property, whichever comes first.¹⁰⁸

XII. Step Four: A Substantial Change Occurs: Wildfire, Passage of Time

The final step in the wildfire planning cycle—at least conceptually—is when one of two events occurs: a wildfire happens, or five years passes from the completion of the CWPP. In some communities, wildfires happen every year and, of course, the wildfire planning process cannot be completed on a yearly basis. However, there are some wildfires that really cause the community to take note and pique the interest. Studies have shown that, in those instances, a local community has about a six-month window in which to re-consider how it will address wildfire. It is at those windows of opportunity that it is important to begin the wildfire planning process anew, harness the renewed interest and make a better long-term plan for the future of the community.

¹⁰⁵ SISTERS, ORE., Ord. No. 444, <http://www.ci.sisters.or.us/pdf/ORD%20444.pdf>.

¹⁰⁶ See McCall, Idaho interactive GIS map: tinyurl.com/mccallfirewise.

¹⁰⁷ See excerpts Appendix A.

¹⁰⁸ KOOTENAI COUNTY, IDAHO, *FireSmart*, <http://www.kcgov.us/departments/disaster/firesmart/firesmart.asp>.

Alternatively, if such a moment does not occur within five years, the community will need to begin the CWPP process again nonetheless. This arises because the Idaho Office of Emergency Management and the Idaho Department of Lands have a memorandum of understanding to integrate county CWPPs into county AHMPs. This will have the long-term benefit of making communities in Idaho eligible for far greater funding opportunities to prevent, and recover from, wildfires. However, those opportunities will only arise if the CWPPs meet the requirements that AHMPs must also meet, which is to be reviewed annually and substantively updated every five years. For that reason alone, Idaho communities will need to engage wildfire planning on a five-year planning process.

XIII. The Cyclical Nature of Wildfire Planning

The wildfire planning process proposed here is conceptual in nature; it is recognized that not all communities will start with a CWPP, then launch into drafting regulations, incentives and voluntary programs, proceed to implement and enforce them, all before a wildfire strikes. Indeed, in many communities, wildfire strikes yearly, and in some communities, it is the inability to enforce a provision that encourages the local government to start from scratch and revise the CWPP. Nonetheless, the proposal for a cyclical planning process, built on a five-year rotation, is a valuable approach to an ever-changing wildfire risk. This is especially so in rapidly growing communities where the WUI is an ever-changing concept, and where the nature of regulations, and the regions where such regulations need to be imposed, may change dramatically in a five-year period. By embracing a cycle of wildfire planning, local communities can feel confident that they have a procedural mechanism in place to continually rethink this evolving risk as their communities also evolve over time.

XIV. The Constant Need for Education

In the conceptual framework, the wildfire planning process is surrounded by education. Education is a constant need in wildfire preparation. There are a number of excellent education components already available, such as the numerous publications available from the U.S. Forest Service¹⁰⁹ In addition, many Idaho communities adopt educational strategies related to matters of local concern. For instance, Hope, Idaho sends out notices about fire dangers from fireworks during the Fourth of July. A number of cities and counties offer brochures promoting Firewise vegetation. Other measures include the issuance of certificates for homeowner wildfire hazard reductions that are offered by Boise and Kootenai County.

XV. Concluding Remarks

The wildfire planning cycle proposed here is primarily a procedural invention; indeed, most of the tools known to prevent wildfire in planning new communities in the WUI have been known for a long time. The question is why they have not been deployed, and even when deployed in regulation, why those wildfire protection measures have not been implemented or protected over time. The argument of this guide is that the reason is primarily procedural: there has not been a coherent way to move from wildfire risk and mitigation measure identification to adoption of

¹⁰⁹ U.S. FOREST SERVICE, *Fire-Adapted Communities are prepared for wildland fire.*, http://www.fs.fed.us/fire/prev_ed/.

regulations, incentives and voluntary programs to implementation and maintenance. If the proposed planning cycle proves useful, it may well be simply in making clear the steps necessary, and basic planning tools already devised for achieving those steps, along the way.

Local governments seeking to implement this process may need to re-imagine how they work with consultants, many of whom are just now beginning to understand the importance of linking the CWPP process with local planning and building code processes. For instance, counties in Idaho have historically relied upon consultants to draft their CWPPs. If a county—or city or neighborhood—want to try the wildfire planning cycle approach proposed here, that community will need to make clear to the consultant that they want something new. That will need to be reflected in Requests for Proposals, as well as in very specific guidelines to the consultant. It may be incumbent on agencies or scholars to ultimately provide local communities the tools to do the CWPP work themselves, or else to include guidance on selecting an appropriate consulting firm through a well-written RFP; managing the consultant through a scope of work that ensures deliverables and the final product are collaborative and include multi-stakeholder input; and providing an implementation and maintenance plan for the community. Till that time, however, local communities will need to understand that the wildfire planning process has not yielded the results it could, and something new needs to be tried. Part of that, this guide suggests, is inclusion of citizens and local planning and building staff, along with local officials, from the very beginning of the wildfire planning process. That continuum of knowledge, from risk and mitigation identification to adoption of regulations, incentives and programs to implementation, enforcement and maintenance can only occur where staffs of various departments are working together and have equal ownership in planning for wildfire.

Finally, this guide offers a wide array of planning tools for wildfire. One of the goals of the guide was to make clear that wildfire planning does not necessarily have to be “anti-development.” While some communities in Idaho will choose to forego development in high-risk wildfire areas, the rapid growth of the state means that, in many locations, there will be simply no choice but to grow into areas prone to wildfire risk. When development happens, there are relatively easy solutions that a little bit of planning can integrate into plans to make for a significantly reduced wildfire risk. Given what is at stake—lives and homes, among other things—we hope that communities will give this new approach a try and make communities as adapted to fire as the existing knowledge of fire and building technology would allow.

Appendix A:

Excerpts of Idaho and other Western State Local Government Wildfire Codes

XVI. Appendix A: Excerpts of Idaho and other Western State Local Government Wildfire Codes

A. Cal. Office of Planning & Research, *Fire Hazard Planning*¹¹⁰

1. Excerpts Regarding Fire Risk Identification

FIRE HAZARD - ALL AREAS

Fire Hazard

Data & Analysis: Below is a list of data that may be useful in establishing a current picture of the values and assets at risk, which may be affected by wildfire. Values and assets refer to accepted principals or standards and any constructed or landscape attribute that has value and contributes to community or individual wellbeing and quality of life. Examples include property, structures, physical improvements, natural and cultural resources, community infrastructure, commercial standing timber, ecosystem health, and production of water.

Check with the local California Department of Forestry and Fire Protection (CAL FIRE) Unit for California Fire Plan information with regards to values and assets at risk.

Identify values and assets at risk such as:

- Recreational areas
- Scenic areas
- Ecologically significant areas
- Critical watersheds
- Public and private timberland
- Wildlife habitat
- Rangelands
- Sensitive soils
- Landslide prone areas
- Cropland
- Water supplies
- Watersheds prone to contribute to flooding
- Air quality
- Historic sites o Cultural sites o Tourism sites
- Emergency shelters
- Structures, such as homes and business

- Utilities and accompanying infrastructure o Population and economic centers

Classify values and assets based on their vulnerability to wildfire:

- Evaluate the identified values and assets based on economic and social value to the community and replacement value.
- Prioritize the values and assets for assisting in the selection of mitigation efforts and development of fire response plans. Prioritization can be accomplished in a variety of ways: most difficult or expensive to replace, most necessary for communities (especially vulnerable members of the community), easiest to protect, broadest benefit to community, closest to urbanized areas and any other priority system that may be relevant to the community.

Additional data and analysis may be appropriate based on local conditions and geographic circumstances.

Emergency Services

Data & Analysis: Below is a list of data that may be useful in establishing a current picture of emergency services and response related to wildfire.

- Identify the LAFCo approved service areas of emergency services including, but not limited to fire, police, and emergency response vehicles.
- Review the LAFCo Municipal Service Review (MSR), if completed, for the emergency services in the area. If no MSR is available, undertake your own review of the services including cost, municipal service level, response time, condition of existing facilities and vehicles, local delivery system and other relevant information.
- Identify and map existing and proposed emergency service facilities.
- Identify areas where emergency services are not readily available.

¹¹⁰ https://www.opr.ca.gov/docs/Final_6.26.15.pdf

- Determine the projected need for emergency services in the area.
- Identify areas of special emergency service needs.
- Determine areas of low resilience and adaptability
- Make emergency service information available in dominant language of community
- Based upon the LAFCo MSR and any other related information, evaluate the adequacy of existing emergency services and demand for additional services for current and projected need in the area.

Emergency evacuations

Data & Analysis: Below is a list of data that may be useful in establishing a current picture of local need and potential response strategies for emergency evacuations related to wildfire:

- Identify previously designated emergency evacuation routes.
- Identify the number of people who currently use these routes.
- Develop a projected increase of people who would need to use these routes over the next ten years.
- Develop a projected increase of people who will need to use new routes.
- Identify potential circulation improvements necessary to avoid unacceptable community risks.
- Evaluate the availability, intelligibility, and accessibility of signed routes for use by evacuees and response vehicles during a fire emergency.
- Identify potential availability of alternate routes.
- Identify the adequacy of the access and evacuation routes relative to the degree of development or use (e.g., road width, road type, length of dead-end roads, turnouts, etc.) (Public Resources Code (PRC) 4290.)
- Identify the accessibility of evacuation routes to differently abled, chronically ill, elderly, pregnant, socially isolated, and non-English-speaking persons.
- Evaluate the potential for disruption to evacuation routes from fire, landslide movement, fault ruptures, earthquake-triggered failures, volcanic eruption and other hazards.

- Identify the location and capacity of existing emergency shelters.
- Estimate the need for expanded capacity at existing shelters or the need for additional emergency shelters. Shelter needs include residents, workers, undocumented residents, campers, tourists, differently abled, elderly, pregnant, young, non-English-speaking and other people reasonably expected in the area.

Firefighter safety

Data & Analysis: Below is a list of data that may be useful in establishing a current picture of firefighter safety related to wildfire.

- Identify existing defense zones.
- Identify low risk fire safety areas (location).
- Identify existing and alternate evacuation routes.
- Evaluate adequacy of existing defense zones.
- Evaluate need for additional defense zones to protect assets or communities at risk.
- Evaluate area to determine where it would be unsafe for ground firefighting.
- Designate and map updated defense zones.

Fire Effects (Minimizing Fire Loss)

Data & Analysis: Below is a list of data that may be useful in establishing a current picture of fire effects related to wildfire:

- Establish desired initial attack success rate.
- Identify maximum acceptable fire size.
- Determine which geographic areas would benefit from mitigation programs to reduce fire effects in the event of fire.
- Estimate cost of treatment methods and compare to cost of suppression.
- Estimate cost to community of fires, including community income, insurance, adaptability, and resilience.

Determine which mitigation measures should be used in each geographic area to accomplish fuel modification and reduce fire risk. The following are possible choices:

- Education
- Increase initial attack capability
- Prescribed Burns
- Wildfire protection zones
- Forest thinning
- Grazing

FIRE HAZARD – WILDLAND AREAS

Data & Analysis: Below is a list of data that may be useful in establishing a current picture of fuel modification in wildland areas related to wildfire. In order to identify the local areas at risk with regards to fuel modification, collect and analyze the following:

- Identify and classify very high fire hazard severity zones based on:
 - Degree of development
 - Fuel loading
 - Weather
 - Slope
 - Aspect
- Accessibility to fire protection assistance (i.e., response time, availability of helispots, proximity of air tanker attack bases, availability of woods workers, etc.)
- Proximity to communities or assets at risk
- Historic fire data
- Projected future fire vulnerability with changing growth patterns and considering the impacts of climate change
- Shifting plant community composition
- Other pertinent information and maps (see GC Sections 51178-51189.5, PRC Sections 4201-4205 and http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.php)
- Analyze the potential for fire to critically impact or eliminate habitats or open-space areas.
- Identify the policy implications for fire safe or fuels reduction policies of both public and private conservation of open-space areas.
- Prioritize applicable areas needing vegetation/fuel treatment by:
 - Identifying maximum acceptable fire size.
 - Estimating costs of treatment methods.
 - Developing timeline for implementation and maintenance of fuels treatments.
- Evaluating how treatment methods impact habitat, wildlife, natural, cultural, and open space resources and floodplains.

FIRE HAZARD - URBAN INTERFACE AREAS

Data & Analysis: Below is a list of data that may be useful in establishing a current picture of fire hazards in the Urban Interface. The purpose of the collection and analysis of the following data is to determine areas containing hazards, risks, and vulnerabilities in the Urban Interface.

- Check the list of “Communities at Risk” per the National Fire Plan (see Communities At Risk List).
- Check “high fire hazard severity zones” maps. (GC Section 51178, see maps at CAL FIRE - Fire Hazard Severity Zones Maps and check with local governments for updates).
- Update “high fire hazard severity zones” maps as necessary.
- Inventory and prioritize your assets at risk (public and private).
- Undertake cost/benefit analysis of various hazard mitigation measures as opposed to fire suppression.
- Establish low risk category standards (tree spacing, predicted surface fuels flame length to crown height ratios, etc.).

FIRE HAZARD - URBAN AREAS

Data & Analysis: Below is a list of data that may be useful in establishing a current picture of fuel and structure modifications in urban areas related to wildfire.

- Identify and classify fire hazard severity areas.
- Evaluate age, condition, and size of structures (code related issues).
- Evaluate use and occupancy of structures.
- Evaluate construction materials and roofing assemblies.
- Evaluate structure density.
- Evaluate access and evacuation routes.
- Evaluate vegetation management capabilities.
- Evaluate historical fire data.
- Evaluate projected future fire risk.
- Evaluate other pertinent information (maps).
- Evaluate landscaping as potential fire hazard.
- Evaluate neighborhood defensible space (island of safety).
- Identify fire protection jurisdictions.
- Evaluate use of open space and other facilities as part of overall fire protection/mitigation plan.
- Inventory urban forests and evaluate affect with regard to fire hazard.

POST EVENT RECOVERY AND MAINTENANCE

Short-Term Recovery

Data and Analysis: Below is a list of data that may be useful in establishing a current picture of short-term recovery possibilities related to impacts of a wildfire.

- Evaluate post-fire fuel hazard ratings.
- Evaluate post-fire air, water, and soil quality.
- Evaluate fire impacts on community health and wellbeing.
- Evaluate fire impacts on air quality and greenhouse gas emissions.
- Evaluate fire impacts on infrastructure.
- Evaluate fire impacts on ecological community.
- Monitor water table and precipitation to analyze risk of drought complicating recovery efforts.
- Evaluate vegetation/fuel conditions relative to future flood and fire control.
- Evaluate vegetation conditions relative to future fire conditions and wildlife habitat.
- Evaluate degree of success of fire risk reduction efforts.

Long-Term Opportunities and Maintenance

Data and Analysis: Below is a list of data that may be useful in establishing a current picture of long-term maintenance opportunities related to wildfire:

- Evaluate patterns and trends of local climate and how they relate to climate change in California.
- Evaluate patterns and trends of local ecological communities and vegetation.
- Identify endangered species, cultural and historic resources, and hazardous material conditions.
- Evaluate patterns and trends of development.
- Evaluate patterns and trends of population growth and demographic change.
- Evaluate long-term ability of community to manage vegetation, use fire-rated infrastructure, and evacuate in emergency situations.
- Evaluate impacts, and potential impacts, of an event on availability and condition of infrastructure.
- Evaluate impact, and potential impacts of an event on environment and ecosystem, including primary, secondary, and tertiary impacts.
- Evaluate “Fire Plan” and Safety Element for adequacy.

FLOOD HAZARD RELATED TO WILDFIRE (PRE- AND POST-FIRE)

Data and Analysis: Below is a list of data that may be useful in establishing a current picture of flood hazards related to wildfire. In order to identify the local areas at risk from floods due to wildfire collect and analyze the following:

- Collect historical data on flooding, such as frequency and intensity.
- Collect data on projected effects of climate and land use change on flooding frequency and intensity.
- Collect data on soil moisture, erosion and permeable surface loss.
- Identify (map) areas within floodplains or subject to inundation by a 100-year flood and the 500-year flood (see <http://myhazards.calema.ca.gov/default.aspx>).
- Identify historic and future precipitation intensity using best available models and information.
- Determine and map areas that are potentially prone to flooding, and debris flow, following a catastrophic wildfire.
- Determine specific vulnerabilities within the identified flooding areas.

LANDSLIDE HAZARD

Data and Analysis: Below is a list of data that may be useful in establishing a current picture of landslide effects as a result of a wildfire. In order to identify the local areas at risk from landslides due to a wildfire collect and analyze the following:

- Identify landslide prone areas from the Division of Mines and Geology and the U.S. Geological Survey landslide inventory and landslide and debris-flow susceptibility maps where maps exist.
- Identify areas which would be prone to landslides following a catastrophic wildfire.

PUBLIC HEALTH

Data & Analysis: Below is a list of data that may be useful in establishing a current picture of wildfire impacts to a community’s public health.

- Check the list of “Communities at Risk” per the National Fire Plan (see Communities At Risk List).

- Check “high fire hazard severity zones” maps. (GC Section 51178, see maps at CAL FIRE - Fire Hazard Severity Zones Maps and check with local governments for updates).
- Inventory and prioritize your assets at risk (public and private).
- Evaluate community access to fire safety information.
- Evaluate home insurance status in community.
- Evaluate physical and linguistic barriers to fire safety for communities.
- Evaluate use and occupancy of structures.
- Evaluate construction materials and roofing assemblies.
- Evaluate structure density.
- Evaluate access and evacuation routes.
- Evaluate projected future fire risk.
- Evaluate historical fire data.
- Evaluate other pertinent information (maps).
- Evaluate landscaping as potential fire hazard.
- Evaluate neighborhood defensible space (island of safety).
- Identify fire protection jurisdictions.

2. Excerpts of Potential Comprehensive Plan Policies

FIRE HAZARD – ALL AREAS

The following are examples of policies that a local government might adopt to mitigate damage to values and assets related to a wildfire:

- Avoid, where feasible, approving new development in areas subject to wildfire risk. If avoidance is not feasible, condition such new development on implementation of measures to reduce risks associated with that development.
- Establish site-specific safety measures to protect local resources from wildfire (all prevention and mitigation measures should be tailored to dominant local ecosystem, geography, community, and firefighting resources and capabilities).
- Public and private landowners shall implement site specific safety measures that mitigate to a low risk condition fire hazards around local resources.
- Local agencies shall work cooperatively with other agencies and private interests to

educate private landowners on fire-safe measures to achieve a low risk condition.

- Public and private funding, where available shall be used to the greatest extent practical to assist private landowners in implementing safety measures to achieve a low risk condition.
- Using best available science, plan for future fire risk as a result of climate change or other factors and alert public and private landowners in future risk areas

Water Supply

The following are examples of policies that a local government might adopt with regards to water supply and fire hazards:

- Maintain adequate water supplies to provide reasonable protection of assets from wildfire without disruption to community water supplies.
- Implement Office of Emergency Services URAMP software program.
- Adopt a specific water supply standard such as NFPA 1142, “Rural Water Supplies” and require developers and property owners to certify compliance with that standard and continue maintenance and availability of that water supply.
- Each property outside of a developed water system shall maintain sufficient usable water storage to provide wildfire and structure protection on the property.
- Plan for changes in future water supply, quality, and availability.

Emergency Services

The following are examples of policies that a local government might adopt with regards to emergency services:

- No development shall be approved unless the local government can make a finding that development can be reasonably accessed and served in the case of a wildfire.
- New development and subdivisions shall include appropriate emergency facilities to assist and support wildfire suppression.
- Fire safe measures shall be commensurate with the response time for emergency services (e.g. longer distance to a fire department calls for more stringent mitigation measures).

- Communities and open space areas shall provide a one quarter mile fuel modification zone for areas suitable for emergency protective services.
- Fire Districts/Departments are advised to engage in wildland fire training with a recognized state or federal wildland fire agency at least once a year.
- All new fire district/department staff responsible for fire suppression activities could receive an adequate number of training hours in local terrain during their first year.
- Local government shall identify and/or construct a low risk fire safety area (location) where community members can evacuate to and wait until emergency service providers can reach them. The local government shall annually review the adequacy and accessibility of the fire protection infrastructure relative to growth and development.
- The local government shall consider the long-term maintenance needs of emergency service equipment and facilities when developing its annual budget.
- Public and private property owners will receive information and instruction on fire rated roofing and construction materials and vegetation management.
- Assistance will be made available for fire rated roofing and construction materials and vegetation management.

Emergency Evacuations

The following are examples of policies that a local government might adopt with regards to emergency evacuations:

- Designate and maintain safe emergency evacuation routes on publically maintained roads for all communities and assets at risk.
- Establish a unified and accessible road signing and street addressing system.
- Identify low risk fire safety areas (location) and/or emergency shelters.
- Establish a public information program educating the public on evacuation routes and fire safety.
- Provide for broad public access to information regarding evacuation routes.
- Establish minimum road widths and flammable vegetation clearances for evacuation routes. (PRC Sections 4290 and 4291)

Firefighter Safety

The following are examples of policies that a local government might adopt with regards to firefighter safety:

- Identify low risk fire safety areas (locations).
- Identify fire defense zones where firefighters can control wildfire without undue risk to their lives.
- Designate and publicize areas where firefighter safety prohibits ground attack firefighting.
- Maintain fire defense improvements on both public and private property.

Fire Effects (Minimizing Fire Loss)

The following are examples of policies that a local government might adopt to mitigate fire effects:

- Forest thinning, grazing, and hand or mechanical clearing shall be conducted in lieu of prescribed fire unless prescribed fire can be clearly shown to provide the greatest overall benefit.
- Establish and maintain a plan that identifies hazards and risks, targeted priority areas, and preferred vegetation/fuel treatment methods and timing.
- Fire rated roofing and construction materials shall be allowed pursuant to Section 703.1 of the California Fire Code.

FIRE HAZARD – WILDLAND AREAS

The following are examples of policies that a local government might adopt with regards to fuel modification to mitigate fire hazards in wildland areas.

- Prior to the construction of any structure, whether residential, recreational, or commercial, a site specific fuel mitigation plan shall be prepared. The location and development of any road, or any other man-made structure that may act as a fuel barrier, shall be done in consideration of its maximum benefit as a fuel barrier/fire break. The plan shall cover the entire parcel and include measures for modifying fuel loading prior to development and a plan to maintain that protection over time.

- All residences shall comply with the fuel modification requirements of PRC Section 4291, whether located in state responsibility or local responsibility areas.
- Plant community shall be monitored for changing fire risk.
- Forest thinning and grazing and hand or mechanical clearing shall be conducted in lieu of prescribed fire unless prescribed fire is clearly shown to provide the greatest overall benefit.
- County resources will work with landowners to assist in choosing the best method of fuel reduction.
- Fire districts shall establish desired initial attack success rate.
- Evaluate how methods impact habitat and open space resources and floodplains.
- Identify preferred methods for areas needing treatment:
 - Education
 - Increase initial attack capability
 - Prescribed fire
 - Planting low-risk vegetation
 - Wildfire protection zones
 - Forest thinning
 - Grazing
 - Mechanical clearing
 - Hand clearing (piling, burning/chipping)

FIRE HAZARD - URBAN INTERFACE AREAS

The following are examples of policies that a local government might adopt to mitigate fire hazards in the urban interface:

- Public and private landowners shall minimize the risk of wildfire moving from one property to adjacent property through fire rated roofing and construction materials and vegetation management.
- Public landowners shall provide a minimum of a one quarter mile defensible fuel profile (buffer zone) at property lines and near points of special interest.
- Public landowners shall implement safety measures that result in a low risk category designation for wildfires threatening the urban interface.
- County agencies shall work cooperatively with other agencies and private interests to educate private landowners on fire-safe measures to implement in order to achieve a low risk category designation.

- Public and private funding for fire risk hazard reduction shall be prioritized to assist private landowners in implementing safety measures for a low risk designation.
- All residential, commercial and industrial construction and development will comply with the Board of Forestry’s State Responsibility Area Fire Safe Regulations (see California Code of Regulations, Title 14, Sections 1270 et seq.) relating to roads, water, signing and fuel modification.
- Public and private property owners shall maintain property in a low risk category (PRC Section 4291 and GC Section 51182).
- Landowners shall maintain minimum defensible space from all structures or improvements on their property and work with neighbors and local government to address defensible space within 100’ of structures that lies on adjacent property.
- The county shall work to facilitate agreements to provide fuel reduction efforts between public and private ownership’s where recommended clearances extend onto public lands. This will require collaboration with USFS.

FIRE HAZARD - URBAN AREAS

The following are examples of policies that a local government might adopt to mitigate fire hazards in urban areas.

- Urban developments shall be planned and constructed to resist the encroachment of uncontrolled fire.
- Create a self-assessment district to maintain a fuel modification program.
- Establish public education services through the appropriate fire protection agencies.
- Plan, design, and place open space facilities to provide for fire protection/mitigation.
- Require structures with fire protection sprinkler systems to provide for outside alarm notification.
- In high fire hazard areas fire rated roofing and construction materials shall be used in reconstruction and new development pursuant to Section 703.1 of the California Fire Code.
- Maintain open spaces so that ground fuels do not promote the spread of wildfire and aerial fuels do not allow the spread of a fire through the tree canopy.

- Public Open Spaces shall be used as demonstration areas and examples to neighborhood residents.
- Create an urban forestry plan to be consistent with the local fire plan.

POST EVENT RECOVERY AND MAINTENANCE

Short-Term Opportunities and Maintenance

The following are examples of policies that a local government might adopt to mitigate wildfire impacts shortly after an event.

- Reduce post fire recovery time by replanting native species.
- Ensure fire protection measures enhance sustainability of restoration projects.
- Ensure reduced future fire risk by removing sufficient dead woody vegetation while retaining reasonable wildlife habitat (cross-link with water quality).
- Retain sufficient downed logs for erosion control as well as habitat maintenance.

Long-Term Opportunities and Maintenance

- The following are examples of long-term policies that a local governments could adopt to mitigate fire impacts.
- Design subdivisions and developments to exist in concert with the natural ecosystem and to promote forest health and stewardship.
- Periodically review trends and projections of future fire risk and fire risk reduction capabilities to ensure that mitigation measures are adequate.
- Natural surface water and moisture levels shall be maintained.
- Incorporate forecasted impacts from climate change into trends and projections of future fire risk and consideration of policies to address identified risk.
- Protect investment through reduction of fire risk.
- Extend defensible fuel profile zone agreements to subsequent landowners.
- Promote the opportunity to return to native plant species.
- Emergency response capabilities shall be maintained and improved to protect all members of the community.

- In high-risk wildland fire areas rebuild structures with a minimum 100' setback (when feasible) from property lines.
- Residential dwellings will be rebuilt using best practice construction methods, materials, codes, and standards to reduce their susceptibility to wildfire.
- Periodically review fire history and lessons learned to ensure that mitigation measures are being managed to optimize effectiveness.

FLOOD HAZARD RELATED TO WILDFIRE (PRE- AND POST-FIRE)

The following are examples of policies that a local government might adopt to mitigate flood hazards related to a wildfire:

- All wildfire burned areas shall be treated to control storm water runoff prior to winter rains.
- Wildfire areas shall be restored by planting native vegetation cover or encouraging the re-growth of native species using best practices as soon as possible to aid in control of storm water runoff.
- Potential for future flood hazard shall be reduced by sufficient removal of dead, woody vegetation along watercourses following a catastrophic fire to reduce the risk of future catastrophic fires.
- Fire hazard reduction measures should balance forest health with fuel reduction activities while considering the potential effect on flood management. Reduction in fire risk will simultaneously reduce flood risk.

LANDSLIDE HAZARD

The following are examples of policies that a local government might adopt to mitigate landslide hazards.

- All wildfire areas prone to landslides shall be treated to avert storm water runoff prior to winter rains.
- Native vegetation cover shall be planted and/or temporary slope stabilization measures will be installed as soon as possible to aid in landslide control.
- Potential for landslides shall be reduced by sufficient removal of dead, woody vegetation following a catastrophic fire.

PUBLIC HEALTH

Policy Examples: The following are examples of policies that a local government might adopt to mitigate impacts to public health related to wildfires:

- Update existing emergency preparedness plans and conduct exercises to augment preparedness to better address local health impacts resulting from wildfires. Preparation should ensure completeness and availability of identified emergency supplies and resources, including but not limited to items such as medical supplies and services, water main repair parts, generators, pumps, sandbags, road clearing, and communication facilities. The effort should include identifying and cataloging the current supply and procuring additional items and services to ensure preparedness in the event of a wildfire emergency.
- Partner with existing public health community outreach and engagement efforts. An outreach program focused on vulnerable populations must identify the populations present in a given community, develop a plan to disseminate the information, and develop materials most appropriate for that population. Perhaps the most important step for a community is to identify dissemination networks (e.g., community-based organizations, local government, philanthropic organizations) that can reach residents susceptible to wildfires, people who live alone, the elderly, outdoor workers (including undocumented and migrant workers) and their employers, asthmatics, the differently abled, chronically ill individuals, and immigrants with literacy/language needs.

B. Community Scale Regulations

1. Comprehensive Plans

a. Lewis County

7.6.2

In recent years, there has been several 200 acre or larger fires, most of which occurred on rangeland and timbered pasture lands. Idaho Department of Lands,

working closely with the US Forest Service, local fire districts, and the Nez Perce Tribe, are quick to respond to fires in residential areas.

Wild Fire

In 2004, Lewis County, under the auspices of the Federal Emergency Management Agency, adopted a Wildland-Urban Interface Wildland Fire Mitigation Plan. This plan evaluated the wildland fire risk potential of the county, the fire fighting resources and capabilities of the various agencies, including the volunteer fire departments, Idaho Department of Lands, Bureau of Land Management, and the U.S. Forest Service, and established a means of communication, budgeting and funding.

b. Boise¹¹¹

Excerpt from Citywide Vision and Policies

Principles, Goals, and Policies for a Safe, Healthy, and Caring Community (SHCC):

PROTECT LIFE AND PROPERTY FROM NATURAL HAZARDS

Boise's scenic natural setting brings with it a number of natural hazards and the risks associated with those hazards. Flooding, wildfires, landslides, and, on rare occasions earthquakes, have all posed a threat to Boise at some time in the past and will likely do so again at some point in the future. Day-to-day decisions made about where and how growth will occur can affect the impact that natural disasters have on the community if and when they do happen. The goals and policies outlined below are intended to minimize the potential for harm to people and property.

Goal SHCC1: Minimize the degree of risk to life and property from wildfire.

SHCC1.1: DEVELOPMENT STANDARDS

Implement development standards such as a mitigation measures matrix, access standards, noncombustible roofs, sprinklers, clear space, and other measures in areas prone to wildfire.

SHCC1.2: PUBLIC EDUCATION AND AWARENESS

Promote public education and awareness of wildfire prevention and protection.

SHCC1.3: WILDFIRE RESPONSE PLANS

Develop, maintain, and regularly update emergency plans for wildfire response.

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http://pds.cityofboise.org/media/114868/blueprint_boise-51414.pdf

SHCC1.4: FEDERAL AGENCY AGREEMENTS
 Expand current agreements with the U. S. Bureau of Land Management (BLM) and U. S. Forest Service to provide aerial fire fighting resources.

SHCC1.5: WATER RESOURCES
 Implement strict controls over the use of water during wildland fires and develop strategies for use of other water resources.

SHCC1.6: WILDLAND URBAN INTERFACE
 Monitor the effectiveness of provisions to protect structures and prevent loss in the wildland urban interface.

...

Excerpt from “Foothills Planning Area Policies”

Goal FH-CCN 7: Reduce or minimize the threat of wildfires and protect against the loss of life and property.

FH-CCN 7.1: WILDFIRES AND SAFETY
 A fire safety plan shall be submitted in the Planned Unit Development application demonstrating effective safety measures during and after construction that include fire prevention and an emergency evacuation plan if a wild fire occurs. Where Foothills developments are adjacent to undeveloped areas, wildfire hazards shall be assessed and minimized through subdivision design, street layout, building design and landscape and building materials restrictions.

...

Excerpt from “Action Plan” section:

THEME #7: A SAFE, HEALTHY, AND CARING COMMUNITY (SHCC)
 Priority actions to promote a safe, healthy, and caring community include: (1) Minimize risks associated with natural hazards, (2) Promote active living and healthy lifestyles, and (3) Monitor special needs.

Action SHCC-1: Minimize risks associated with natural hazards.

Boise’s dramatic natural setting increases its exposure to natural hazards. Priority actions to minimize risks associated with these hazards include:

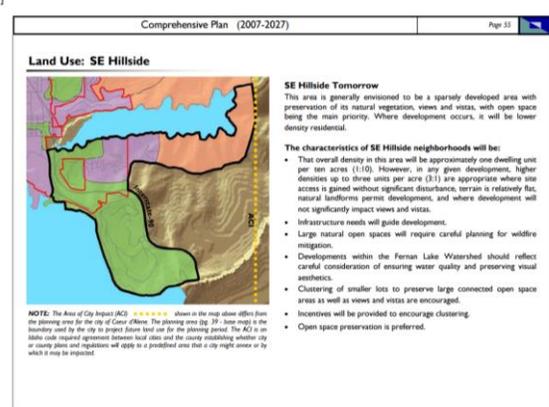
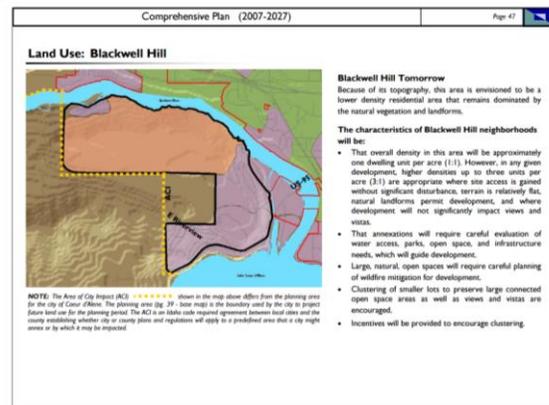
SHCC1.1—UPDATE HAZARD AREA MAPPING
 Work with the Ada City/County Emergency Management Department and other local, state, and federal partners to compile and maintain mapping that identifies the location and distribution of known hazards in the community, including: geologic; seismic; hydrologic; and wildfire.

(See policies SHCC1.6 and 2.1.)

Mitigation Measures Matrix

A matrix of locational, design and material standards that are intended to protect various types of structures and landscapes from the threat of wildfire, flooding or similar natural hazards.

c. Couer d’Alene



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Glossary: Definitions		
Soil erosion The wearing away of the soil by the elements.	Topography The configuration and relations of a surface including its relief, elevation, and the position of its natural and man-made features.	Viewshed The landscape or area that can be seen directly from a defined viewpoint or along a transportation corridor.
Sprawl The unplanned, uncontrolled spreading of urban development into areas adjoining the edge of a city.	Traffic calming A set of strategies used by urban planners and traffic engineers that aim to slow down traffic and improve safety for pedestrians and bicyclists. Typical of curb extensions, center islands, speed bumps, street tree canopies, strategically placed valley parks, and roundabouts.	Wildfire mitigation The implementation of various measures designed to reduce the risk of destruction by wildfires.
Streetscape The view along a street from the perspective of a driver or pedestrian, especially of the natural and man-made elements in or near the street right-of-way including street trees, lawns, landscape buffers, signs, street lights, above-ground utilities, drainage structures, sidewalks, and street furniture.	Transition A change in use, usually between two or more zoning boundaries, which has the potential to create conflict.	Zoning A regulating measure in which the community is divided into districts or zones with permitted and special uses established, as well as regulations governing lot size, building bulk, setbacks, and other development standards.
Structured parking A multi-story structure or part thereof which is specifically designed for vehicle parking.	Tree City USA National recognition program for urban and community forestry that provides direction, technical assistance, and public recognition.	
Sustainability A use capable of being continued with minimal long-term effects on infrastructure and environment.	Urban forest Includes tree-lined roadways, open green spaces, undeveloped forests, and parks, along with other public and private spaces within an urban area.	

d. Gooding County¹¹²

Wildfire In Gooding County, due to hot, dry climate and low moisture, wildfires are a threat on a yearly basis whether caused by natural or man-made situations. Wildfires may cause significant damage to open range feeding grounds, wild life habitat, cultural sites, personal property and recreation areas. Current warming trends and below normal precipitation levels in the past ten years is causing severe drought conditions. These droughts are causing severe water losses to the area aquifers as well as municipal water supplies. Furthermore, early spring growth to the areas vegetation followed by lack of moisture is increasing the risk of wildfires and generating extreme fire behavior. Gooding County has an approved Wildland Fire Mitigation Plan and a Fire Wise Plan.

e. Elmore County¹¹³

Private property rights

15. Elmore County calls upon Federal land management agencies to better manage fuel loads on federal lands to prevent wildfires to ensure protection of private property rights.

Land Use Objectives

15. Encourage utilizing natural resources on public lands within Elmore County to minimize the risk of wildfire.

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<http://www.goodingcounty.org/DocumentCenter/Home/View/186>

Planned Community Objectives

18. Planned Communities should incorporate and work with public and private land managers to encourage range fire rehabilitation practices, which include grasses and shrubs to enhance the forage base of the County's rangeland while preparing, adopting and implementing a wildfire Management Plan for the PC. Where re-vegetation programs after wildfire or range fires within Planned Communities are encouraged.

Soil Objectives

4. Support proper fuel management practices on land to both reduce the risk of wildfires and undue erosion.

6. Encourage and support re-vegetation programs after wildfire or range fires.

Forests

Most of the timber in the County is on federal land. There are less than 20,000 acres of private lands that could be classified as timberlands. Within the Boise National Forest, there are visible signs of tree damage due to disease and insect invasions. Federal land management agencies have failed to take action to reduce disease and insect related tree kill, which has lead to dead fuel for wildfire. During the summers of 2012 and 2013 much of the County sustained substantial damage from forest fires. The summer of 2013 was devastating to the County with over eighty structures on private property lost in the Elk Complex Fire. Based on lessons learned from earlier fires, it is crucial that fire-fighting agencies develop a Fire Management Plan to protect Elmore County from devastating range and forest fires. It is imperative that such a plan be used in a true "multiple use system" that encourages timber production, livestock grazing and recreation.

Forest Goal 3

Implement forest management practices that properly harvest and manage forests to reduce the risk of wildfire, protect private property and increase economic opportunities within the County.

Rangeland Objectives:

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<http://www.elmorecounty.org/Land%20Use/Comp%20Plan%20Update/2014-01-20/Comp%20Plan%202014.pdf>

4. Support preparation, adoption and implementation of a wildfire Management Plan for Elmore County.

Fish and Wildlife Objectives:

8. Insist that re-seeding and re-vegetation occurs on land affected by wildfire as soon as possible after the fire damage.

Federal / State / County Natural Resources Coordination Goal 2

Implement land management practices that greatly reduce the risk of wildfire, including harvesting of timber and grazing.

a. Gem County¹¹⁴

Wildfire: The Gem Community is served by five (5) different fire agencies: the City of Emmett Fire Department, Gem County Fire District #1, Gem County Fire District #2, Middleton Rural Fire District and Eagle Fire Department. (See Appendix 6-2 for a map of the district boundaries). While most of the wildfires occur in the county, the city has one area of concern: the foothills lying east of Freezeout Hill in the southeast corner of the city limits. Most of the wildfires occur in northern Gem County, which is Fire District #2. According to the All Hazard Mitigation Plan, the Gem Community has 575 buildings exposed to high fire hazard, 6,572 exposed to moderate high fire hazard, 34 to moderate fire hazard and 103 to low fire hazard. Fire District #1 is working with homeowners in their district to have defensible space areas around their buildings of at least 50 feet. Both Fire District #1 and Fire District #2 have their districts Red Zone mapped and are able to reference digital property maps to provide a more rapid and targeted response during an emergency. The Red Zone is all fire hazards within 50 feet of structures.

Chapter 6, page 5 (pdf page 42).

Gem Community Policies for Natural Resources and Hazardous Areas:

General

Wildfires

¹¹⁴ <http://www.co.gem.id.us/development-services/comprehensive-plan/GemCompPlan.pdf>

6.36 Encourage remaining districts and departments to do Red Zone mapping.

6.37 As population growth and district needs may dictate, encourage Mutual Aid and Automatic Aid between all fire agencies in the Community.

6.38 Determine the feasibility and potential adoption of a Wildland-Urban Interface policy or ordinance that would apply in areas of the community prone to wildfires and/or in high wildfire risk zones. Chapter 6, page 6-9 (pdf page 43-46).

b. Latah County¹¹⁵

10. HAZARDOUS AREAS ELEMENT

Goal: To protect life and property from natural hazards.

Policies:

1. Ensure appropriate regulation of development in hazardous areas, such as floodplains, wildland urban interface and on unstable slopes.
2. Ensure that appropriate measures are used to minimize loss of property due to wildfire in rural developments.

2. Specific Plans

a. Boise Neighborhood Specific Plan for Warm Springs Mesa

https://drive.google.com/file/d/0BxL_Rg-RbUonZfICWnFJa21oWDdxWkQ2anUxbVVMVDhMV25J/edit

8.1 GOAL: Warm Springs Mesa

Neighborhood Association strives to be a caring community that values the health and well-being of each of its residents. The residents rely on Boise City, Ada County, State of Idaho, and U.S. BLM to keep

¹¹⁵

<http://www.latah.id.us/pzc/Ordinances/Comprehensive%20Plan.pdf>

them safe and protect their property. The WSMNA will continue to encourage and support residents to actively participate in Neighborhood Watch, the Firewise program, and emergency response planning.

8.2 POLICIES

SHCC1.1 Work with the BLM, U. S. Forest Service, and the City to protect lives and property from wildfire through continued involvement with the Idaho Firewise program. Inform, educate, and encourage participation of Mesa residents in the Firewise program.

WARM SPRINGS MESA WUI POLICIES

1. Continue to be an active leader in innovative wildfire mitigation activities for other neighborhoods located within the Wildland Urban Interface (WUI).

2. Work with the City Wildfire Mitigation Team to develop projects on an annual basis for mitigating the risks associated with living in the WUI. Educate homeowners about the risks associated with living in the WUI and provide information on how homeowners can make their properties safer in the event of a fire.

(<http://www.idahofirewise.org/library/>)

3. Utilize innovative methods to prevent wildfire including goat grazing, reseeding of native grasses and forbes, and herbicide applications to change the plant landscape.

4. Create an evacuation plan for the Warm Springs Mesa in coordination with the Boise Police and Fire Departments and educate homeowners on evacuation efforts.

5. Maintain Firewise Community designation through community Firewise activities, volunteer opportunities and neighborhood coordination.

SHCC1.2 Coordinate with the Boise Fire Department, Idaho Bureau of Homeland Security and the Ada County Emergency Management Department to implement The Idaho State Hazard Mitigation Plan, The Ada County Wildfire Response Plan (2013), and the City of Boise Evacuation Plan (2010). Ensure that all Mesa residents have access to emergency response information.

SHCC2.1 Encourage the support and participation of all Mesa residents in the principles of the Neighborhood Watch program in order to enhance the

health, safety, well-being, and quality of life of all residents.

SHCC2.2 Encourage the Mesa Board to contribute to the safety of Mesa residents in cooperation with ACHD on traffic calming methods, through maintenance, of crosswalks, speed bumps, street lighting, signage, road-striping, and cleared landscaping.

SHCC2.3 Collaborate with ACHD to implement the Boulder Heights Estates development agreement to ensure the safety of residents using existing and future neighborhood sidewalks and bike routes.

SHCC2.4 Continue cooperative efforts with Boise City Police Department, Code Enforcement, and the Fire Department to participate in, and contribute to their neighborhoods safety programs.

SHCC2.5 Attend to the issue of hunters' firearms and hunting and trapping safety through on-going engagement with IDF&G regarding its Area 39 activities within proximity of the Mesa neighborhood.

SHCC2.6 Promote health and safety by reinforcing and supporting Boise City policies for the responsible handling and removal of hazardous materials.

SHCC3.1 Encourage a healthy lifestyle for Mesa neighbors by promoting the use of the trail systems for hiking, biking, trail maintenance, sight-seeing, photography and all that Mother Nature has to offer.

SHCC3.2 Implement the Blueprint Boise Foothills Policies, the Boulder Heights Estates development agreement, and the WSMNA Bylaws in the on-going development of the interface between the Mesa neighborhood and the Ridge-To-Rivers Trail System.

SHCC3.3 Develop secondary trail interconnectivity and trailheads to the Ridge-To-Rivers Trail System from within the Mesa neighborhood. This will encourage the public to value, protect, access, traverse, and enjoy the public lands, open spaces, and trails.

SHCC3.4 Continue participation in the Barber Valley Coalition in its efforts to develop programs for Firewise, establish safe traffic patterns, and develop wildlife and habitat enhancements.

C. Land Use and Zoning Codes

1. Ada County

ARTICLE B. WILDLAND-URBAN FIRE INTERFACE OVERLAY DISTRICT

8-3B-1: PURPOSE:

8-3B-2: APPLICABILITY:

8-3B-3: STANDARDS:

8-3B-4: PROHIBITED USES:

8-3B-1: PURPOSE: linklink

The purpose of this article is to protect the public health, safety, and welfare by establishing standards to:

A. Minimize the potential of spreading fire from wildland areas to structures;

B. Establish special standards that apply to new construction, alteration, moving, or change of use of habitable structures, with the intent to reduce the threat of loss of life and property from fire;

C. Require vehicle turnouts on new private roads with the intent to provide better emergency access to remote areas; and

D. Require that new subdivisions and planned unit developments provide water supply systems and suitable access for firefighting crews, with the intent to increase the resources available to such crews and minimize the spread of fire. (Ord. 389, 6-14-2000)

8-3B-2: APPLICABILITY:

A. These regulations shall apply to: 1) new subdivisions, 2) new private roads, and 3) new construction, alteration, moving, or change of use of residential, commercial or industrial structures within the overlay district as identified on the wildland-urban fire interface overlay district map, the limits of which are adopted by ordinance 391 on file at the county development services department, or as hereinafter may be amended.

B. Nonhabitable structures shall be exempt from these regulations, except when located within the defensible space as set forth in the regulations of subsection 8-3B-3A1 of this article. (Ord. 389, 6-14-2000)

8-3B-3: STANDARDS:

A. Vegetation Control:

1. Any new construction, alteration, moving, or change of use of a habitable structure shall be required

to establish a minimum fifty foot (50') defensible space around the perimeter of any habitable structure. Property owners shall be responsible for maintaining the defensible space, unless such responsibility is transferred to another party through a binding contract. The defensible space shall meet the following criteria:

a. Only single specimens of trees, ornamental vegetation, cultivated ground cover (such as green grass, ivy, succulents, or similar plants), or native grasses and weeds trimmed to a maximum height of four inches (4"), are allowed within the defensible space, provided any such plants do not form a means of readily transmitting fire. All other vegetation shall be removed from the defensible space. See section 8-1A-2, "Figure 9", of this title.

b. All deadwood shall be removed from trees within the defensible space. Clusters or groups of trees shall be thinned such that the tree crowns do not overlap. Trees within the defensible space shall be pruned to remove all limbs located below six feet (6') from the adjacent grade. See section 8-1A-2, "Figure 10", of this title.

c. Tree crowns shall be pruned to maintain a minimum horizontal clearance of ten feet (10') from any structure or outlet of a chimney.

d. Liquefied petroleum gas containers shall be located within the defensible space in accord with the applicable code as adopted by the state of Idaho.

e. Firewood and combustible material shall not be stored in unenclosed spaces beneath structures, on decks, or under eaves, canopies, or other projections or overhangs. All firewood and combustible material stored in the defensible space shall be located a minimum of twenty feet (20') from structures and separated from the crown of trees by a minimum horizontal distance of fifteen feet (15').

f. Agricultural structures, as herein defined, shall not be allowed within the defensible space.

g. All accessory structures within the defensible space must meet the fire resistive construction standards for structures as established by the Ada County building code as set forth in title 7, chapter 2 of this code.

h. If an abutting public street or approved private road meets the standards for the defensible space as set forth above, the width of such roadway shall be counted as part of the defensible space.

2. All areas adjacent to private roads and driveways shall be cleared of vegetation. Single specimens of trees, ornamental vegetation, cultivated ground cover (such as green grass, ivy, succulents, or similar plants), or native grasses and weeds trimmed to a maximum height of four inches (4"), are allowed, provided any such plants do not form a means of readily transmitting fire.

a. For driveways, all areas within five feet (5') of each side of the driveway shall be cleared.

b. For private roads, the area encompassed by the travelway plus five feet (5') on each side of the travelway, measured from the outside edge of the travelway, shall be cleared of all flammable vegetation.

3. All vegetation shall be cleared from within thirty one inches (31") of any above grade electrical distribution and transmission lines.

4. All vegetation shall be cleared from within ten (10) radial feet of any noninsulated energized electrical conductor and associated live parts. Cultivated ground cover (such as green grass, ivy, succulents, or similar plants), or native grasses and weeds trimmed to a maximum height of four inches (4"), are allowed provided any such plants do not form a means of readily transmitting fire.

5. For new driveways, new construction, or moving of structures on a site, the areas that require vegetation removal shall be located within the property boundaries. The director may approve a lesser standard if one or both of the following findings can be made:

a. The property abuts a public or approved private road as set forth in subsection A1h of this section; and/or

b. Severe topographic or other site constraints exist that prohibit locating new construction to meet the specified standard.

6. For the purposes of this section, the term "cleared" shall mean the removal of all vegetation with the following exception: single specimens of trees, ornamental vegetation, cultivated ground cover (such as green grass, ivy, succulents, or similar plants), and native grasses and weeds trimmed to a maximum height of four inches (4"), are allowed provided any such plants do not form a means of readily transmitting fire.

7. It is not the intent of this section to require an owner to relocate existing habitable structures, driveways, or utilities, nor to require an owner to remove vegetation from an abutting property.

B. Private Roads:

1. Vehicular turnouts for emergency vehicles shall be required on all new private roads. Such turnouts shall be spaced at a maximum interval of seven hundred feet (700') and shall be a minimum of eight feet (8') wide and thirty feet (30') long. Road construction and vehicular turnarounds shall meet the private road standards as set forth in section 8-4D-4 of this title. Driveways that meet turnout standards shall be counted as turnouts, provided they are a minimum of twenty feet (20') wide and thirty feet (30') long.

2. Maintenance of the private road shall include vegetation control as specified in subsection A2b of this section.

C. New Subdivisions And Planned Unit Developments:

1. Fire hazards and emergency access roads shall be evaluated by a licensed fire professional engineer retained by the applicant to determine site specific hazards and proper accessibility for emergency vehicles. The licensed fire professional engineer shall also prepare a fire protection plan that is specifically tailored to the proposed subdivision or planned unit development and shall consist of the following:

a. Completed fire hazard severity form from the current international urban-wildland interface code, appendix C, using nationally recognized standards;

b. A fire protection plan map showing the roadway, turnouts, turnarounds, terminus and lots;

c. Determination of fuel model loading;

d. Required signage for turnouts, turnarounds and fire lane parking;

e. Required number and placement of turnouts based on development density and roadway width;

f. Requirements for fire resistance rated construction;

g. Required road width or required interconnected system of roadways and fire accesses.

2. The fire protection plan shall be reviewed by the applicable fire district, or if no fire district, the Ada County sheriff, with advice from the Idaho state fire marshal, as part of the agency review process of subdivisions and planned unit developments.

D. Alternative Development Proposal: The director may approve, or recommend approval of, an alternative development proposal when the overall design, as proposed by the applicant, meets or exceeds the intent and the requirements of this article and shall not be detrimental to public health, safety, and welfare. (Ord. 389, 6-14-2000; amd. Ord. 426, 9-26-2001; amd. Ord. 490, 4-9-2003; amd. Ord. 560, 8-24-2004; amd. Ord. 592, 8-2-2005; amd. Ord. 628, 7-12-2006; amd. Ord. 699, 6-18-2008)

8-3B-4: PROHIBITED USES: linklink

Campgrounds and seasonal farmworker housing shall be prohibited within the wildland-urban fire interface overlay district. (Ord. 389, 6-14-2000)

2. McCall¹¹⁶

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http://www.sterlingcodifiers.com/codebook/index.php?book_id=497

3.8.04: FIRE HAZARD MITIGATION STANDARDS:

(A) Area Of Fire Hazard Described: Lands in zones RR, RE, R1, R4 and AF are presumptively in the area of fire hazard.

(B) Requirements: In areas of fire hazard:

1. Yards must be cleared as follows: a) A defensible zone thirty feet (30') wide shall be created around all dwellings; provided, that this subsection shall not be interpreted to authorize or require a trespass on property of others by the owner of the yard; b) within that zone, grasses shall be kept at or below six inches (6") in height, shrubs and trees are thinned to a spacing of ten feet (10') or more, conifers over sixteen feet (16') in height are limbed to a height of eight feet (8') above the ground; and c) dead and down wood is removed; and d) no tree shall be permitted to overhang a chimney.

2. In any development with common area and open space, the association, or the owner in the absence of an association, shall remove dead and downed woody materials less than six inches (6") in diameter, dead or dying standing trees, and slash from the common area and open space at the time of development and periodically thereafter.

3. All slash will be removed, converted to mulch, or burned within twelve (12) months of its creation.

4. In subdivisions where there are vacant lots, it is the responsibility of the landowner to properly mitigate any hazard. Hazards which are noticed by the city, county, or the fire district to the landowner but not properly mitigated will be removed or alleviated by the city at the expense of the landowner.

5. Where a hazard described in subsection (B)4 of this section is not mitigated by the property owner, and a fire results, the city is not liable for damage that results.

(C) Determination By Fire Chief: The fire chief shall determine if lands are within a fire hazard area and if a fire hazard exists. In the event of a dispute whether lands should be considered to be within the area of fire hazard, or when a fire hazard exists, the decision of the fire chief shall be final. (Ord. 821, 2-23-2006, eff. 3-16-2006)

3.8.03: TIMBER HARVEST:

(A) Public Resource: The existing forest in the McCall area is considered a public resource, important to the character of the planning jurisdiction and its tourist economy.

(B) Tree Removal Limitations: Prior to the issuance of a relevant building permit, tree removal shall be limited to the removal of no more than twenty percent

(20%) of the stems per lot or parcel, with the removal of dead, dying or damaged timber being given priority. Removal of stems larger than twelve inches (12") in diameter measured at sixty inches (60") will require the approval of the city arborist. Further removal will be limited to the salvage of further dead, dying or damaged timber. Following issuance of a relevant building permit, tree removal is additionally permitted within the area of the building footprint, other structures, driveways, and other improvements, and in accord with section 3.8.04, "Fire Hazard Mitigation Standards", of this chapter. Development of the lot should endeavor to preserve standing, healthy trees outside the area occupied by improvements, lawn not being considered an improvement for these purposes. Landscaping shall take into consideration the replacement of trees thereafter diseased or dying.

(C) Slash, Logging Debris: Slash, long butts, cull logs, and logging debris shall not be accumulated or piled within view of a roadway. All such debris shall either be removed to an approved location for disposal, burned (with proper permits), or converted to mulch.

(D) Conditional Use Permit: Except as otherwise provided in subsection (E) of this section, timber harvest is prohibited, unless the owner has first obtained a conditional use permit for such harvest; provided, however, timber harvest without a conditional use permit is permitted from road rights of way by or under contract with the public agency having jurisdiction of the right of way; or by a developer as required for road or utility construction in connection with a subdivision having at least preliminary plat approval, as required for survey or engineering or to remove dead or dying trees with the approval of the city arborist.

(E) Harvesting Without Permit; Procedure: Timber harvest from state endowment lands is permitted after review and consultation with the city and without a conditional use permit as follows:

1. Notice of a proposed timber sale or other logging contract shall be given to the clerk by the department of lands at least sixty (60) days before the publication of invitation to bid upon the sale, or creation of contract rights in a logger, whichever first occurs; thereafter the clerk shall forward the notice and supporting materials to the commission, which, if it chooses to do so, may hold a public hearing on the question of the appropriate city response to the proposed state action. The commission may request additional information.

2. The council, upon receiving the recommendations of the commission in this regard, may, if it chooses to do so, hold a second public hearing on the question of the city response to the proposed state action. The council may request additional information. Following such consideration by the council as it deems

appropriate, a statement of council's concerns and recommendations may be approved for transmittal to the department of lands.

3. Public notice of any such public hearing under this subsection shall be given by publication as provided in chapter 15, "Procedures, Appeals And Actions", of this title.

4. The department shall not enter into the timber sale or other logging contract without first implementing or otherwise responding point by point, in writing, delivered to the city manager, to the council's statement of concerns and recommendations.

5. Notice of a sale which is classed as a "direct sale" under present rules of the department of lands, that is, one hundred thousand (100,000) or fewer board feet, by negotiated sale for ten thousand dollars (\$10,000.00) or less, and respecting certain trees the market value of which would be lost in the event of any appreciable delay, shall be timely if furnished to the clerk fifteen (15) or more days before the signing of a contract for such sale; and the clerk shall bring the matter directly to the attention of council at its next meeting. (Ord. 821, 2-23-2006, eff. 3-16-2006)

3. Lemhi County¹¹⁷

Lemhi County Development Code Sections;

5.5 Wildfire Defensible Space. Any residence and/or structure located in a wooded area, or an area of flammable brushy vegetation, shall provide a minimum of thirty (30) feet of wildfire defensible space. A defensible space is one in which trees are thinned so that crowns do not overlap or touch, woody brush is removed or substantially thinned, and dead fuel is removed. Maintenance of the defensible space is a requirement for continuing compliance with this ordinance.

6.10 Wildfire Hazards. All developments that are in or adjacent to forested areas, or areas of flammable brushy vegetation shall be required to:

6.10.1 for individual homes and other structures: provide a fire defensible space of at least 30 feet around the home or structure. A defensible space is one in which trees are thinned so that crowns do not overlap or touch, woody brush is removed or substantially thinned, and dead fuel is removed. Maintenance of the defensible space is a requirement for continuing compliance with this ordinance.

6.10.2 for subdivisions or any other multiple unit development: thin timber on and remove dead fuel from the site, and provide appropriate perimeter and, in larger developments, internal fuel breaks. A fuel break is a strategically located strip of land in which the timber has been thinned and fuel removed to create an open "park-like" appearance. Fuel breaks either include roads or are accessible to firefighting apparatus. Fuel breaks are generally at least twelve (12) feet in width, with the width increasing on slopes over ten (10) percent.

12.4.5.7.2. Any residence located within the WUI boundary, follows guidelines provided by wildland fire management agencies for defensible space and safe building practices. Score (- 10 points).

4. Coeur d'Alene

Article IX. HILLSIDE OVERLAY ZONE

17.08.900: Title And Purpose

17.08.905: Applicability

17.08.910: Definitions

17.08.915: General Requirements

17.08.920: Grading And Erosion Control

17.08.925: Surface And Ground Water Drainage

17.08.930: Tree Preservation, Protection And Removal

17.08.935: Building Location And Design Standards

17.08.940: Sensitive Surface Waters

17.08.943: Fernan Lake Planning Area

17.08.945: Deviation From Development Standards

17.08.950: Maintenance

17.08.955: Prohibited Conduct, Enforcement, And Penalties

17.08.900: TITLE AND PURPOSE:

The title of this article shall be the HILLSIDE OVERLAY ORDINANCE. The purpose of these regulations is to establish a hillside overlay zone and to prescribe procedures whereby the development of lands within the hillside overlay zone occurs in such a manner as to protect the natural and topographic development character and identity of these areas, environmental resources, the aesthetic qualities and restorative value of lands, and the public health, safety, and general welfare by ensuring that development

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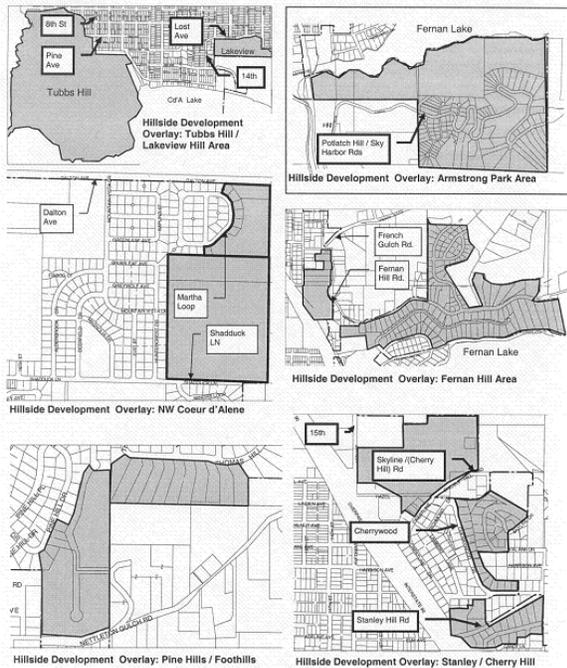
<http://lemhicountyidaho.org/bldgdept/Lemhi%20Cou>

[Development%20code%20amended%2010_16_12_corrected.pdf](#)

does not create soil erosion, sedimentation of lower slopes, slide damage, flooding problems, that it prevents surface water degradation, severe cutting or scarring, and to reduce the risk of catastrophic wildfire in the wildland-urban interface. It is the intent of these development standards to encourage a sensitive form of development and to allow for a reasonable use that complements the visual character and the nature of the city. (Ord. 3091 §2, 2003)

17.08.905: APPLICABILITY:

The provisions of this article shall apply to all land within the hillside overlay zone as shown in exhibit A of this section and to all lands annexed into the city limits after May 1, 2005. Lands with an average slope of less than fifteen percent (15%), within the hillside overlay zone, are exempt from these regulations.
Exhibit A



(Ord. 3207 §1, 2005; Ord. 3091 §3, 2003)
17.08.910: DEFINITIONS

ACTUAL SLOPE: The actual slope of the parcel, in the area to be developed, prior to development. This definition shall apply only to section 17.08.943 of this chapter.

AVERAGE SLOPE: The slope of a parcel computed from the vertical and horizontal distances at the highest and lowest points of the parcel.

BUILDING ENVELOPE: The area within the perimeter of the structure, including the primary structure and any attached portions or projections.

CLUSTER LOTS: The same number of homes is clustered on a smaller portion of the total available land. The remaining land, which would have been allocated to individual home sites, is converted into protected open space and shared by the residents of the development or of the entire community if required as a part of an approval process.

dbh: The diameter of a tree at 4.5 feet above ground level.

DEVELOPER: One who undertakes "development" as defined herein.

DEVELOPMENT: All land disturbing activity, except as exempted herein, including tree removal and any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing topography. Land disturbing activities include, but are not limited to, demolition, construction, clearing, grading, filling, and excavation.

GEOTECHNICAL ENGINEER: A professional engineer licensed in the state of Idaho, qualified by education or experience in geotechnical engineering.

HYDROLOGIST: A professional who possesses, at a minimum, a bachelor's degree in one of the physical sciences or civil engineering and four (4) years of professional experience in hydrologic or hydro-geologic work or any professional who possesses any combination of training, education and experience that would provide the required knowledge and abilities to utilize advanced principles and practices employed in hydrology, water supply, drainage, flood control, surface water, ground water and other related aspects of hydrology.

LANDSCAPE PROFESSIONAL: A person who has training, skill, and expertise in tree identification, tree biology, and ecology, including, but not limited to, a certified arborist, professional forester, or landscape architect.

MAXIMUM DRIVEWAY LENGTH: Driveway length measured from the public right of way to the structure.

NATURAL STATE: Land set aside to be retained in a state that existed immediately prior to the "development" as defined herein.

SENSITIVE SURFACE WATER BODIES: Fernan Lake, Coeur d'Alene Lake and the Spokane River.

WILDFIRE MITIGATION: Reducing the risk of catastrophic wildfire in the wildland-urban interface as addressed in the national fire plan, through the use of fire resistive construction, fuel modification, creation of survivable/defensible space, firebreaks, improved fire department access and water supplies, etc.

WILDLAND-URBAN INTERFACE: Those areas where structures or other development meets or intermingles with wildland or vegetative fuels. (Ord. 3160 §1, 2003: Ord. 3091 §4, 2003)

17.08.915: GENERAL REQUIREMENTS:

A. Geotechnical Studies: Prior to development a geotechnical study indicating that the site is suitable for the proposed use and development shall be prepared by a geotechnical engineer and shall be submitted and approved by the city. The study shall include the following information:

1. Project description to include location, topography, drainage, vegetation, discussion of previous work and discussion of field exploration methods, if any.
2. Site geology, to include site geologic maps, description of bedrock and surface materials, including artificial fill, locations of any faults, folds, etc., and geologic structural data including bedding, jointing and shear zones, soil depth and soil structure. The analysis shall indicate the degree of risk for landslides and/or slumping.
3. Discussion of any off site geologic conditions that may pose a potential hazard to the site, or that may be affected by on site development.
4. Suitability of site for proposed development from a geotechnical standpoint.
5. Specific recommendations for site preparation, foundation design and construction, slope stability, potential for slope sloughing and raveling, ground water, surface and subsurface drainage control, fill placement and compaction, retaining walls, and other design criteria necessary to mitigate geologic hazards.
6. Additional studies and supportive data shall include cross sections showing subsurface structure, graphic logs with subsurface exploration, results of laboratory tests and references, if deemed necessary by the engineer or geologist to establish whether an area to be affected by the proposed development is stable.
7. Signature and registration number of the engineer.

8. Additional information or analyses as necessary to evaluate the site.

9. Recommendations for inspections during construction by the geotechnical engineer.

B. Wildland-Urban Interface: Wildfire mitigation goals for each development shall be determined by the city prior to development, and shall be achieved using the applicable sections of the Kootenai County wildland-urban interface fire mitigation plan, 2000 urban-wildland interface code and National Fire Protection Association (NFPA) standards as guidelines. (Ord. 3160 §2, 2003: Ord. 3091 §5, 2003)

17.08.920: GRADING AND EROSION CONTROL:

Prior to development, grading and erosion control plans conforming to the following requirements shall be submitted and approved by the city. Erosion control measures conforming to best management practices (BMPs) approved by the city, or identified in the DEQ manual entitled "Catalog Of Storm-Water Best Management Practices For Idaho Cities And Counties", shall be required.

A. Plans: All grading and erosion control plans shall include the following:

1. Property boundaries.
2. All existing natural and manmade features and facilities within twenty feet (20') of the area to be disturbed, including, but not limited to, streets, utilities, easements, topography, structures, and drainage channels.
3. Existing and proposed finish contours of the areas to be disturbed, at two foot (2') vertical intervals. However, this requirement can be waived when the finished ground surface elevation does not vary by more than two feet (2') from the ground surface elevation prior to the proposed development.
4. Location of all proposed improvements, including paving, structures, utilities, landscaped areas, flatwork, and storm water control facilities.
5. Existing and proposed drainage patterns, including ridgelines and tributary drainage areas.
6. Storm water control facilities, including invert elevations, slopes, length, cross sections, and sizes. Construction details shall be shown for grassed infiltration areas, and/or detention/retention facilities.
7. Existing and proposed drainage easements.
8. Details for temporary and permanent erosion control measures.
9. Revegetation measures.
10. Plans shall be stamped and signed by a professional engineer or landscape architect, licensed in the state of Idaho. However, plans for public

improvements shall be stamped and signed by a professional engineer licensed in the state of Idaho.

B. Review By Geotechnical Engineer: The project geotechnical engineer shall provide written proof of review and compliance to all grading plans. All grading shall conform to the most current adopted building code and the recommendations of the geotechnical engineer.

C. Installation Of Temporary Erosion Control: Temporary erosion control measures shall be installed and functional prior to start of any grading and/or land disturbing activity. They shall be maintained in a functional condition until the permanent measures are installed.

D. Retention In Natural State: All development shall retain an area or areas equal to twenty five percent (25%) of the total parcel plus the percentage figure of the average slope of the total parcel, in its natural state. Lands to be retained in a natural state shall be protected from damage through the use of temporary construction fencing or the functional equivalent.

For example, on a twenty five thousand (25,000) square foot lot with an average slope of twenty nine percent (29%), $25\% + 29\% = 54\%$ of the total lot area shall be retained in a natural state. In this example a maximum of eleven thousand five hundred (11,500) square feet could be disturbed. Also, see exhibit 17.08.940A of this chapter.

Lots less than twenty five thousand (25,000) square feet, legally created prior to adoption of this article, shall be required to retain an area equal to fifty percent (50%) of the area calculated by the above formula. In the above example, on a lot created prior to this article, a twenty four thousand nine hundred ninety nine (24,999) square foot lot would need to leave twenty seven percent (27%) retained in the natural state. The area that could be disturbed would be a maximum of eighteen thousand two hundred forty nine (18,249) square feet.

E. Grading: All cut slopes shall be constructed in such a manner so that sloughing or raveling is minimized. The maximum allowable vertical height of any cut or fill slope shall be thirty feet (30'). The maximum inclination of fill slopes shall be two to one (2:1) (horizontal to vertical). For public roadways, the maximum allowable vertical height for cut and fill slopes in combination shall be sixty feet (60').

F. Temporary Erosion Control For Slopes With Erodable Surface Materials: All slopes with erodable

surface material shall be protected with erosion control netting, blankets, or functional equivalent. Netting or blankets shall only be used in conjunction with organic mulch such as straw or wood fiber. The blanket must be applied so that it is in complete contact with the soil so that erosion does not occur beneath it. Erosion netting or blankets shall be securely anchored to the slope in accordance with manufacturer's recommendations. Temporary slope erosion control measures shall be installed upon completion of slope grading if permanent erosion control measures are not completed at the same time.

G. Revegetation Requirements: All areas with erodable surface materials that are graded and not paved shall be revegetated. The vegetation used for these areas shall be native or similar species that will reduce the visual impact of the slope and provide long term slope stabilization. All revegetation measures shall be installed, inspected by the city, and approved prior to the issuance of a certificate of occupancy, or other time as determined by the city. Vegetation shall be installed in such a manner as to be substantially established within one year of installation.

H. Maintenance Of Erosion Control Measures: All measures installed for the purposes of long term erosion control, including, but not limited to, vegetative cover, rock walls, and landscaping, shall be maintained in perpetuity on all areas which have been disturbed, including public rights of way. The applicant shall indicate the mechanisms in place to ensure maintenance of these measures.

I. Security: After an erosion control plan for a building site is approved by the city and prior to issuance of a building permit, the applicant shall provide a performance bond or other security in the amount of one hundred fifty percent (150%) of the value of the erosion control measures shown on the approved plan. The city attorney shall approve all security. The financial guarantee instrument shall be in effect for a period of at least one year from the project completion date. All or a portion of the security retained by the city may be withheld for a period up to three (3) years beyond the one year maintenance period if it has been determined by the city that the site has not been sufficiently stabilized against erosion.

J. Inspections And Final Report: Prior to the acceptance of a subdivision by the city or issuance of a certificate of occupancy for individual structures, the project geotechnical engineer shall provide a final report indicating that the project was constructed in accordance with their recommendations, and that all

recommended inspections were conducted by the project geotechnical engineer.

K. Protecting Bare Soil During Development: All surfaces where bare soil is exposed during clearing and grading operations, including spoil piles, shall be covered or otherwise protected from erosion.

L. Construction Ways And Vehicles: Stabilized construction entrances and driveways shall be required for all construction sites to minimize sediment tracking onto roadways. Parking of vehicles shall be restricted to paved or stabilized areas. (Ord. 3160 §3, 2003; Ord. 3091 §6, 2003)

17.08.925: SURFACE AND GROUND WATER DRAINAGE:

The requirements for storm water management plans as set forth in this code shall apply to all development within the hillside overlay zone including single-family residences. In addition, the following requirements shall apply:

A. Storm water facilities shall include storm drain systems associated with street construction, facilities for infiltration, treatment, and/or conveyance of drainage from driveways, parking areas and other impervious surfaces, and roof drainage systems.

B. Storm water facilities, when part of the overall site improvements, shall be, to the greatest extent feasible, the first improvements constructed on the development site.

C. Storm water facilities shall be designed to divert surface water away from cut faces or sloping surfaces of a fill.

D. Existing natural drainage systems shall be utilized in their natural state to the greatest extent feasible.

E. Storm water facilities shall be designed, constructed and maintained in a manner that will avoid erosion on site and to adjacent and downstream properties. (Ord. 3091 §7, 2003)

17.08.930: TREE PRESERVATION, PROTECTION AND REMOVAL:

The preservation, protection, and removal of trees shall meet the following requirements:

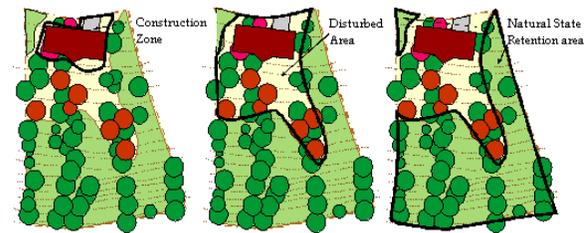
A. Tree Removal: Prior to the development, a tree removal plan must be submitted to and approved by the city. Removal of trees less than six inches (6") dbh are not regulated as long as the method of cut and

removal does not create soil disturbance. (The acts of walking and falling trees are not to be construed to create soil disturbance.) Trees can be removed if they meet one or more of the following conditions:

1. Trees within a construction zone:
 - a. The tree is located within the building envelope.
 - b. The tree is located within a proposed street right of way, driveway, or parking area.
 - c. The tree is located within water, sewer, or other public utility easement.
 - d. The tree is located within or adjacent to areas of cuts or fills that are deemed threatening to the life of the tree, as determined by a landscape professional.

Trees removed for any of the above conditions are not required to be replaced.

Exhibit 17.08.930A



2. Trees located within other areas to be disturbed: Trees can be removed within other areas except areas to remain in a natural state. Trees removed within these areas must be replaced on a one for one basis with trees that will have approximately the same size and crown at maturity. The replacement trees must meet the requirements of this article and be located on the same property.

3. Trees located within areas to remain in a natural state: Trees may be removed from these areas with the approval of the city if they meet any of the following conditions:

- a. Removal is required in order to achieve the wildfire mitigation goals established by the city. Trees removed for this reason need not be replaced.
- b. The tree is dead or dying. Trees removed meeting this criteria must be replaced on a one for one basis with trees that will have approximately the same size and crown at maturity. The replacement trees must meet the requirements of this article and be located on the same property.

B. Inventory Of Existing Trees: Prior to any soil disturbing activities on the building lot, including tree removal, an inventory shall be completed locating all trees greater than six inches (6") dbh within the area(s) to be developed. A plan shall be prepared at the same

scale as the site plan. Trees shall be identified by dbh, species, and approximate extent of tree canopy. All tree locations shall have an accuracy of plus or minus two feet ($\pm 2'$). The name, signature, and address of the person responsible for the survey shall be provided on the plan.

C. Protection Of Natural Areas And Trees: The developer shall adhere to the following protection standards for all trees not to be removed and for all areas to remain in a natural state:

1. All areas to remain in a natural state and all trees designated for preservation shall be clearly marked on the project site plan. Prior to the start of any clearing, stripping, stockpiling, trenching, grading, compaction, paving, or change in ground elevation, the applicant shall install temporary delineation to clearly identify areas to be retained in a natural state. Trees to be preserved that are located adjacent to or in the area to be disturbed shall be clearly identified and protected by placing temporary fencing or similar approved method outside the drip line of each tree. The fences may be inspected and their location approved by the city.

2. Construction site activities, including, but not limited to, parking, material storage, soil compaction and concrete washout, shall be arranged so as to prevent disturbances within tree protection areas.

3. No grading, stripping, compaction, or significant change in ground elevation shall be permitted within the drip line of trees designated for preservation unless indicated on the approved grading plans. If grading or construction is approved within the drip line, a landscape professional may be required to be present during grading operations, and shall have authority to require protective measures to protect the roots.

4. Changes in soil hydrology and site drainage within tree protection areas shall be minimized. Runoff should be directed away from trees designated for preservation.

D. Tree Replacement: Trees designated or approved for removal in accordance with subsections A2 and A3b of this section shall be replaced in accordance with the following standard:

1. Replacement trees shall be indicated on a tree replanting plan. The replanting plan shall include all locations for replacement trees, and shall also indicate tree planting details, including species.

2. Replacement tree locations shall adhere to the wildfire mitigation goals for the project. The city's urban forester shall have the discretion to adjust the proposed replacement tree species or location based upon site specific conditions.

3. Replacement trees shall be a minimum of one inch (1") caliper for deciduous trees and a minimum height of four feet (4') for evergreen trees.

4. Maintenance of replacement trees shall be the responsibility of the property owner. Required replacement trees shall be continuously maintained in a healthy manner. Trees that die within the first five (5) years after initial planting must be replaced in kind, after which a new five (5) year replacement period shall begin. Replanting must occur within thirty (30) days of notification unless otherwise noted.

E. Enforcement:

1. All tree removal shall be done in accordance with the provisions of this article. No trees designated for preservation shall be removed without prior approval of the city.

2. Should the developer or developer's agent remove, destroy, or damage any tree that has been designated for preservation, the city shall require the developer to replace the tree in accordance with this article and may fine the developer an amount established by the city. For trees that are removed or destroyed, the minimum amount of the fine shall be equal to the appraised value of the tree. The appraised value of a tree will be determined by a qualified appraiser using the standards specified by the International Society of Arboriculture as set forth in the most recent edition of their official publication "Guide For Plant Appraisal", developed by the Council of Tree and Landscape Appraisers. (Ord. 3091 §8, 2003)

17.08.935: BUILDING LOCATION AND DESIGN STANDARDS:

All buildings shall be designed and constructed in compliance with the following standards. To reduce hillside disturbance, buildings shall incorporate the following design requirements:

A. Building Design Requirements:

1. Roof Material: Only class A roof coverings listed and identified by an approved testing agency or approved noncombustible roof covering shall be used for new roofs or replacement of existing roofs.

2. Foundations: All structures shall have foundations that have been designed by a professional engineer licensed in the state of Idaho. The foundation design shall be based on a geotechnical engineer's recommendations.

3. Architectural Features: Architectural features such as bay windows, decks, building step back, etc., shall be required on all exterior walls greater than twenty feet (20') in height, as measured from lowest adjoining finish grade, not including gables. All architectural features shall have a minimum depth of one foot (1').

4. Color: A palette of colors approved by the council shall be used for exterior walls, facades, and roofs. They shall have a light reflective value (LRV) of forty (40) or less, per the manufacturers' specifications. When such data is unavailable, compliance will be determined by a comparison of samples where data is available. This light reflective value standard shall not apply within established residential areas. Window and door glazing shall be nonmirrored. (Ord. 3091 §9, 2003)

17.08.940: SENSITIVE SURFACE WATERS:

For development within five hundred feet (500') of a sensitive surface water body, the following additional standards shall apply:

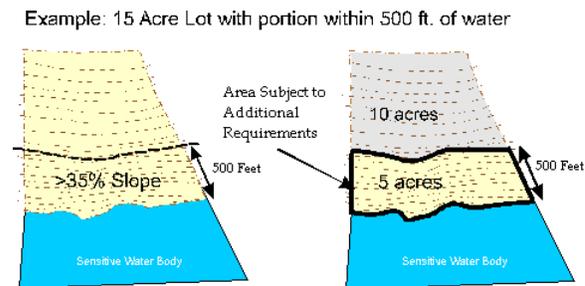
A. Storm Water Management Plan: A storm water management plan shall be prepared by an Idaho licensed professional engineer or registered landscape architect with water quality training and experience. The plan shall include an evaluation of the impacts of the development as it relates to surface water quality of the adjacent water body, and provide recommendations for mitigation.

The development of the property shall not create any impacts that cannot be mitigated. The quality of surface water runoff shall be protected by utilization of best management practices (BMPs) identified in the DEQ manual entitled "Catalog Of Storm-Water Best Management Practices For Idaho Cities And Counties". Development shall comply with Idaho water quality standards.

B. Density: The following densities shall apply to divisions of land, unless a deviation is granted pursuant to the planned unit development process, up to but not to exceed the density allowed in the underlying zone. The density ratio standard shall not apply to individual building permit applications on existing parcels recorded prior to the adoption of this article nor portions of a lot beyond the five hundred foot (500') boundary. See example below:

Average Slope Within 500 Foot Boundary	Density See Example	Cluster Lots	Maximum Driveway Length
15 _ 25%	0.5 acre	Encouraged	250 feet
25.01 _ 35%	1 acre	Encouraged	100 feet
Over 35%	2.5 acres	Required	100 feet

Example of a parcel split by the five hundred foot (500') overlay boundary:



Fifteen (15) acre lot zoned R-1;

Five (5) acres are within five hundred feet (500') of the water and that has a greater than thirty five percent (>35%) slope;

Exhibit 17.08.940A

Example: Fifteen Acre Lot With Portion Within Five Hundred Feet Of Water

The zoning density (theoretical lot density) for the area within 500 foot boundary = 5 (area within boundary) divided by 2.5 (density factor for over 35% slope) = 2.0 units;

Development within this area must be clustered and a part of a planned unit development. Exhibit 17.08.940A of this section.

The density for the area outside of the 500 foot boundary = lot area divided by 34,500 (standard minimum lot size for the R-1 district) = 37. Note that the actual lot density would be affected by street design and other design factors.

C. Interagency Coordination: The city may request comments on the project from affected agencies, where appropriate. Where coordinated permits are necessary, approvals from permitting agencies may be required.

D. Waterfront Lots: For lots with frontage on sensitive water body, an undisturbed natural vegetation buffer shall be retained at the waterfront. A stairway, walkway, stairway landing, or a tram shall be allowed to encroach within the buffer. The buffer shall be a minimum of twenty five feet (25') from the high water mark of the water body. For purposes of this article, high water marks shall be considered to be the following elevations:

Coeur d'Alene Lake 2,125.0 (NGVD 1929 datum), (2128 WWP datum)

Fernan Lake 2,131.37 (Kootenai County site disturbance ordinance)

The high water marks for the Spokane River shall be determined by on site inspection of evidence of historical water levels. (Ord. 3160 §4, 2003; Ord. 3091 §10, 2003)

17.08.943: FERNAN LAKE PLANNING AREA:

A. Applicability:

1. All land within five hundred feet (500') of the high water mark of Fernan Lake, as defined in section 17.08.940 of this chapter, shall be subject to the following additional requirements.

2. The Fernan watershed management plan, plan goals and action plan shall be used as a guide for decision making in the implementation of the increased standards delineated in this section.

B. Hydrology Report:

1. In addition to the geotechnical study required under section 17.08.915 of this chapter, a hydrology inventory and report from a professional hydrologist shall be required. The report shall be submitted to city in conjunction with the application. This report must include location of surface and underground springs, both intermittent and permanent, surface water disposal and placement of storm water management areas. The report must also provide recommendations for mitigating any adverse impacts of the development on surface and ground water. The recommendations of the professional hydrologist shall be provided to the geotechnical engineer preparing the report required under section 17.08.915 of this chapter for incorporation into the site design of the project.

C. Development Standards:

1. No public or private roads, driveways or rights of way shall be constructed or dedicated within seventy five feet (75') of the high water mark of Fernan Lake as defined in section 17.08.940 of this chapter. Provided however that the requirements of this subsection shall not apply to construction that is necessary to replace or maintain existing public streets.

2. Construction within seventy five feet (75') of the high water mark shall be prohibited except for walkways, stairs, stairway landings and trams. No heavy construction equipment, such as backhoes, graders and dump trucks shall be used within the seventy five foot (75') buffer area. Nature trails, walkways and stairs shall not exceed six feet (6') in width. Thinning of vegetation to allow for nature trails, walkways and stairs are limited to a total width of ten feet (10'). Provided however that the requirements of this subsection shall not apply to construction that is necessary to replace or maintain existing public services such as streets, sidewalks, parking lots, streetlights, fire hydrants and underground utilities.

3. There shall be no manmade development including structures, utility lines, roads or driveways on actual slopes of thirty five percent (35%) or greater. Provided however that properties that are directly accessed from a public right of way, constructed and existing on or before the effective date of this section, that is more than two hundred feet (200') from the high water mark of Fernan Lake, shall be exempt from the provisions of this subsection if:

a. All structures on the subject property are built within seventy five feet (75') from the property line adjacent to the public right of way. (Ord. 3207 §2, 2005; Ord. 3160 §5, 2003)

17.08.945: DEVIATION FROM DEVELOPMENT STANDARDS:

The developer, or the property owner, may request deviations from any of the development standards of the hillside overlay ordinance to the planning director. Deviations may be granted only as listed herein:

A. Minor Deviations: The planning director shall notify the public of the request for minor deviation in accordance with subsection A6 of this section. After public notice and comment on the deviation request, the city planning director will review and decide on the proposed deviations. This decision may be appealed to the planning commission for approval or denial. Minor deviations may only be granted if all of the following circumstances are found to exist:

1. The deviation will result in equal or greater protection of the resources protected under this chapter;
2. The deviation is the minimum necessary to alleviate the difficulty;
3. The deviation does not conflict with Idaho Code, the city of Coeur d'Alene comprehensive plan and zoning ordinance and, in the case of the Fernan Lake planning area, the Fernan watershed management plan.
4. The requested modification was not specifically appealed during the public hearing process; and
5. The requested modification will not cause adverse physical impacts on adjacent properties.

Deviations typical of this category include:

- a. Reduction of portion or all of the requirements for geotechnical study, grading plan, tree survey, etc., if the work is minor in nature or if adequate information already exists to determine the impact of the development.
 - b. Modification of dimensional requirements for driveway lengths, curb and sidewalk requirements, architectural features.
 - c. The use of seedlings (rather than 4 foot _ 8 foot tall B&B trees) for tree replacements on steep slopes where there are shallow soils.
 - d. Deviation from the maximum cut and fill slopes and fill slope inclination all as defined in subsection 17.08.920E of this chapter.
6. Prior to granting or denying a minor deviation request, notice and opportunity to be heard shall be provided to property owners adjoining the parcel under consideration. The city shall cause notice to be mailed to adjoining property owners no less than seven (7) calendar days before application review. The applicant shall provide an accurate mailing list and shall be responsible for all costs of public notice.

B. Substantial Deviations: Substantial deviations may be granted by the planning commission to the conditions and limitations of the hillside development regulations, after public notice and hearing. This decision may be appealed to the city council for approval or denial. Substantial deviations may only be granted if all of the following circumstances are found to exist:

1. The deviation is the minimum necessary to alleviate the difficulty;
2. The deviation will result in equal or greater protection of the resources protected under this article;
3. The requested modification was not specifically appealed during the public hearing process;
4. The requested modification will not cause adverse physical impacts on adjacent properties; and
5. The deviation does not conflict with Idaho Code, the city of Coeur d'Alene comprehensive plan and zoning

ordinance and, in the case of the Fernan Lake planning area, the Fernan watershed management plan.

C. Planned Unit Developments: Modifications to the development standards of this article approved through the planned unit development process (section 17.07.205 et seq., of this title) shall not be subject to the foregoing review and hearing process for deviations.

Public notice for substantial deviations shall be pursuant to section 67-6509 Idaho Code, and shall include mailed notice to abutting property owners not less than fifteen (15) days before the public hearing. The applicant shall provide an accurate mailing list and shall be responsible for all costs of public notice. (Ord. 3207 §3, 2005: Ord. 3127, 2003: Ord. 3091 §11, 2003)

17.08.950: MAINTENANCE:

Maintenance requirements and responsibility shall be clearly identified for all projects where best management practices are employed, including those for erosion and sedimentation control, storm water management, and fuel modification for wildfire mitigation. When a storm water system is designed to service more than one lot, a maintenance agreement between all parties that benefit from the system must be established, including assurance of adequate funding. Easements across private property for maintenance access to community storm water systems shall also be required where necessary. All private maintenance agreements and required easements must be executed prior to issuance of certificate of occupancy, recordation of final plat, or similar approvals of the city.

In the event that appropriate maintenance of any storm water system is not conducted, the city shall have the option of requiring the property owner or association to provide for maintenance, or take other enforcement measures as outlined in section 17.08.955 of this chapter. (Ord. 3091 §12, 2003)

17.08.955: PROHIBITED CONDUCT, ENFORCEMENT, AND PENALTIES:

If any violation of this article occurs, the planning director, or his designee, may revoke the permit or order the work stopped by notice, in writing, served on any persons engaged in doing or causing such work to be done. Such person shall stop all site work until authorized by the planning director to proceed. The planning director, or his designee, may also withhold

further issuance of permits. Stop work orders may be appealed in the same manner as other appeals.

Violations of this article may be considered a criminal misdemeanor and shall be punishable as provided in section 1.28.010 of this code. Each day of violation shall constitute a separate offense. The city may also take civil action to compel performance and completion of, or maintenance of, improvements installed pursuant to this article. (Ord. 3257 §2.26, 2006; Ord. 3127, 2003; Ord. 3091 §13, 2003)

D. Neighborhood / Subdivision Scale Regulations

1. Blaine County

10-5-3: DESIGN STANDARDS:

No preliminary plat application shall be approved unless the board makes a positive finding that the application complies with each of the following standards. No waiver of any of these standards may be granted except pursuant to section 10-8-5 of this title.

...

B. Lot Requirements:

1. Each lot shall contain a satisfactory building site which is properly related to topography.
2. Corner lots shall be a sufficient area without obstructive landscaping to provide acceptable visibility for traffic safety.
3. Each lot shall have access to an internal street or drive, where practicable.
4. Calculation of lot area shall not include land which is below the "natural or ordinary high water mark" of navigable streams (as defined by Idaho Code sections 50-1202 and 36-1601), and therefore subject to the public trust doctrine.
5. If lots in a residential land use area are more than double the minimum acreage required for a residential zoning district (R-.4 _ R-21/2), equal or exceed the minimum acreage required in the residential/agricultural district (R-5) or are within an area of city impact, applicants may be required to arrange lots in anticipation of future resubdivision and provide for future streets where necessary to serve potential lots.
6. Each lot located adjacent to public lands shall have adequate setbacks and a landscaping plan which provide defensible space to protect private property from wildland fires, to reduce the likelihood of fires

spreading from private property to public lands, and to protect public health, safety and welfare.

The board may consider additional requirements recommended by the fire district, including, but not limited to, larger building setbacks from public lands, additional water supply systems, and specific landscaping design. The board may also consider options proposed by the applicant to meet the safety goals of this subsection.

2. Latah County

Subdivisions

8.01.10 COMPLIANCE WITH DESIGN STANDARDS

All parcels, buildings, improvements, and driveways located in an approved land division shall comply with Section 9.01 of this ordinance. Failure to comply with these design standards will make the affected parcels ineligible for building permits.

9.01.02 DESIGN STANDARDS FOR ALL CONSTRUCTION PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY

To ensure public safety and comply with the provisions of the Latah County Comprehensive Plan, all new construction shall meet the following requirements, in addition to the requirements contained in the Building Code Ordinance, prior to issuance of a certificate of occupancy for any structure:

1. All residential roof coverings shall be made of fire resistive material.

3. Kootenai County

9-15-7: DESIGN REQUIREMENTS:

This section delineates the minimum, on site design requirements for PUDs. While off site improvements may also be required to mitigate negative effects of the development, these will be considered project by project.

PUDs shall also minimize the hazards associated with wildfire, and when located in timbered areas, shall provide a fire mitigation plan, developed by a professional forester, that is approved by the director, the fire district, or the Idaho department of lands. The plan must be implemented as part of the essential, required improvements for the PUD.

9-15-8: APPLICATION REQUIREMENTS:

B. Application Requirements; Final PUD Plan Approval: The following items constitute a complete application for final PUD plan approval. The applicant is required to submit one application packet. An application that is incomplete will not be processed.

11. Wildfire Mitigation Plan: For PUDs in timbered areas, a wildfire mitigation plan, prepared by a professional forester, approved by the fire district, the director, or Idaho department of lands.

10-2-1: MAJOR SUBDIVISION:

A "major subdivision" is one that proposes to: a) create five (5) or more lots, or b) redivide land that has been subdivided in the previous five (5) years, when the two (2) subdivisions together will create five (5) or more lots, or c) create two (2) to four (4) lots with shared infrastructure or improvements, or a water system that requires engineering, that must be constructed to meet the requirements of the county or other agencies.

...

B. Application Requirements; Final Subdivision Approval: The following items constitute a complete application for final approval of a major subdivision. The applicant is required to submit one application packet. An application that is incomplete will not be processed. (Items shown with a . symbol are required for minor subdivision applications, which are explained in section 10-2-2 of this chapter.)

...

7. Wildfire Mitigation Plan: For major subdivisions in timbered areas, a wildfire mitigation plan, prepared by a professional forester, and certification from the forester that the plan has been implemented. The plan must meet the requirements of section 10-6-1 of this title and be approved by the fire district, the director, or Idaho department of lands.

10-6-1: APPENDIX A; WILDFIRE MITIGATION PLAN REQUIREMENTS FOR MAJOR SUBDIVISIONS IN TIMBERED AREAS:

A. Site plans showing:

1. The location of draws, ridges, steep slopes and other hazardous, physical features. Slopes shall be depicted according to the following categories: zero to fourteen percent (14%), fifteen (15) to thirty four percent (34%) and greater than or equal to thirty five percent (.35%).
2. Aspect (north, south, east, west facing).

3. The approximate location of proposed structures.
4. Railroad lines.
5. Existing or proposed roads that could be used for emergency ingress and egress, with the slope and width of the roads noted. Emergency access roads must meet zoning ordinance or fire district requirements for access driveways, turnarounds at the end of driveways must be at least fifty feet (50') from structures, and one pullout should be provided for every four hundred feet (400') of driveway length. Two (2) means of access to the subdivision should be provided. Note: Turnarounds must be located away from structures so they are accessible if the structures are on fire.
6. Fuel hazard rating map, broken into the following categories:

Low hazard: Fuels consist of grass, weeds, and shrubs.

Medium hazard: Fuels consist of brush, large shrubs and small trees.

High hazard: Heavy accumulation of large fuels (timber, large brush).

7. Existing or proposed firebreaks.
8. The location of existing or proposed overhead power lines, propane tanks or other features that might cause or accelerate a wildfire.
9. The location of hydrants and emergency sources of water.

B. A written report that:

1. Explains features of the site that might help firefighting efforts, such as nearby water systems or fire stations.
2. Outlines how perimeter and internal fuel breaks will be designed, constructed and maintained.
3. Provides short and long term plans for eliminating dangerous vegetative and fuel conditions in and around proposed building sites. Canopy cover in these areas should be less than fifty percent (50%), lower branches should be pruned, the ground should be relatively free of debris, and ladder fuels and dead and dying trees must be removed. Snags that do not present a fire hazard should, however, be left standing to provide habitat for birds and wildlife.
4. Verifies that power lines will be installed underground, unless underground installation is precluded by physical features of the land. If lines cannot be installed underground, the report must include an explanation of why they cannot be installed underground, and it must include plans for routine trimming of overhanging tree limbs, and for removal of ground debris below the lines.
5. Confirms that there will be safe and adequate emergency access for residents and emergency

personnel entering and exiting individual lots and the general area.

6. Identifies sufficient and accessible emergency water supplies for firefighting purposes. Water sources cannot be located within fifty feet (50') of a structure, must be surrounded with defensible space, and should be clearly identified with signs approved by the fire district, IDL or Kootenai County.

7. Describes any modifications or appurtenances needed to allow use of water sources (e.g., pumps or hydrants). If pumps are served by aboveground power lines, plans for emergency power generation may be required. (Ord. 394, 12-14-2006)

Article 6.6 Conservation Subdivisions

8.6.601: PURPOSE: Kootenai County encourages the use of conservation designs for subdivisions. The purpose of a conservation subdivision is to fit the development to the land, to cluster homes on smaller lots, to minimize road construction, to reduce stormwater and water quality impacts, to make it possible to develop shared water and sewage systems, and to save large areas of green space for farming, pasture, timber production, wildlife habitat, recreation and other uses that benefit the community. This article outlines the requirements for conservation subdivisions.

8.6.602: DENSITY: The maximum density allowed within a conservation subdivision shall be calculated by dividing the total acreage in the proposed subdivision by the minimum lot size permitted in the underlying zone. For example, the maximum density allowed within a two hundred (200) acre subdivision in the Rural zone would be forty (40) lots ($200 \div 5 = 40$). The minimum lot size for a building lot in a conservation subdivision shall be 8,250 sq. ft.

8.6.603: CONSERVATION OF PROPERTY: Conservation subdivisions shall be designed to conserve at least twenty percent (20%) of the property within the subdivision.

8.6.604: GREEN SPACE: Green space is land with natural, cultural or historic resources of value to the community. Land that is to be preserved as green space must be a part of the land being divided, must be unencumbered by existing conservation easements, must be in good condition (e.g. stable, in conformance with applicable best management practices), and must fall into one or more of the following categories:

A. Actively managed pasture, farm or timber land, except such agricultural uses as may be incompatible with residential uses. Appurtenant structures,

including residential structures, are permitted as set forth in the applicable provisions of chapters 2 and 3 of this title. However, if a residential structure is proposed to be built on a green space lot, that lot shall be counted as a building lot. If the proposed agricultural use requires irrigation, water rights sufficient to support the use must be retained with the land.

B. Wildlife habitat or wildlife corridors as identified by the Idaho Department of Fish and Game or Coeur d'Alene Tribe. These areas might include stream corridors, draws, wetlands, grassland, stands of mature timber, areas with snags, wintering areas, nesting and roosting sites, waterfront areas and travel corridors between habitat blocks and sources of food and water. Any fencing in these areas must allow for the safe movement of wildlife.

C. Areas with native vegetation, including native grass land, or unique vegetative communities as identified by the Idaho Conservation Data Center.

D. Recreational areas, including trails and wildlife viewing areas, except such areas as may be incompatible with residential uses.

E. Historic or culturally significant areas.

F. Natural landmarks and scenic areas.

G. Parks, playgrounds, picnic areas, community supported gardens and similar uses. Up to ten percent (10%) of the green space area may be used for structures appurtenant to such uses, in conformance with applicable provisions of this title and the requirements of other agencies with jurisdiction and those which will provide services.

H. Sensitive areas, as defined in section 8.9.403 of this title.

I. If public use of green space is proposed, up to two percent (2%) of such green space may be used for public parking.

J. Ridge tops and other prominent, natural features.

K. Stream and wetland protection buffers, and land adjacent to these areas.

L. Land preserved to protect drinking water supplies.

M. Sites for shared water, wastewater or stormwater systems.

N. Other land with natural, cultural or historic value.

8.6.605: PUBLIC ACCESS:

A. Green space lots where public access will be allowed, whether to residents of the subdivision only or to the public in general, may include one or more trails into, through, around or adjacent to those lots. Trails must be convenient and accessible to lots that are not adjacent to green space lots. Trails do not need to provide access to the entire site. Any proposed trails must be indicated as such on the subdivision plat, and those which do not already exist must be constructed as part of the subdivision infrastructure. All trails and associated easements must comply with the applicable requirements of article 6.7 of this chapter.

B. The Board may require installation of a parking area in conjunction with any green space lots where access by the general public will be allowed, and may require fencing or a vegetative buffer, or both, to separate those areas from nearby residences.

8.6.606: CONSERVATION SUBDIVISION DESIGN PROCEDURE: Conservation subdivisions shall be designed in accordance with the following procedure:

A. Identify potential green space areas that comply with the requirements of this article.

B. Develop an Existing Resources Report and Site Analysis Map in accordance with the requirements set forth in sections 8.6.203 and 8.6.905 this chapter.

C. Determine the underlying zone, maximum allowed density, and proposed numbers of building and green space lots. Building sites should be selected and positioned to avoid slopes in excess of fifteen percent (15%) and to take advantage of views and green space. Note: Though building sites should be designed to avoid slopes, this is a recommendation, not a requirement.

D. Align streets and trails to be compatible with topography, to minimize road length and site disturbance, to avoid drainageways, sensitive areas, green space lands, and slopes of fifteen percent (15%) or greater, and to meet the requirements of this chapter and of the highway district with jurisdiction.

E. Draw lot lines.

Article 6.9 Documentation Standards

Conservation subdivisions shall be designed to conserve at least twenty percent (20%) of the property within the subdivision.

8.6.901: STANDARDS FOR WILDFIRE MITIGATION PLANS: The standards set forth in this section are the minimum standards for wildfire mitigation plans whenever such plans are required to be submitted to the Department. Although not intended to be a comprehensive list, as each plan will be different and will need to be tailored to the needs of the particular subdivision to which it will apply, the following items, at a minimum, shall be included in all wildfire mitigation plans:

A. Site plan. A site plan must be submitted which shows the following:

1. The location of draws, ridges, steep slopes and other potentially hazardous physical features. Slopes shall be depicted according to the following categories:

- ≥ 0% and < 15%
- ≥ 15% and < 35%
- ≥ 35%

2. Aspect (i.e., north, south, east, west facing).

3. The location of existing structures, and the approximate location of proposed structures.

4. The location of any railroad lines.

5. Existing or proposed roads that could be used for emergency ingress and egress, with the slope and width of the roads noted. Two (2) means of access to the subdivision should be provided. Emergency access roads must comply with the standards for access driveways set forth in section 8.4.201 of this title, or alternatively, those of the fire protection district with jurisdiction. Turnarounds at the end of driveways must be at least fifty feet (50') from structures, and one pullout should be provided for every four hundred feet (400') of driveway length. Turnarounds must be located away from structures so they are accessible if the structures are on fire.

6. A fuel hazard rating map, broken out into the following categories:

a. Low Hazard: areas in which fuels consist of grass, weeds, and shrubs

b. Medium Hazard: areas in which fuels consist of brush, large shrubs and small trees

c. High Hazard: areas containing heavy accumulation of large fuels (timber, large brush)

7. The location of existing and proposed fire breaks.
8. The location of existing and proposed overhead power lines, propane tanks or other features that might cause or accelerate a wildfire.
9. The location of hydrants and emergency sources of water.

B. Report. A written report must be submitted which provides the following information:

1. An explanation of any features of the site that might help firefighting efforts, such as nearby water systems or fire stations.
2. An outline of how perimeter and internal fuel breaks will be designed, constructed and maintained.
3. Short and long term plans for eliminating dangerous vegetative and fuel conditions in and around proposed building sites. Canopy cover in these areas should be less than fifty percent (50%), lower branches should be pruned, the ground should be relatively free of debris, and ladder fuels and dead and dying trees must be removed. Snags that do not present a fire hazard should, however, be left standing to provide habitat for birds and wildlife.
4. Verification that power lines have been installed underground, or will be installed underground if required pursuant to the provisions of this code. If lines have not been or will not be installed underground, the report must include an explanation of why they cannot be installed underground, and it must include plans for routine trimming of overhanging tree limbs, and for removal of ground debris below the lines.
5. Confirmation that there will be safe and adequate emergency access for residents and emergency personnel entering and exiting individual lots and the general area.
6. Identification of sufficient and accessible emergency water supplies for firefighting purposes. Water sources cannot be located within fifty feet (50') of a structure, must be surrounded with defensible

space, and should be clearly identified with signs approved by the fire district, IDL or Kootenai County.

7. A description of any modifications or appurtenances needed to allow use of water sources (e.g. pumps or hydrants). If pumps are served by above ground power lines, plans for emergency power generation may be required.

4. Power County¹¹⁸

Development Code §10-13-4: PUBLIC HEALTH AND SAFETY:

G. Wildfire Hazards: All developments in or adjacent to forested areas, or areas of flammable brushy vegetation shall:

- ...
2. For subdivisions: thin timber and remove dead fuel from the entire site, and provide appropriate perimeter and, in larger developments, internal fuelbreaks. A fuelbreak is a strategically located strip of land in which the timber has been thinned and fuel removed to create an open "park-like" appearance. Fuelbreaks either include roads or are accessible to firefighting apparatus. Fuelbreaks are generally at least two hundred feet (200') in width, with the width increasing on slopes over ten percent (10%).

5. Gooding County¹¹⁹

Subdivision Ordinance No. 102

Preliminary plat submission must contain a proposal for fire protection, including a water source for fire suppression. Improvement standards for areas re-vegetated post development include planting those species that tend to recover from fire damage and do not contribute to a rapid rate of fire spread.

6. Bannock County

Bannock County and fire districts within the County employ use of the Wildlands Urban Interface Code. Additionally, Bannock County's Building Ordinance and Subdivision Ordinance seeks to increase the ability for vehicular to access structures by requiring

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http://www.sterlingcodifiers.com/codebook/index.php?book_id=838

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<http://goodingcounty.org/DocumentCenter/View/74>

all buildings/structures which are more than 150' feet from roads to be built as fire apparatus roads, meaning the roads/driveways must be at least 20' wide, be constructed with all-weather surfaces, have fire code approved turnarounds, and be free from brush overhang.

7. Gem County

F. Vegetation And Revegetation:

1. The applicant shall submit a slope stabilization and revegetation plan which shall include a complete description of the existing vegetation to be removed and the method of disposal, the vegetation to be planted and slope stabilization measures to be installed. The plan shall include an analysis of the environmental effect of such operation, including the effects of slope stability, soil erosion, water quality and fish and wildlife.

2. Vegetation sufficient to stabilize the soil shall be established on all disturbed areas as each stage of grading is completed. Areas not contained within lot boundaries shall be protected with perennial vegetal cover after all construction is completed. Efforts shall be made to plant those species that tend to recover from fire damage and do not contribute to a rapid rate of fire spread.

3. The applicant shall be fully responsible for any destruction of native vegetation proposed for retention. The applicant shall carry the responsibility for its own employees and for all subcontractors from the first day of construction until the notice of completion is filed. The applicant shall be responsible for replacing such destroyed vegetation.

Gem County Code, Title 12 Subdivision Regulation, Chapter 7 Special Development Subdivisions, Section 2 Hillside Subdivision

8. Hauser

8-3A-7: WILDFIRE HAZARDS:

These performance standards apply in the upper watershed, Lake Village and Hauser Hills zoning districts.

A. Individual homes and other principal structures shall provide a fire defensible space of at least thirty feet (30') surrounding the home or structure. A defensible space is one in which woody brush is removed or substantially thinned and dead fuel is removed. Fire hazards shall not be permitted within the defensible space. Maintenance of defensible space is a requirement for continuing compliance with this title.

B. Subdivisions and other multiple occupancy developments shall implement a wildfire prevention plan. Such plans shall be prepared with the assistance of a professional forester and shall:

1. Show how special wildfire hazard areas, including natural fire chimneys will remain undeveloped, or how the wildfire hazard in those areas will be mitigated;

2. Show how the wildfire hazard within the development will be reduced prior to occupancy by thinning and similar techniques, including clearing or, preferably, thinning of road rights of way and removal of all combustible slash resulting from road construction from a strip at least one hundred feet (100') on either side of all roads;

3. Show how adequate access for firefighting equipment and the evacuation of the development will be provided;

4. Show how an effective system of perimeter and internal fuel breaks will be designed, constructed, and maintained; and

5. Show whether (and if so, how) a water supply adequate for wildfire fighting purposes will be provided. Provision of such a water supply is encouraged by subsection 8-3D-1D of this chapter. (Ord. 149, 10-22-2008)B. The maintenance of any open space area required for compliance with this title shall include fencing, where required; prompt and effective control of noxious weeds; litter removal; and wildfire suppression. Maintenance activities shall not diminish the open space values (wetlands, slopes, etc.) being protected.

E. Individual Sites or Project Scale

1. Power County¹²⁰

Development Code §10-13-4: PUBLIC HEALTH AND SAFETY:

G. Wildfire Hazards: All developments in or adjacent to forested areas, or areas of flammable brushy vegetation shall:

1. For individual structures, including single-family dwellings: provide a fire defensible space of at least thirty feet (30') around the home or structure. A "defensible space" is one in which trees are thinned so that crowns do not overlap or touch, woody brush is removed or substantially thinned, and dead fuel is removed. Maintenance of the defensible space is a requirement for continuing compliance with this Title.

2. Bannock County

Bannock County and fire districts within the County employ use of the Wildlands Urban Interface Code. Additionally, Bannock County's Building Ordinance and Subdivision Ordinance seeks to increase the ability for vehicular to access structures by requiring all buildings/structures which are more than 150' feet from roads to be built as fire apparatus roads, meaning the roads/driveways must be at least 20' wide, be constructed with all-weather surfaces, have fire code approved turnarounds, and be free from brush overhang.

F. Building Scale

1. Boise

Section 7-01-69 AMENDMENT ADDING CHAPTER 49, WILDLAND URBAN INTERFACE CODE

4901 Scope

Upon the effective date of this ordinance, the requirements contained herein shall be applicable to all new structures and additions constructed within the Boise City Wildland-Urban Interface (WUI) Zones as illustrated by attachment 69-A. Design and construction of new structures within the WUI Zones shall comply with all the provisions of this chapter along with the current provisions contained within the International Fire Code, International Building Code

and Boise City Zoning Code as adopted and periodically amended or updated. Should any provision within this chapter conflict with any other provision of Boise City Code, then this chapter shall control.

4902 Wildland-Urban Interface Zone Designations

The Wildland-Urban Interface Zones shall be depicted on maps available for inspection by the public. Zone "A" shall depict foothills fire hazard areas. Zone "B" shall depict valley, desert and other occluded fire hazard areas. These maps are generalized depictions of the WUI Zone boundaries. The Code Official shall have final authority in determining which lots shall be included within each zone. The reevaluation and review of the WUI Zones shall be conducted every three-years or more frequently as deemed appropriate by the Boise City Council.

4903 Authority of Code Official

The Chief of the Boise Fire Department or his/her designee (hereinafter "code official") is hereby authorized to enforce the provisions of this code. The code official empowered to render interpretations of this code and to adopt policies and procedures in order to effectuate the implementation and enforcement of the code provisions contained herein. Such interpretations, policies and procedures shall be in accordance with the intent and purpose of this chapter.

4904 Violation and Penalty

A. Criminal Penalties Any person, firm or corporation found guilty of violating any provision of this chapter shall be guilty of a misdemeanor, and upon conviction may be punished by a fine of not more than one thousand dollars (\$1,000.00), by imprisonment for not more than one hundred eighty (180) days or by both. Each day, or any portion thereof, a violation of this chapter occurs or continues shall constitute a separate offense, and upon conviction thereof may be punished as provided above.

B. Civil Penalties Any person, firm or corporation violating any provision of this chapter may be assessed civil penalties in an amount of not more than two hundred dollars (\$200.00) for a first offense and not more than one thousand dollars (\$1000.00) for each subsequent offense. Each day, or any portion thereof, a violation of this chapter occurs or continues shall constitute a separate violation and a civil penalty may be assessed as provided above. The notice of violation shall state what violation(s) has occurred and state when and to whom the civil penalty must be paid.

¹²⁰

http://www.sterlingcodifiers.com/codebook/index.php?book_id=838

Failure to pay the assessed civil penalty may result in legal or other action by the City of Boise and the violator may incur reasonable collection costs.

4905 Appeal

Any person, firm or corporation aggrieved by any action or decision of the code official arising out of the enforcement of this chapter may appeal first to the Fire Code Board of Appeals, and then to the Boise City Council. Such appeal shall be made in writing and must be filed with the City Clerk within ten (10) calendar days after the action or decision which is the subject of the appeal. This appeal provision does not apply to criminal enforcement actions arising from the provisions of this code.

4906 Special Building Construction Regulations

Buildings and structures in WUI Zones “A” and “B” shall be constructed in accordance with the International Fire Code, International Building Code, Boise City Code and this chapter.

Exceptions:

1. Detached accessory structures not exceeding 200 square feet in floor area.
2. In WUI Zone “B” this chapter, with exception of roof coverings and repair of roof coverings, is only applicable to outer perimeter structures abutting undeveloped property.

4907 General

Buildings and structures hereafter constructed, modified or relocated into or within the WUI Zones shall meet the construction requirements in accordance with this chapter. Fire-resistant construction shall be in accordance with Sections 4908 through 4918.

4908 Roof covering

Roofs shall have a Class A roof covering or a Class A roof assembly. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of 72-pound mineral-surfaced, non-perforated cap sheathing complying with ASTM D 3909 installed over the combustible decking.

4909 Replacement or repair of roof coverings

Roof coverings on buildings or structures in existence prior to the adoption of this code that are replaced or have 50 percent or more replaced in a 12-month period shall be replaced with a roof covering as required for new construction based on the type of ignition-resistant construction specified in accordance with Section 4908.

4910 Replacement or repair of siding

Siding coverings on buildings or structures in existence prior to the adoption of this code that are replaced or have 50 percent or more replaced in a 12-month period shall be replaced with a siding material as required for new construction based on the type of ignition-resistant construction specified in accordance with Section 4912.

4911 Protection of eaves

Eaves and soffits shall be protected on the exposed underside by materials approved for a minimum of 1-hour fire-resistance-rated construction, 1-inch (25.4 mm) nominal fire-retardant-treated lumber or ¾-inch (19 mm) nominal fire-retardant-treated plywood, identified for exterior use and meeting the requirements of Section 2303.2 of the International Building Code. Fascias are required and shall be protected on the backside by materials approved for a minimum of 1-hour fire-resistance-rated construction or 2-inch (51 mm) nominal dimension lumber.

4912 Exterior walls

Exterior walls of buildings or structures shall be constructed with one of the following methods:

1. Materials approved for a minimum of 1-hour fire-resistance-rated construction on the exterior side.
2. Approved non-combustible materials.
3. Heavy timber or log wall construction.
4. Fire-retardant-treated wood on the exterior side. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the International Building Code.

Such material shall extend from the top of the foundation to the underside of the roof sheathing.

4913 Unenclosed underfloor protection

Buildings or structures shall have all underfloor areas enclosed to the ground with exterior walls in accordance with Section 4912.

Exception: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire resistance-rated construction or heavy timber construction.

4914 Appendages and projections

Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be a minimum of 1-hour fire-resistance-rated construction, heavy timber construction or constructed of approved noncombustible materials or fire-retardant-treated wood identified for exterior use and

meeting the requirements of Section 2303.2 of the International Building Code.

When the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 4912.

4915 Exterior glazing

Exterior windows, window walls, glazed doors, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block or have a fire protection rating of not less than 20 minutes.

4916 Exterior doors

Exterior doors shall be approved noncombustible construction, solid core wood not less than 1¾ inches thick (45 mm), or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall be in accordance with Section 4915. Exception: Vehicle access doors.

4917 Vents

Attic ventilation openings, foundation or underfloor vents, or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches (0.0929 m²) each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed ¼ inch (6.4 mm), or shall be designed and approved to prevent flame or ember penetration into the structure.

Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located at least 10 feet (3048 mm) from property lines. Underfloor ventilation openings shall be located as close to grade as practical.

4918 Detached accessory structures

Detached accessory structures greater than 200 square feet in floor area located less than 50 feet (15 240 mm) from a building containing habitable space shall have exterior walls constructed with materials approved for a minimum of 1-hour fire resistance rated construction, heavy timber, log wall construction or constructed with approved noncombustible materials on the exterior side. When the detached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to

within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 4912 or underfloor protection in accordance with Section 4913.

Exception: The enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy-timber construction. See Section 4908 for roof requirements.

4919 Emergency Vehicle Access and Fire Sprinkler System Requirements

Emergency vehicle access shall be provided in all designated WUI Zones in accordance with the provisions of the International Fire Code, Boise City Code and this chapter

Any multi-family dwelling with more than two dwelling units located within WUI Zone “A” shall require approved fire sprinkler systems in dwelling structures if:

- (a) the development is located more than one and one half (1.5) miles from any fire station, or
- (b) the development is located in an area where the response time from the nearest fire station is greater than four minutes.

Fire sprinkler systems shall be required in WUI Zone “A” for all new multi-family dwellings with more than two dwelling units with a floor area in excess of 5,000 gross square feet.

4920 Defensible Space

Definition – Defensible Space. An area either natural or man-made, where material capable of allowing a fire to spread unchecked has been treated, cleared or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations to occur.

All newly constructed structures in Zones “A” and “B” shall be protected by a thirty (30) foot defensible space from undeveloped land. Defensible space may consist of the following, in order of preferred priority: a) a modified fire-resistive perimeter area within a common lot or roadway outside of individual lot lines; and/or b) a fire-resistive landscaped yard area within individual lot lines in accordance with National Fire Protection Association (NFPA) Standard 1144, “Standard for Reducing Structure Ignition Hazards from Wildland Fire”. The maximum building envelope for development sites must be identified on each parcel to provide adequate access around the

structure for fire protection, and to provide a fire break.

The defensible space shall include a landscape plan and a description of maintenance responsibilities for the property providing the defensible space. Those responsibilities shall be included in the CC&R's for the property.

Landscaping within defensible space shall have the characteristics of fire-resistive vegetation described as follows:

1. Growth with little or no accumulation of dead vegetation (either on the ground or standing upright).
2. Non-resinous plants (willow, poplar or tulip trees).
3. Low volume of total vegetation (for example, a grass area as opposed to a forest or shrub-covered land).
4. Plants with high live fuel moisture (plants that contain a large amount of water in comparison to their dry weight).
5. Drought tolerant plants (deeply rooted plants with thick, heavy leaves).
6. Stands without ladder fuels (plants without small, fine branches and limbs between the ground and the canopy of overtopping shrubs and trees).
7. Plants requiring little maintenance (slow-growing plants that, when maintained, require little care).
8. Plants with woody stems and branches that require prolonged heating to ignite. In Zone "B," when there is an approved phasing plan for expansion of the project beyond the perimeter currently being constructed, the temporary creation of 100-foot of defensible space may be substituted for the non-roofing related standards of this code, subject to approval of the fire official.

4921 Fire Safety Plan

Prior to preliminary plat approval, a fire safety plan shall be filed with any subdivision or Planned Unit Development within Zone "A" or with any perimeter subdivision or Planned Unit Development in Zone "B" that requires compliance with this code. The plan shall be based on a site-specific wildfire risk assessment that includes considerations of project size, location, topography, aspect, flammable vegetation, climatic conditions and fire history. The plan shall address water supply, access, building ignition and fire-resistive factors, fire protection systems and equipment, defensible space and vegetation management. Developments with less than five (5) dwellings are not required to file a fire safety plan. The fire safety plan shall be retained by the code official.

(6772, Added, 04/13/2010; 6638, Repealed & Replaced, 01/22/2008; 6308, Repealed & Replaced, 03/02/2004; 3443, Added, 08/27/1973)

G. Required Implementation / Maintenance

1. Hauser

8-3A-7: WILDFIRE HAZARDS:

These performance standards apply in the upper watershed, Lake Village and Hauser Hills zoning districts.

A. Individual homes and other principal structures shall provide a fire defensible space of at least thirty feet (30') surrounding the home or structure. A defensible space is one in which woody brush is removed or substantially thinned and dead fuel is removed. Fire hazards shall not be permitted within the defensible space. Maintenance of defensible space is a requirement for continuing compliance with this title.

B. Subdivisions and other multiple occupancy developments shall implement a wildfire prevention plan. Such plans shall be prepared with the assistance of a professional forester and shall:

1. Show how special wildfire hazard areas, including natural fire chimneys will remain undeveloped, or how the wildfire hazard in those areas will be mitigated;
2. Show how the wildfire hazard within the development will be reduced prior to occupancy by thinning and similar techniques, including clearing or, preferably, thinning of road rights of way and removal of all combustible slash resulting from road construction from a strip at least one hundred feet (100') on either side of all roads;
3. Show how adequate access for firefighting equipment and the evacuation of the development will be provided;
4. Show how an effective system of perimeter and internal fuel breaks will be designed, constructed, and maintained; and
5. Show whether (and if so, how) a water supply adequate for wildfire fighting purposes will be provided. Provision of such a water supply is encouraged by subsection 8-3D-1D of this chapter. (Ord. 149, 10-22-2008)B. The maintenance of any open space area required for compliance with this title shall include fencing, where required; prompt and effective control of noxious weeds; litter removal; and wildfire suppression. Maintenance activities shall not diminish the open space values (wetlands, slopes, etc.) being protected.

H. Fire Code

1. Blaine County

BLAINE COUNTY ORDINANCE NUMBER 2016-04

An ordinance of Blaine County, Idaho as authorized by Idaho Code §41-253 amending Blaine County Code, Title 7, Chapter 7, Fire Code, by deleting it in its entirety and adopting a new Chapter 7, Fire Code by which the 2012 International Fire Code, including Appendices B, C, D, and F as published by the International Code Council along with amendments and additions relating to local conditions including: a requirement for Class A roof coverings (non-wood in certain fire districts) for new construction, additions and re-roofs; providing a minimum requirement for water supply for subdivisions and re-plats; requiring driveways to meet the standards for fire apparatus access roads; providing a severability clause and an effective date.

RECITALS

WHEREAS, the Blaine County Board of County Commissioners passed Blaine County Ordinance Number 2011-04 relating to the 2009 edition of the International Fire Code on May 9, 2011;

WHEREAS, the State of Idaho has authorized local jurisdictions to adopt the 2012 edition of the International Fire Code and additional, locally relevant fire protection provisions in accordance with Idaho Code §41-253;

WHEREAS, the fire chiefs of the various districts throughout Blaine County, in the interest of fire and life safety, have worked collaboratively to codify and standardize fire requirements for the welfare of their respective communities;

WHEREAS, because the entire county is a wildland urban interface risk area, the Blaine County Board of County Commissioners has adopted the Community Wildfire Protection Plan dated 2016 identifying fire wise practices, ranking and mapping of fuel hazard areas of Blaine County; and

WHEREAS, the State of Idaho Department of Insurance has adopted the 2012 edition of the International Fire Code by rule, see IDAPA §18.01.50.

WHEREAS, the Blaine County Fire Protection Ordinance is the minimum fire code standard for the protection of the health and welfare of citizens and visitors;

THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF BLAINE COUNTY, IDAHO, AS FOLLOWS:

Section 1. That the Blaine County Code, Title 7 Chapter 7 shall be and the same is hereby repealed in its entirety and a new Chapter 7 Fire Code is adopted as a supplemental amendment to the 2012 ~~2009~~ edition of International Fire Code. The following text reflects amendments, changes, and alterations to the ~~2009~~ ~~2006~~ supplemental amendments to the ~~2009~~ ~~2006~~ International Fire Code:

[NOTE: Additions are underlined; deletions are stricken; and unmarked text is unchanged between the existing 2009 and the proposed 2012 editions.]

7-7-1: SHORT TITLE:

This Chapter shall be known as the *FIRE PROTECTION ORDINANCE*.

7-7-2: DEFINITIONS:

AGRICULTURAL BUILDING: A structure located in an A-20, A-40, R-10, or RR-40 zoning district, as set forth in Title 9 of Blaine County Code, and designed and constructed to house farm implements, hay, grain, poultry, livestock, or other horticultural products. This structure shall not be a place of human habitation or a place of employment where agricultural products are

processed, treated, or packaged, nor shall it be a place used by the public.

BOARD: The Blaine County Board of County Commissioners.

BUILDING OFFICIAL: The Blaine County Building Official.

CLASS A ROOF: The minimum roof covering in Blaine County shall be Class A rated. The proposed roofing must meet industry standards for Class A in reference to ASTM E 108, ASTM D 2898, UL 790 or NFPA 256 and Chapter 15 or the 2012 2009 International Building Code. A ~~minimum 5/8 inch thick plywood solid sheathed roof deck may be a component of said assembly.~~

COMMISSION: The Blaine County Planning and Zoning Commission.

COMMUNITIES AT RISK: A study dated November 15, 2004 identifying a countywide fire mitigation plan involving mapping, fuel hazards, ranking, and fire wise practices.

COUNTY: The unincorporated portion of the County of Blaine, a political subdivision of the State of Idaho.

DEFENSIBLE SPACE: A minimum thirty (30) foot area surrounding any occupancy consisting of vegetation approved, by the authorized jurisdiction, vegetation that reduces a means of transmitting fire from vegetation to structures or from transmitting fire from structures to vegetation.

DISTRICT: The Ketchum Rural Fire Protection District, the Wood River Fire Protection District, the Carey Fire Protection District, the Smiley Creek Fire Protection District, or the portion of the West Magic Fire Protection District located within Blaine County, political subdivisions of the State of Idaho, which is also referred to as "Fire Departments" under the 2012 2009 International Fire Code.

FIRE CHIEF: The chief officer of the fire department serving the jurisdiction, or a duly authorized representative.

FIRE CODE OFFICIAL: The fire chief or other designated authority charged with the administration and enforcement of the Code, or a duly authorized representative. In those portions of the County that are not in a Fire District, the County Building Official shall retain the authority of Fire Code Official.

FLOOR AREA: The area included within the surrounding exterior walls of a building or portion thereof, including all basements and garages, but excluding exterior decks, patios and porches.

GROUP R-3: The occupancy designated as Group R-3, as set forth in the 2012 2009 International Building Code, and more specifically known as: a) dwellings; b) lodging houses; and c) congregate residences (each accommodating ten (10) persons or less). For the purposes of this chapter only, Group R-3 occupancies include private garages, carports, and sheds.

GROUP R-4: Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff. Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code, or shall comply with the 2012 2009 International Residential Code.

INTERNATIONAL BUILDING CODE: The latest edition of that code, known as the 2012 2009 International Building Code published by the International Code Council, as adopted by Idaho Code Section 39-4109 and the Building Code Board, and the appendices thereto, excepting those appendices designated in Idaho Code Section 39-4109.

INTERNATIONAL FIRE CODE: The latest edition of the 2012 2009 International Fire Code with appendices B-Fire-Flow Requirements for Buildings, C-Fire Hydrant Locations and Distribution, D-Fire Apparatus Access Roads, and F-Hazard Ranking thereto, published by the International Code Council, and adopted by the Idaho State Fire Marshal, setting forth the minimum standards for the protection of life and property from fire and explosions in the State of Idaho, as adopted by Idaho Code Section 41-253, IDAPA 18, Title 1, Chapter 50.

OCCUPANCY: The classification of every building, whether existing or hereinafter erected, as set forth in the 2012 ~~2009~~ International Building Code.

7-7-3: FINDINGS:

The Board makes the following findings:

- A. The latest editions of the 2012 ~~2009~~ International Fire Code and the 2012 ~~2009~~ International Building Code have been adopted by State law. The 2012 ~~2009~~ International Fire Code and 2012 ~~2009~~ International Building Code promote the public health, safety, and general welfare.
- B. The unincorporated area of Blaine County is generally rural in character and water supplies within the unincorporated areas of Blaine County are often limited.
- C. The Districts provide sufficient fire protection personnel and equipment to their constituents to enable a modification of the requirements of Appendix B of the 2012 ~~2009~~ International Fire Code, based on the present level of service (i.e., water supply carrying capacity and personnel) of each District.
- D. The Ketchum Rural Fire ~~Protection~~ District, the Wood River Fire ~~Protection~~ District, and Carey Rural Fire ~~Protection~~ District presently provide a sufficient level of service to protect occupancies up to a total floor area of 4,000 square feet, without requiring a greater water supply on-site. The West Magic Fire ~~Protection~~ District presently provides a sufficient level of service to protect occupancies up to a floor area of 2,500 square feet, without requiring a greater water supply on-site.
- E. Because the Districts can provide a sufficient level of service and because the Districts are generally rural in character, the full fire-flow requirements of an urban community are not normally required within the Districts. If the level of service of the Districts increases or decreases in the future, total floor area may

be increased or decreased by amendment of this Chapter without requiring greater water supply on-site.

- F. Additional requirements, review, and inspection promote the purposes of the 2012 ~~2009~~ International Fire Code, the 2012 ~~2009~~ International Building Code and promote compliance with the requirements therein and with the Fire Protection Ordinance.
- G. The development of new ponds that secure both decorative and fire protection purposes is contrary to the Board's current water policy discouraging such uses.

7-7-4: DUTIES OF BUILDING OFFICIAL:

In addition to their other duties, the Building Official is charged and empowered with the administration and enforcement of the 2012 ~~2009~~ International Fire Code within the County but outside of the Districts.

7-7-5: MODIFICATION TO THE INTERNATIONAL FIRE CODE:

A. Exemption from Appendix B.

Except as otherwise provided herein, the fire flow requirements as stated in Appendix B of the 2012 ~~2009~~ International Fire Code for all occupancies within the Districts are not applicable because the development of full fire flow requirements is not practical and because the occupancies within the Districts are sufficiently serviced by personnel and equipment. For those occupancies within the County but outside of the Districts, the requirements of the 2012 ~~2009~~ International Fire Code, including Appendix B, applies.

B. Water Supply or Sprinkler System for any Occupancy.

1. Floor Area Requirements by Jurisdiction:

Ketchum Rural Fire ~~Protection~~ District; Wood River Fire ~~Protection~~ District or Carey Rural Fire ~~Protection~~ District: The construction of new

square footage or an addition to an existing occupancy, excluding Agricultural buildings, including a remodel, which creates a total floor area of 4000 square feet or greater, shall install an approved fire protection water supply as set forth in Appendix B of the 2012 2009 International Fire Code, or may install an approved fire sprinkler system as set forth in NFPA Standards 13, 13D and 13R. The construction of any occupancy, excluding Agricultural buildings, on new or existing buildings, including a remodel, which creates a total floor area of 8000 square feet or greater, shall install a fire sprinkler systems set forth in NFPA Standards 13,13D, 13R and provide an approved water supply as determined by the Fire Code Official.

West Magic Fire ~~Protection~~ District: The construction of new or an addition to an existing occupancy, excluding Agricultural Buildings, including a remodel, which creates a total floor area of 2,500 square feet or greater, shall install an approved fire protection water supply or a sprinkler system as set forth in NFPA Standards 13, 13D and 13R. The construction of any occupancy, excluding Agricultural Buildings, on a new or existing building, including a remodel, which creates a total floor area of 5,000 square feet or greater, shall install a sprinkler system as set forth in NFPA Standards 13, 13D and 13R AND an approved fire protection water supply.

Smiley Creek Fire ~~Protection~~ District: Structures exceeding 2,500 square feet shall be protected by fire sprinklers as approved by the Smiley Creek Fire ~~Protection~~ District and in compliance with the Fire Protection Ordinance or as approved by the Fire Code Official.

For the purpose of calculating square footage for any Group R-3 occupancy on the same lot or parcel, each building or portion of a building separated by one or more fire walls or fire barriers when approved by the Authority Having Jurisdiction, which comply with the provisions of Section 706 Fire Walls or 707 Fire Barriers of the 2012 2009 International Building Code, may be considered a separate building or fire area and may be

considered independently from the total square footage of one or more Group R-3 occupancies. In addition to installing sprinkler systems or approved fire protection water supplies in the above-stated areas, the applicable Fire Chief, Fire Code Official or Building Official may, at their discretion, require additional fire mitigation measures including, but not limited to, fire walls or fire barriers constructed in accordance with Section 706 Fire Walls or Section 707 Fire Barriers of the 2012 2009 International Building Code.

2. Water Supply and Sprinkler System Requirements.

The building permittee is granted the option of selecting a minimum 10,000 gallon water supply, which shall consist of a cistern, constructed of approved materials other than steel or concrete, or other fire protection water supply that has been approved by the applicable Fire Chief, Fire Code Official, or Building Official. The construction of ponds is not an approved water supply for fire suppression. The water supply and related requirements shall be (a) capable, at a minimum, of delivering 500 gallons of water per minute for twenty (20) minutes with an approved fire apparatus connection; (b) located within 1,000 feet, measured on an approved access roadway, of the nearest point of the structure; and, (c) approved by the applicable Fire Chief, Fire Code Official or Building Official. Sprinkler Systems shall a) comply with NFPA Standards 13, 13D or 13R; b) be connected to a water flow alarm; c) be provided with a fire department connection; and, d) be approved by the applicable Fire Chief, Fire Code Official or Building Official. Any approved water flow alarm shall be supervised by a remote signaling station, approved by the applicable Fire Chief, Fire Code Official or Building Official.

3. Modification of Fire-Flow Requirements.

For any occupancy, except Agricultural Buildings, located in a District or in the County, the applicable Fire Chief, Fire Code Official or Building Official may decrease the fire-flow

requirements for isolated buildings or a group of buildings in rural areas or small communities where the development of full fire-flow requirements are impractical, or increase the fire-flow requirements where considerations indicate an unusual susceptibility to group fires or conflagrations.

C. Sprinkler System for Occupancy's other than A, R-3₁ or Agricultural Building.

Any construction for any occupancy other than R-3 or an Agricultural Building within the County on a new or existing building, including a remodel, shall be subject to the provisions of NFPA Standard 1142 with the exception of assembly occupancies with an occupant load of 100 or more. Assembly occupancies, in the County and in the Districts, with an occupant load of 100 or more occupants shall install an approved NFPA Standard 13 fire sprinkler system throughout in addition to many other requirements.

1. Section 903.2.8 of the ~~2012~~ 2009 International Fire Code does not apply in its entirety. This code provides for fire protection water supplies or fire sprinkler systems in Section B, Water Supplies, or Sprinkler Systems for any Occupancy in the Fire Districts.

D. Water Supply for Subdivisions and Re-plats.

The construction of a new subdivision or a re-plat of an existing subdivision that creates 5 or more new lots or parcels shall be provided with an approved fire protection system and water supply capable of producing a sustained fire flow as determined by the Fire Code Official. Fire hydrant locations, pumper connections and distribution required for subdivisions shall be determined by the Fire Code Official. In addition to the minimum fire flow requirements of fire protection systems, floor area requirements by jurisdiction shall be complied with for the construction of any occupancy excluding agricultural buildings, on new or existing buildings including a remodel, which creates a total floor area of 8,000 square feet or greater.

E. Fire Apparatus Access Roads and Driveway.

Fire Apparatus Access Roads and Driveways: Approved fire apparatus access roads or driveways shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within Blaine County Fire Districts and areas of unincorporated Blaine County not within an established Fire District. Approved fire apparatus access roads and driveways shall comply with the requirements of Section 503 and Appendix D of the 2012 International Fire Code.

F. Defensible Space.

Construction for any occupancy on a new or existing building, including remodels, within the County shall provide a minimum defensible space of thirty (30) feet surrounding any occupancy. Approved vegetation shall be maintained annually by the property owner to minimize fire fuel loads within this defensible space.

G. Application of Appendix B for Occupancies on Separate Lots or Parcels.

Except for those buildable lots or parcels existing on the date of the adoption of the 1993 Fire Protection Ordinance, Appendix B of the ~~2012~~ 2009 International Fire Code shall apply to those occupancies within the County where the separation between any occupancy on separate lots or parcels is less than fifty (50) feet.

H. Application of Alternative Sprinkler System or Fire Flows for the Same or Different Occupancies on the Same Lot or Parcel.

If there is construction on any occupancy within the County on a new or existing building, including a remodel located within fifty (50) feet of another occupancy on the same lot or parcel, the square footage of all the occupancies located within fifty (50) feet of the proposed construction, shall be calculated as though there was only one building, unless each

building or portion of a building is separated by one or more fire walls, as set forth in Section 5 (b) (1) of the Fire Protection Ordinance. If the total square footage of the occupancies exceeds 4,000 square feet in the Ketchum, and Wood River Fire Protection District and Carey Fire District or 4,000 square feet in the Carey Fire Protection District, 2,500 square feet in the West Magic Fire Protection District or Smiley Creek Rural Fire District then the new construction shall comply with the requirements in Section 5(b) of the Fire Protection Ordinance.

I G. Class A Roof Assemblies Required Roofs Assembly.

1. Ketchum Rural Fire District, Wood River Fire District and Smiley Creek Fire District: Class A Roofing Required.

a. Class A roof coverings or assemblies containing no wood products with no wood products in the roof covering are required on all new construction buildings. ~~Class A Roof Deck: Class A roof deck coverings are the minimum exposure rating for Blaine County on all new roof construction or as approved by the fire code official per section 104 of the 2009 international fire code.~~

b. When a structure is being reroofed it is required to have a Class A roof covering or assembly containing no wood products. Class A or the highest rated covering that matches existing covering is required when less than ten (10) percent of the roof area is being repaired and additional areas are not subsequently repaired within five (5) years.

c. Where the addition to an existing structure exceeds 1,000 square feet of roof area, the entire structure must be upgraded to a Class A roof covering or assembly containing no wood products. Additions to buildings over 1,000 square feet of roof area require that the roof of the entire building be upgraded to a Class A roof with no wood products in the roof covering.

2. Carey Fire District, West Magic Fire District: Class A roof assemblies are required on all new buildings. Class A roof assemblies are required for all re-roofs over 1,000 square feet of roof area. Class A is not required when less than ten (10) percent of the roof area is being repaired and additional areas are not subsequently repaired within five (5) years. Additions to buildings over 1,000 square feet of roof area require that the roof of the entire building be upgraded to a Class A roof assembly.

For the purpose of this Code, roof area shall be measured on a horizontal plane projection of all levels including overhangs and overlaps. When appropriate mitigation measures are proposed, the applicable Fire Chief, Fire Code Official or Building Official may, at their discretion, waive this requirement.

J H. Address Numbers.

All residences shall exhibit approved legible address numbers in locations that are plainly visible from the highway, road, or street fronting the property. Address numbers shall be a minimum of four (4) inches in height and shall contrast with their background. Address numbers shall be posted a minimum of forty-eight (48) inches above final grade and shall be maintained unobstructed and visible at all times.

K I. Fire Protection Equipment.

All required fire protection systems and equipment, including standpipe systems, shall be installed by an approved Licensed Contractor for the type of equipment being installed. Licensed Contractors shall provide certification and licensure documentation to the applicable Fire Chief, Fire Code Official, or Building Official upon request. Submittal of construction documents, meeting the requirements of the ~~2012~~ 2009 IFC Section 105, for approval by the applicable Fire Chief, Fire Code Official, or Building Official is required before commencing installation of any required fire protection system or equipment including standpipe systems.

L J. Fireworks.

The use of fireworks, 1.4G (formerly known as Class C, Common Fireworks) other than Non-Aerial Common Fireworks as defined by Idaho Code Title 39 Chapter 26 is prohibited. The use of Special Fireworks as defined by Idaho Code Title 39 Chapter 26 or Fireworks 1.3G (formerly known as Class B, Special Fireworks) requires a permit from the authority having jurisdiction. The sale or distribution of any fireworks in the unincorporated areas of Blaine County is prohibited. The manufacture of any type of fireworks within Blaine County is prohibited.

Fireworks, 1.3 G for display fireworks, as defined by Section 3302 of the 2012 ~~2009~~ IFC, shall meet all of the requirements of the 2012 ~~2009~~ IFC Section 3308.

The following definitions are added to Section J:

Non-Aerial Common Fireworks means any fireworks such as ground spinners, fountains, sparklers, smoke devices or snakes designed to remain on or near the ground and not to travel outside a fifteen (15) foot diameter circle or emit sparks or other burning material which land outside a twenty (20) foot diameter circle or above a height of twenty (20) feet. Non-aerial common fireworks do not include bottle rockets, firecrackers, jumping jacks, or similar products.

Application for Fireworks Display Permit: Any person desiring to engage in a public or private display or other events using fireworks shall first make a written application, including fees as set by Resolution of the Authority Having Jurisdiction, Fire Department, to the Fire Chief, Fire Code Official or an appointee for a "Fireworks Display Permit".

The Authority Having Jurisdiction, Fire Department, Fire Chief, Fire Code Official or an appointee shall have the power to grant or deny any application, subject to such reasonable conditions, if any, as it shall prescribe so long as the denial of the application or any conditions imposed on the granting of the application are reasonably necessary for protection of public health and safety, subject to review by the Board of Appeals as set for in Section 7-7-7 of this Ordinance.

Term of Permit: A "Fireworks Display Permit", if issued, shall be nontransferable, shall list the specific date or dates upon which the display or event shall occur and the types of fireworks and uses that will be allowed.

Insurance Required: Each applicant for a "Fireworks Display Permit" shall have filed with the Fire Code Official prior to the issuance and validity of any permit, a policy or certified true copy thereof, of public liability insurance, including both "accident" and "occurrence" coverage. The insurance coverage limits for both public liability and for products liability coverage shall be at least One Million Dollars (\$1,000,000.00) per person per occurrence bodily injury; One Million Dollars (\$1,000,000.00) per occurrence aggregate bodily; and One Million Dollars (\$1,000,000.00) per occurrence aggregate property damage. Each policy of insurance shall be in the form and substance acceptable to the County, and shall name as insured parties under the terms of the policy the County, all officials, elected and appointed, of the County in performance of official functions regarding all operations under or pertaining to said permit, any licensee or licensor of the applicant, and all vendors of fireworks covered by the permit to be issued to the applicant. Said policy of insurance shall be so written that it cannot be canceled without at least ten (10) days prior written notice to the County from the underwriting insurance company. The policy of insurance shall be underwritten through or by a qualified and duly licensed insurance company or companies doing or authorized to do insurance business in Idaho, and a copy of said policy shall be filed with the Fire Code Official prior to the issuance of the permit.

General Prohibitions: It shall be unlawful for any person, except in compliance with this chapter, to:

- A. Alter any fireworks;
- B. Throw any fireworks from, into, or at a moving vehicle or at any person;
- C. Use fireworks in any area that constitutes a severe fire threat based on the vegetative conditions during the current fire season as determined by the authority having jurisdiction.

Exceptions: The provisions of this chapter do not apply to and shall not prohibit:

- A. The use of explosives, flares, noisemakers or signals designed and used for the purpose of protecting the public.
- B. The use of blank cartridges.
- C. The use of flares or noisemakers designed and labeled specifically for pest control purposes and approved by the Idaho Department of Fish and Game.

Liability of Parents or Guardians: The parents, guardians or other persons having custody or control of a minor shall be liable for damage caused by the use of fireworks by the minor.

Compliance with Idaho State Fireworks Act: It shall be the duty of every person to comply with all the provisions of Chapter 26, Title 39, Idaho Code, Idaho State Fireworks Act and of this ordinance. Violation of the Act or any provisions of this ordinance by the permittee, or by any of their agents, employees, or officers shall constitute a cause, in and of itself, to deny any subsequent application for a permit.

7-7-6: REVIEW, APPROVAL, INSPECTION, AND FEES:

A. Review of Building Permits.

Before any building permit is issued within the Districts, the applicable Fire Chief, Fire Code Official or Building Official shall review the building permit application, along with copies of all building plans and specifications for any occupancy group to determine whether the building is designed to comply with the 2012 ~~2009~~ International Fire Code and the Fire Protection Ordinance. Before any building permit is issued within the County but outside of the Districts, the Building Official shall review the building permit application, along with copies of all building plans and specifications for any occupancy group to determine whether the building is designed to comply with

the 2012 ~~2009~~ International Fire Code and the Fire Protection Ordinance. Before any building permit is issued, the applicable Fire Chief, Fire Code Official or Building Official shall certify on the building permit that the application is designed to comply with the 2012 ~~2009~~ International Fire Code and the Fire Protection Ordinance.

B. Applications.

Review of Subdivision Before any preliminary or short plat for property within the Districts is considered pursuant to Title 10 of the Blaine County Code, the applicable Fire Chief, Fire Code Official or Building Official shall review the subdivision application, along with copies of all plans and specifications, to determine whether the proposed subdivision will comply with the 2012 ~~2009~~ International Fire Code and the Fire Protection Ordinance. Before any preliminary or short plat for property within the County but outside of the Districts is considered pursuant to Title 10 of this Code, the Building Official shall review the subdivision application, along with copies of all plans and specifications, to determine whether the proposed subdivision will comply with the 2012 ~~2009~~ International Fire Code and the Fire Protection Ordinance. Before any preliminary or short plat is approved pursuant to Title 10 of this Code, the applicable Fire Chief, Fire Code Official or Building Official shall forward to the Commission, for a preliminary plat, or to the Board, for a short plat, their recommendations, including suggested conditions for their consideration. If there are considerations indicating an unusual susceptibility to group fires or conflagrations, the applicable Fire Chief, Fire Code Official or Building Official may require a fire-flow greater than that required by the 2012 ~~2009~~ International Fire Code and the Fire Protection Ordinance.

C. Approval of Building Permits and Subdivision Applications.

Compliance with the 2012 ~~2009~~ International Fire Code and the Fire Protection Ordinance shall be established to the satisfaction of the applicable Fire Chief, Fire Code Official or Building Official before the Building Official will issue a building permit, or before a preliminary or short plat is approved.

D. Inspection.

1. Fire Safety Equipment. The applicable Fire Chief, Fire Code Official or Building Official is empowered to inspect fire safety equipment or materials as part of the approval of a building permit issued for the construction of any Building. Any such fire safety equipment or materials shall not be concealed or covered during the course of the construction, repair or remodeling authorized by the building permit until the same has been inspected and approved by the applicable Fire Chief, Fire Code Official, or Building Official. Any such fire safety equipment shall be inspected and approved by the applicable Fire Chief, Fire Code Official, or Building Official before a framing inspection is approved by the Building Official. As a condition of a building permit, such fire safety equipment shall be inspected and approved by the applicable Fire Chief, Fire Code Official, or Building Official before a final building inspection is approved by the Building Official.

2. Water Supply or Sprinkler System. As a condition of a building permit, a water supply shall be inspected and approved by the applicable Fire Chief, Fire Code Official or Building Official before combustible construction is initiated. The permittee has the burden and obligation to submit written proof to the Building Official that the water supply has been inspected and approved. As a condition of a building permit, sprinkler system plans shall be inspected and approved by the applicable Fire Chief, Fire Code Official or Building Official before a framing inspection is approved by the Building Official. As a condition of a building permit, a sprinkler system shall be inspected and approved by the applicable Fire Chief, Fire Code Official or Building Official before a final building inspection is approved by the Building Official. The permittee has the burden and obligation to submit written proof to the Building Official that the sprinkler system has been inspected and approved.

3. Fire Protection Maintenance. All fire protection water supplies, fire protection

equipment, access to occupancies and equipment, whether required or voluntarily installed, that would require a response by the Fire Districts or be used by the Fire Districts shall be maintained in operating condition at all times. Operating condition includes unobstructed access, maintenance, testing, and inspections as required by the applicable Fire Chief, Fire Code Official or Building Official.

E. Fees.

Each Fire District may by resolution, adopt a fee schedule for reviewing Building Permit, Subdivision, Plat and Conditional Use Permit applications. The fee for any application requiring Fire District comment shall be in addition to the fees collected by the Land Use and Building Services Department.

7-7-7: APPEALS:

A. Appeals.

When the applicable Fire Chief, Fire Code Official or Building Official disapproves of an application or refuses to grant a permit, or when there is a question as to the suitability of alternate materials and types of construction, or when there is a question of interpretation of the 2012 ~~2009~~ International Fire Code or the Fire Protection Ordinance, the applicant or aggrieved party may appeal the decision of the applicable Fire Chief, Fire Code Official or Building Official to a Board of Appeals, as required by the 2012 ~~2009~~ International Fire Code.

B. Appeal Procedure.

A written notice of appeal, detailing all basis for appeal including the particulars regarding any claimed error or abuse of discretion, shall be filed with the applicable District or in those portions of the County that are not in a District, the County Building Department, before five p.m. of the fifteenth calendar day after the decision of the applicable Fire Chief, Fire Code Official, or Building Official has been made. The failure to physically file a notice of appeal with the

applicable District or Building Department within the time limits prescribed by this Section shall cause automatic dismissal of such appeal.

C. Board of Appeals.

The Board of Appeals consists of five members who are qualified by experience and training to pass upon pertinent matters. The five members are appointed by the District having jurisdiction or in those portions of the County that are not in a Fire District, the Board of Appeals shall be appointed by the Board of County Commissioners and hold office at the Board of Commissioners' pleasure. The applicable Fire Chief, Fire Code Official or Building Official shall be an ex officio member and shall act as secretary of the Board of Appeals or shall have the power to appoint a secretary.

D. Conduct of Hearings.

The Board of Appeals shall conduct a hearing for the appeal within thirty (30) days of the filing of the appeal. The Board of Appeals shall adopt reasonable rules and regulations for conducting its investigations and shall render decisions and findings in writing to the applicable Fire Chief, Fire Code Official, or Building Official, with a duplicate copy to the appellant within thirty (30) days after the hearing of appeal.

E. Idaho State Department of Insurance.

Pursuant to Idaho Code Section 41-260, the Idaho State Fire Marshal's Office may hear appeals from aggrieved parties in reference to this Idaho State Statute after following the appeals procedure under section 7-7-7 A, B, C and D.

7-7-8: PENALTIES:

A. Violation of a provision of the Fire Protection Ordinance or the 2012 2009 International Fire Code shall be a misdemeanor, punishable as provided in Blaine County Code Section 1-4-1. Each day that such a Violation occurs or continues shall constitute a separate criminal offense. Any violation of any provision of the Fire

Protection Ordinance may also result in the filing of a civil complaint for civil damages, if applicable, imposed upon any person violating the 2012 2009 International Fire Code or the Fire Protection Chapter. Whenever it appears that any person has engaged in any act or practice constituting a violation of the 2012 2009 International Fire Code or this Fire Protection Chapter, the Building Official, applicable Fire Chief, or Fire Code official may issue a stop work order and the Board may bring an action to enjoin any such acts or practices and to enforce compliance of the 2012 2009 International Fire Code or the Fire Protection Ordinance. Any civil action for injunctive relief or civil damages shall be in addition to the criminal penalties set forth in this Chapter.

7-7-9: WARNING AND DISCLAIMER OF LIABILITY:

The degree of fire protection required by the Fire Protection Ordinance is considered reasonable for regulatory purposes and is based on nationally accepted fire protection standards. The Fire Protection Ordinance does not imply that persons or property will be fully or even partially protected from fire or damage. The Fire Protection Ordinance shall not create liability on the part of the Board, Blaine County, or its employees, officers or agents, or the Districts or their employees, officers or agents for any damage to persons or property following the adoption of this Chapter, including, but not limited to, reliance on this Chapter or any administrative decision made hereunder.

SECTION 2: SEVERABILITY:

The Board of County Commissioners intends that each separate provision of this Ordinance be deemed independent of all other provisions herein, and it is further the intention of said Board that if any of the provisions of this ordinance be declared to be invalid, then all other provisions thereof shall remain valid and enforceable.

SECTION 3: EFFECTIVE DATE:

This Ordinance shall be in full force and effect from and after its passage, approval, and publication.

REGULARLY PASSED, APPROVED AND ADOPTED this 23rd day of May, 2016.

BLAINE COUNTY
BOARD OF COUNTY COMMISSIONERS

Jacob Greenberg, Chairman

Angenie McCleary, Commissioner

Attest:

Lawrence Schoen, Commissioner

JoLynn Drage, Clerk
PUBLISHED JUNE 1, 2016

SUMMARY

2. Madison County

Fire Code § 12-33(d)

Sec. 12-33. - Requirements for unincorporated areas of the county.

(a) Scope. The requirements contained herein shall be applicable to all new structures and additions constructed within the unincorporated areas of the county. Design and construction of new structures shall comply with all the provisions of this section along with the current provisions contained within the International Fire Code, International Building Code, and county subdivision ordinance. Should any provision within this section conflict with any other provision, then the more restrictive shall apply.

(b) Authority of code official. The fire chief or duly authorized representative is authorized to enforce the provisions of this code. The code official is empowered to render interpretations of this code and to adopt policies and procedures in order to effectuate the implementation and enforcement of the code provisions contained herein. Such interpretations, policies, and procedures shall be in accordance with the intent and purpose of this section.

(c) Fire safety mitigation plan. Prior to preliminary plat approval, a fire safety mitigation plan shall be filed with any subdivision located in the unincorporated areas of the county. The fire safety mitigation plan shall be based on a site-specific wildfire risk assessment that includes considerations of project size, location, topography, aspect, flammable vegetation, climatic conditions, and fire history. The plan shall address water supply, access, building ignition and fire-resistive factors, fire protection systems and equipment, defensible space and vegetation management.

(d) Plan review. Upon receiving the preliminary plat application, the fire chief shall review the preliminary plat and fire safety mitigation plan for fire and life safety provisions. The review shall include, but not be limited to the following:

(1) Increasing or decreasing required fire flows. The fire chief, at his discretion, may use appendix B of the International Fire Code or NFPA 1142, Water Supplies for Suburban and Rural Fire Fighting.

(2) Access and egress including multiple point access or looped road systems.

(3) Limitation on building envelopes.

(4) Structures, buildings and LPG tanks shall conform to the guidelines identified in Idaho Firewise.

(5) Defensible space requirements shall specifically address the steepness of slopes, size/type of vegetation, and locations of buildings and structures.

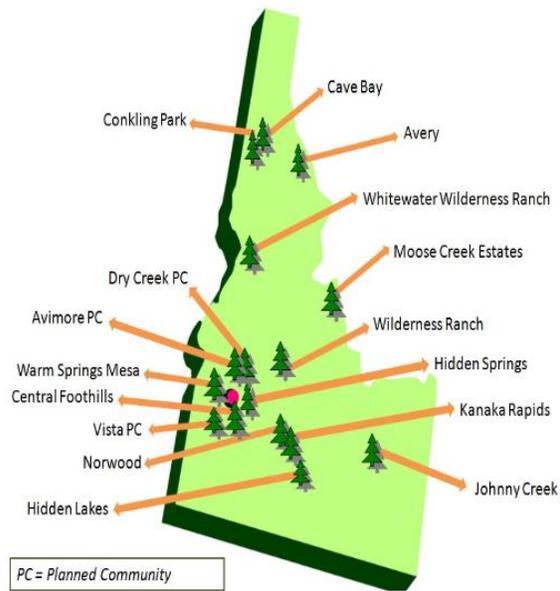
(6) Restrictions on building materials. Materials and building techniques shall comply with NFPA 1144, Reducing Structure Ignition Hazards from Wildland Fire.

(e) Final plat application. After the approval or conditional approval of the preliminary plat, no deviations will be allowed from the preliminary plat. All fire and life safety requirements shall be met prior to the county commissioners' final plat approval. The fire chief shall sign the final plat signifying that the fire and life safety requirements have been met.

(Ord. No. 381, § IV, 8-22-2011)

I. Firewise

Map of all Idaho Firewise communities in Idaho.¹²¹



J. HOA CC&Rs and Related Documents

1. Hidden Springs

Hidden Springs CC&Rs

<http://www.hiddensprings.com/Documents%20and%20Settings/5/Site%20Documents/Master%20CCR's.pdf>

3.1.7.16 Wildfire Prevention. Establish, implement and enforce all programs, services, activities, restrictions, rules and regulations necessary or appropriate to achieve the "Wild Fire Prevention Strategy" identified in Section 3, 3-19, of the Town Plan, including any and all steps necessary to minimize disruption of wildlife habitat in the form of native ground cover vegetation and existing soil and drainage patterns.

Hidden Springs design guidelines:

<http://www.hiddensprings.com/Documents%20and%20Settings/5/Site%20Documents/Gov%20Document>

¹²¹ <http://idahofirewise.org/home-safety/firewise-communities/>

[s/HS%20Firewise%20Guidelines%20700%20April%202010.pdf](http://www.sterlingcodifiers.com/codebook/index.php?book_id=447)

The Town Plan is located in the Ada County Zoning Ordinance, which includes these specific requirements:

http://www.sterlingcodifiers.com/codebook/index.php?book_id=447

8-21A-9-27: WILDFIRE PREVENTION STRATEGY: linklink

Background: The Hidden Springs community has been carefully planned with a strategy for the prevention, control and rapid extinguishment of wildfires. This program is intended to address the legitimate concern about residential development in the foothill areas as it relates to public safety and wildfire prevention, while maintaining the functional and aesthetic parameters of the community. Development of a program for wildfire prevention has been an effort involving members of the planning team and local fire experts. This strategy has been reviewed with fire and resource experts since the 1996 wildfire affecting the Hidden Springs property. The consensus is that the strategy remains valid and highly desirable as an approach to dealing with fire hazards in the foothills. Seven (7) primary criteria have been identified in establishing a sound wildfire prevention program for this project:

Available Water: Two (2) aspects of water systems have been considered in the planning and development of this community. The first is the quality and quantity of water available for domestic use. The second is the type of system and quantity of water available for fire protection. The availability of water for fire protection on the Hidden Springs community will exceed the minimum storage requirement of five hundred fifty thousand (550,000) gallons. Fire flow will also exceed the minimum one thousand five hundred (1,500) gallons per minute with additional buffering for peak hour demands.

Water mains will be sized to accommodate fire hydrants at a maximum of five hundred foot (500') spacing in residential areas and about three hundred fifty foot (350') spacing near commercial and community structures. Hydrants will be strategically located near emergency access easements to the residential perimeter and wildlife management areas,

as well as periodically along roadways. Booster pumps to ensure adequate pressure and backup power are also part of the design of the water distribution system.

Lots greater than 2.5 acres located north of the power lines will be served from individual wells, subject to approval by the required jurisdictional agencies. Each residential building will be required to have a fire sprinkler system meeting NFPA 13D supplied from their individual well. Fire hydrants connected to the public water system are located approximately one and one-fourth (1 1/4) miles south of the 9th addition access on Cartwright Road. Fill and return time for a firetruck would be ten (10) minutes or less.

Proximity Of Fire Services: Fire service will be provided by the North Ada fire and rescue district. The bureau of land management also has responsibilities for fire protection in the foothills because of extensive public lands in the area. A fire station site will be provided in the village center in the first phase of the project. When the district constructs a station on the site, volunteers from Hidden Springs may be asked to supplement the staff at the new station. The new facility is envisioned by the district to house a pumper, tanker and grassfire equipment (that have adequate capacity to serve Hidden Springs, the Dry Creek Valley and adjacent areas) at its completion.

Emergency Vehicle Access: Primary roads within the community will be designed to provide access for emergency vehicles. Provisions will be made for access by firefighting equipment and personnel from two (2) directions into each residential neighborhood. All roads will have a maximum gradient of ten percent (10%). Spurs that serve those areas occurring off the primary roads will terminate in cul-de-sacs, with adequate turnarounds for emergency vehicles. All roads will be maintained by Ada County highway district to its standards. Emergency access easements to residential perimeters and major open space areas will be provided at strategic locations, including ends of cul-de-sacs and between adjoining lots.

Site Planning: Careful site planning for fire protection at the perimeter of the residential neighborhoods as well as local protection for individual homesites is a critical function of the wildfire prevention program for Hidden Springs. As such, a comprehensive system of roads, trails, riparian greenways and open preserves is an integral part of each neighborhood. This system provides strategic emergency access points and firebreaks at the neighborhood perimeters that allow firefighters to confine a fire to a small area. To reduce local exposure to hillside areas, the residential lots in each neighborhood will be low density, with a limited

building envelope on the most level portion of the site. Also, setbacks will be required between all structures and adjacent slopes.

Noncombustible Construction Materials: Architectural design guidelines for the Hidden Springs project will require that noncombustible materials such as tile/slate, asphalt composition shingles, and standing seam metal be utilized for roofing materials. These guidelines will also require any highly combustible material used for exterior siding, paneling, fencing and other wood structures to be factory treated with an industry rated fire retardant chemical.

Landscaping And Fuel Modification: The landscape planting guidelines for Hidden Springs will include provisions for wildfire prevention in conjunction with site planning, aesthetics, water requirements, native plants and ongoing maintenance programs. The goal of these guideline provisions will be twofold. First, to implement a comprehensive landscape design that will reduce fuel volume in the common and perimeter areas, and second, to provide individual homesites with a framework for fuel modification. The guideline criteria for the fuel modification in the common areas and residential neighborhoods of Hidden Springs are: planting fire resistant plant materials; establishing irrigated landscape envelopes within each homesite; developing vegetation buffers that provide transition to adjacent native vegetation and establishing criteria for clearance between buildings and plantings within each site.

Following the wildfire on a portion of the Hidden Springs property in the summer of 1996, a revegetation effort is getting underway. In consultation with wildfire and vegetation experts, a mix of fire resistant grasses and plants will be planted in several stages over the coming months.

Maintenance And Management: Ongoing maintenance, management and enforcement of the wildfire prevention program will be the responsibility of the community association and governed by the covenants, codes and restrictions for the Hidden Springs community. The design guidelines for the project will be administered by a design review committee for site planning, architectural and landscape design compliance with the wildfire prevention program. Additionally, public information and education programs about wildfire prevention will be developed in cooperation with the North Ada fire and rescue district and the bureau of land management. (Ord. 325, 3-12-1997; amd. Ord. 793, 12-7-2011)

2. Cordillera, Colorado

RESOLUTION OF THE BOARD OF DIRECTORS OF THE CORDILLERA PROPERTY OWNERS ASSOCIATION

A RESOLUTION AFFIRMING, AMENDING AND RESTATING THE ASSOCIATION'S WILDFIRE MITIGATION REGULATIONS RESOLUTION NO. 2009-61

WHEREAS, on March 29, 2007, the Cordillera Property Owners Association (the "Association"), adopted a Wildfire Mitigation Resolution to set forth mandatory wildfire mitigation regulations to protect the homes and property of Cordillera property owners ("Owners") from wildfires (the "Wildfire Mitigation Resolution"); and

WHEREAS, the Association has determined that certain Owners have failed to comply with the mandatory provisions set forth in the Association's wildfire mitigation regulations; and

WHEREAS, pursuant to Paragraph 4.a. of the Association's fine policy regarding covenant and rule enforcement adopted via Resolution on October 20, 2008 (the "Fine Policy"), the Board shall have the right to establish a different fine structure for particular violations, provided such structure is clearly set forth in a resolution of the Board; and

WHEREAS, the Association desires to amend and restate the Wildfire Mitigation Resolution to establish specific deadlines for Owners to comply with mandatory wildfire mitigation regulations and to set forth stricter penalties for noncompliance of the Association's wildfire mitigation regulations.

NOW THEREFORE, THE BOARD OF DIRECTORS OF THE CORDILLERA PROPERTY OWNERS ASSOCIATION HEREBY ADOPTS THE FOLLOWING AMENDED AND RESTATED WILDFIRE MITIGATION REGULATIONS:

1. Mitigation Required Owners shall be required to perform wildfire vegetation management on their properties according to the time schedule attached hereto as Exhibit A, which more or less addresses neighborhoods according to their hazard ratings (Anchor Point 2004). Wildfire mitigation must be commenced no later than the time periods set forth below.

a. 2007 and 2008 Compliance Period. Owners notified in calendar years 2007 and 2008 to perform wildfire mitigation on their property(ies) and who have failed to comply with the

Association's wildfire mitigation regulations as of the date of this

Resolution shall commence wildfire mitigation on their property(ies), in accordance with the regulations set forth herein, no later than July 1, 2009. Failure to perform wildfire mitigation by such date shall result in a fine imposed upon the Owner, after an opportunity for a hearing, as set forth in Paragraph 6 herein. For purposes of this subparagraph I.a., wildfire mitigation shall be deemed to have "commenced" upon the execution of an agreement between the Owner and a contractor that requires the contractor to perform such wildfire mitigation in the summer of 2009.

b. 2009, 2010 and 2011 Compliance Period. Owners required to perform wildfire mitigation in calendar years 2009, 2010, or 2011 (the "Compliance Year"), as set forth on Exhibit A attached hereto, shall receive written notification from the Association in April of the Compliance Year that the Owner must commence wildfire mitigation on the Owner's property(ies) no later than August 1 of the Compliance Year. Such notice shall be mailed to the Owner via U.S. mail to the Owner's Cordillera address and to the Owner's secondary address on record if such address has been provided. Failure to perform wildfire mitigation by such date indicated in the notice shall result in a fine imposed upon the Owner, after an opportunity for a hearing, as set forth in Paragraph 6 herein. For purposes of this subparagraph I.b., wildfire mitigation shall be deemed to have "commenced" upon the execution of an agreement between the Owner and a contractor that requires the contractor to perform such wildfire mitigation in the summer of the Compliance Year.

2. Mitigation Standards. Mitigation shall comply with the Eagle Cmnty Wildfire Regulations and the Cordillera Design Review Board ("Cordillera DRB") for Zones I, 2 and 3.

Cordillera requires that parcels of size three acres or less shall be required to mitigate the entire property. Parcels over three acres shall be required to mitigate a distance of 210 feet from the all decks and overhangs. Copies of the regulations are available from Cordillera DRB, Cordillera Public Safety or online from Eagle County at the following website:

[http://www.eaglecounty.us/uploadedFiles/commDev/Wildfire Information/WildfireRegs.pdf](http://www.eaglecounty.us/uploadedFiles/commDev/Wildfire%20Information/WildfireRegs.pdf)

3. Vacant Lot. Vacant lots shall be mitigated to Zone 3 standards. Parcel of size three acres or less shall mitigate the entire property, including the building envelope. Parcels over three acres shall be required to mitigate a distance of 210 feet for the center of the building envelope. Copies of the regulations are available from the Cordillera DRB, Cordillera Public Safety or online from Eagle County.

[http://www.eaglecounty.us/uploadedFiles/commDev/Wildfire Information/WildfireRegs.pdf](http://www.eaglecounty.us/uploadedFiles/commDev/Wildfire%20Information/WildfireRegs.pdf)

4. Administration. Cordillera Public Safety and the Cordillera DRB shall administer and coordinate this program. Cordillera Public Safety shall conduct hazard assessments and reviews with Owners and coordinate compliance with the regulations established herein.

5. Landscaping at Homes Built Prior to 2004. It is recognized that this Resolution affects homes built prior to the Eagle County Wildfire Regulations (April 2004) and that the landscaping for these homes, particularly the landscaping in Zone I, was prescribed by the

Cordillera DRB, yet is contrary to current regulations. Zone I is the most important part of the wildfire mitigation program when it comes to protecting the home and fire fighters. When conducting hazard assessments for the purpose of this Resolution, Cordillera Metropolitan

District ("CMD") staff, on behalf of the Association, shall document landscaping done prior to

2004 and supply the Owner with written recommendations, BUT the Owner shall not be required to remove this landscaping. However, in the event the exterior landscaping of the same property, in whole or in part, is remodeled, the entire defensible space shall come under compliance with the regulations.

6. Failure to Comply.

a. Notice. In the event an Owner fails to perform wildfire mitigation by the date set forth in Paragraph 1 herein, the Association shall mail a written notice (the "Notice") to the Owner via U.S. mail and via certified mail, return receipt requested, to the Owner's Cordillera address and to the Owner's secondary address on record if such address

has been provided, containing the following information:

(i) The address of the property(ies) on which the Owner has failed to perform wildfire mitigation by the due date set forth in this Resolution;

(ii) A period of not less than 10 calendar days within which the Owner may present a written request to the Board for a hearing to dispute the Association's claim that the Owner has failed to commence wildfire mitigation by the due date set forth in this Resolution; and

(iii) The fine to be imposed if the Owner fails to request a hearing within 10 calendar days of the notice, or if the Owner is found to be in violation of this Resolution after a hearing before the Board.

(iv) A statement that the fine shall be waived if the Owner commences wildfire mitigation within thirty

(30) days of the date of the Notice and provides evidence to the Association that Owner has commenced wildfire mitigation.

(v) A statement that if the Owner fails to commence wildfire mitigation

on Owner's property(ies) within thirty (30) days of the date of the Notice, the Association or its designee may, but shall not be obligated to, perform wildfire mitigation on the Owner's property(ies), which shall include entering upon the Owner's property(ies), and that all costs incurred by the Association or its designee to perform wildfire mitigation on Owner's property(ies) shall be charged to the Owner, and shall be subject to late charges and interest if not paid.

b. Hearing Procedures. Requests for hearings shall be held before the

Association's Board and conducted pursuant to the procedures set forth in Paragraph 4 of the Association's Fine Policy, as may be amended from time to time, except as otherwise provided in this Paragraph 6.b. If, after a hearing, the Board determines that the Owner has failed to perform or commence wildfire mitigation on the Owner's property(ies), the fine set forth in the Notice shall be immediately due and owing as of the original date set forth in the Notice.

c. Fines. The following fines shall be levied against the Owner for failure to perform wildfire mitigation as described herein:

(1) Failure to Comply with the 2007 and 2008 Compliance Period

Owners notified in calendar years 2007 and 2008 to perform wildfire mitigation on their property(ies) and who have failed to comply with the Association's wildfire mitigation regulations by July 1, 2009 shall be fined \$3,000. Such fine shall be waived by the Association if the Owner commences wildfire mitigation on the Owner's property(ies) within thirty (30) days of the date of the Notice and submits evidence to the Board that the Owner has commenced wildfire mitigation.

Such evidence shall include a copy of an executed agreement between the Owner and the contractor that shall perform the wildfire mitigation on Owner's property(ies).

(2) Failure to Comply with the 2009, 2010 and 2011 Compliance

Period. Owners who fail to perform wildfire mitigation on their property(ies) by August 1 of the applicable Compliance Year shall be fined \$3,000. Such fine shall be waived by the Association if the Owner commences wildfire mitigation on the Owner's property(ies) within thirty (30) days of the date of the Notice and submits evidence to the Board that the Owner has commenced wildfire mitigation.

Such evidence shall include a copy of an executed agreement between the Owner and the contractor performing the wildfire mitigation on Owner's property(ies).

In addition to the fines described herein, other charges and interest shall be imposed in accordance with Paragraph 4 of the Association's Fine Policy, as may be amended from time to time.

d. Association's Right to Cure. If the Owner fails to commence wildfire mitigation on Owner's property(ies) within thirty (30) days of the date of the Notice, the

Association or its designee may, but shall not be obligated to, perform wildfire mitigation on the Owner's property(ies), which shall include entering upon the Owner's property(ies), and all costs incurred by the Association or its designee to perform wildfire mitigation on Owner's property(ies) shall be charged to the Owner and subject to late charges and interest if not paid.

e. Collection Procedures. Any fines, charges and interest more than sixty (60) days past due shall be collected pursuant to the collection procedures set forth in Paragraph 7 of the Association's Fine Policy, as may be amended from time to time.

7. Maintenance. Wildfire mitigation will not be effective if not maintained or if new/inappropriate vegetation is added. In order to maintain effectiveness of wildfire mitigation, Owners shall maintain their defensible spaces as originally approved by Eagle County and the Cordillera DRB.

8. Failure to Maintain Wildfire Mitigation. If the Board observes, or upon being advised of by an Association staff member, Owner, or agent of the Board, that the Owner has failed

to maintain wildfire mitigation on his or her property(ies), the Owner shall be deemed to be in violation of the Association's Governing Documents and shall be subject to the enforcement procedures set forth in the Association's Fine Policy, as may be amended from time to time, including the Association's right to enter upon the Owner's property(ies) to maintain wildfire mitigation on Owner's property(ies) and charge the Owner with all costs incurred by the Association to maintain wildfire mitigation on the Owner's property(ies). Failure of the Owner to cure such violation as provided in the Second Notice (as defined in the Fine Policy) shall result in a fine of \$100. If the Owner fails to pay the fine (including all charges and interest) and/or cure the violation within 10 calendar days of the date of the Second Notice, a fine of \$200 shall be imposed as set forth in the Third Notice (as defined in the Fine Policy).

9. Inspections. The Association has authority to enter upon the Owner's property to conduct inspections. On behalf of the Association, CMD Staff will periodically conduct inspections of Cordillera properties within neighborhoods or when observations from staff or other owners necessitate inspections of such properties.

10. Hazards Ratings. Cordillera Public Safety will maintain a list of hazard ratings for each property in Cordillera. Ratings will be calculated using the Eagle County rating form so that all properties in Cordillera are rated using the same system.

11. Prior Resolution This Resolution affirming, amending, and restating the Association's wildfire mitigation regulations replaces in its entirety the Wildfire Mitigation Resolution adopted by the Association's Board of Directors on March 29, 2007, and such Wildfire Mitigation Resolution shall be of no further force and effect upon the Effective Date of this Resolution.

12. Effective Date. This Resolution affirming, amending, and restating the Association's wildfire mitigation regulations shall take effect on the date and at the time of its adoption.

K. Vegetation Management / Weed Ordinances

1. Ferman Village

<http://www.fermanvillage.org/wp-content/uploads/2010/01/Adopted-Ordinance-Nuisance-5-3-2010.pdf>

K. NUISANCES: Note: See Ordinance Numbers 108 and 109 for animals, dismantled or inoperable vehicle regulations. Declaration of Nuisance. No person in charge of or in control of a premises, whether as owner, lessee, tenant, occupant or otherwise, shall allow any "nuisance" as defined in this chapter to remain on the premises unless permitted within a fully enclosed structure. Nuisance includes any of the following:

3. Accumulations of noxious weeds and grasses and other growths upon property within the city limits constitute a source of fire hazard and shall be removed, cut and destroyed by the owner or agent of the ground or premises on which the same is located.

2. Gem County¹²²

Chapter 3

WEED CONTROL

4-3-1: FIRE HAZARD

PROHIBITED:

4-3-2: PENALTY:

4-3-1: FIRE HAZARD

PROHIBITED:

It shall be unlawful for any owner or person in control of land upon which any weeds or grass determined to be a fire hazard are present within one hundred feet (100') of an improved structure, within any platted townsites or subdivisions in unincorporated areas of the county to fail to remove such weeds not later than ten (10) days after service of notice upon such owner or person in control of said land by the sheriff's office or the county weed department. (Ord. 78-3A, 9-11-1978)

4-3-2: PENALTY:

A violation of this chapter shall, upon conviction, be punishable by a fine of not more than three hundred dollars (\$300.00), or by incarceration of up to six (6) months in the county jail, or by both such fine or incarceration. (Ord. 78-3A, 9-11-1978)

Gem County Code, Title 4 Public Health and Safety

The City of Glenns Ferry does have a Weed Abatement program that we follow. This is to help to protect citizens property during the warmer months. We send out notices to property owners that have high and dry weeds and other hazards. For the most part property owners take care of such.

L. Existing Property Owners

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http://www.sterlingcodifiers.com/codebook/index.php?book_id=411

¹²³ http://www.co.valley.id.us/wp-content/uploads/Brochure_2016.pdf

1. Valley County¹²³

2. Kootenai County¹²⁴

Anytime a new home is built that is in the Wildland Urban Interface (WUI) zone we offer a free assessment to the property owners, any information we provide is recommendation, not a requirements.

FireSmart™ is a proactive program of Kootenai County and the National Fire Plan. Its purpose is to increase awareness of the hazards associated with wildfire in the Wildland Urban Interface (WUI) areas of Kootenai County and to mitigate those hazards wherever possible. Funding is provided through grants from our state and federal agencies.

The program is two-fold:

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<http://www.kcgov.us/departments/disaster/firesmart/firesmart.asp>

1. Provide property owners with information and educational tools to make them a full partner in protecting their home or business from wildfire. FireSmart™ helps landowners learn how to create a fire safe zone around their home, reduce the ignitability of structures and create safe access for firefighters and other emergency personnel. Your local Fire Districts are also available to help with home assessments.

2. Assists property owners in creating fuel breaks designed to protect themselves and their community from wildfire. For landowners whose property qualifies for treatment as a fuel break, the initial hazardous fuel treatment work is paid for through the FireSmart™ program. Participants agree to maintain the work for a period of 10 years, or until they sell the property, whichever comes first.

FireSmart™ Tips

Create a lean, green, and clean area 30 feet around your home
Create and maintain "defensible" space at least 100 feet from this lean, green, clean area
Keep the area free of dead vegetation (grass, leaf litter, limbs, etc.)
Prune tree limbs up to 10 feet or 30-50 percent of tree height, whichever is less
Dispose of slash (materials smaller than 3 inches in diameter)
Clean needles and leaves from gutters, roof, and inside corners of house
Water and mow your lawn regularly
Store firewood away from structures
Screen chimneys and under porch or deck
Identify and control noxious weeds
Prune vegetation over driveway to a minimum height of 13.5 feet for clearance
Provide an escape route
Keep your address visible
Establish turn-outs to allow passage of vehicles, including fire engines, at a minimum width of 50 feet.
Avoid road grades over 10%
Choose "Fire-Resistive" plants and landscape materials
Do not plant flammable junipers next to your home
Maintain your defensible space each year

¹²⁵ <http://fire.cityofboise.org/media-releases/2012/07/protect-your-home-from-wildfire/>;
<http://fire.cityofboise.org/media-releases/2012/07/protect-your-home-from-wildfire/>

3. Gem County

Gem County Fire and Rescue recommendations for wildfire mitigation and preparedness: <http://gemcountyfirerescue.org/Wildfire.html>

4. Boise¹²⁵

Homeowners "Wildfire Hazard Reduction Certificate" - Boise Fire Department would like to offer homeowners a "Wildfire Hazard Reduction Certificate" upon completion of several items to make their home safer from wildfire.

Homeowners Wildfire Hazard Reduction Certificate Checklist

Cleanup roof debris
Remove branches that overhang the structure
Clean out gutters of debris ·
Clean chimney regularly
Install Y2" spark arrestor on chimney (if not present)
Metal grated vents - (foundation, soffit, eaves)
Clean foundation out for 4' -Non combustible ground cover flower beds (NO BARK MULCH) and cleanup of debris
Clean under deck
Clean under house
30' Zone- Limbed up trees, separation of tree canopies (if conifer) cleared duff from shrubbery and plants, non-combustible ground cover in place.
Remove Ladder Fuels
Move firewood away from home
Maintained mowed lawn
Place hoses at all outdoor hose bibs
Home address clearly posted

Criteria Checklist¹²⁶

CERTIFICATE CRITERIA CHECKLIST

¹²⁶ http://fire.cityofboise.org/media/3554/45396_CriteriaChecklist.pdf

Cleanup Roof Debris: Any combustible material collected needs to be removed (valleys, cracks, overhangs, etc.).

Remove Branches that Overhang the Structure: Any branches that may cause fire spread or drop debris that will become a fire hazard should be removed.

Clean Out Gutters of Debris: Any combustible debris collected in the gutters needs to be cleaned out.

Clean Chimney Regularly: Confirmation of annual cleaning and maintenance of the chimney

Install ½” Spark Arrestor on Chimney (if not present): Available at your local hardware stores or home improvement centers.

Metal Grated Vents – (foundation, soffit, and eaves): Prevent sparks from entering your home through vents, by covering exterior attic and underfloor vents with wire mesh no larger than 1/8 of an inch.

Clean Foundation Out For 4’ - Non Combustible Ground Cover / Flower Beds (NO BARK MULCH) and Cleanup of Debris: Although mulch helps retain soil moisture, when dry, it can become flammable. Mulch as well as all landscaping should be kept well-watered to prevent them from becoming fire fuel.

Clean Under Deck: Prevent combustible materials and debris from accumulating beneath patio deck or elevated porches; screen underneath or box in areas below the deck or porch with wire mesh no larger than 1/8 of an inch.

Clean Under House: Prevent combustible materials and debris from accumulating beneath your home 30’ Zone – Limbed Up Trees, Separation of Tree Canopies (if Conifer) Cleared Duff from Shrubbery and Plants, Non-Combustible Ground Cover in Place: Do you have at least 30 feet of space surrounding your home that is Lean, Clean and Green? The objective of Defensible Space is to reduce the wildfire threat to your home by changing the characteristics of the surrounding vegetation.

Lean = Prune shrubs and cut back tree branches, especially within 15 feet of your chimney.

Clean = Remove all dead plant material from around your home; this includes dead leaves, dry grass and even stacked firewood

Green = Plant fire-resistant vegetation that is healthy and green throughout the year.

Remove Ladder Fuels: Take out the “ladder fuels” – vegetation that serves as a link between grass and tree tops. These fuels can carry fire from vegetation to a structure or from a structure to vegetation.

Any structure attached to the house, such as decks, porches, fences and sheds should be considered part of the house. These structures can act as fuses or fuel bridges, particularly if constructed from flammable materials. Therefore, consider the following:

If you wish to attach an all-wood fence to your home, use masonry or metal as a protective barrier between the fence and house.

Move Firewood Away from Home: Move firewood away from your house or attachments like fences or decks.

Maintained Mowed Lawn: Water and maintain your lawn regularly, mow dry grass and weeds.

Place Hoses at All Outdoor Hose Bibs: Self explanatory

Home Address Clearly Posted: Identify your home and neighborhood with legible and clearly marked street names and numbers so emergency vehicles can rapidly find the location of the emergency. Include a driveway that is at least 12 feet wide with a vertical clearance of 15 feet – to provide access to emergency apparatus.

WHEN COMPLETED WITH THE LIST, CONTACT JERRY McADAMS AT 570-6576 TO BE CHECKED OFF AND GET YOUR CERTIFICATE.

M. Disclosure

1. Nez Perce County

Hazard Mitigation Plan Summary given to all of the people

Nez Perce County Local Hazard Mitigation Plan Appendix IV to Section 5, Progress in Plan Implementation

Hazard Summary

- Floods. Floods are the most significant natural disaster affecting Nez Perce County. Areas adjacent to small streams have flooded in recent events. Two floods in 1996 and 1997 resulted in Presidential disaster declarations. Nez Perce County participates in the National Flood Insurance Program (NFIP). If your property is in multiple flood zones, build in the safest area.

WILDLAND FIRE

Relative Wildland Fire Possibilities

High: Red color on map

Medium: Orange color on map

Low: Yellow color on map

Mitigation Measures

Recommended: Firewise practices, including:

- Create a defensible space around buildings
- Use fire-resistant roofing, such as metal
- Store firewood and flammable materials at least 30 feet away from buildings
- Landscape with fire-resistant vegetation
- Clean chimneys and heating systems annually
- Make sure water sources are accessible to the fire department

Recommended: Firewise practices, including:

- Create a defensible space around buildings
- Use fire-resistant roofing, such as metal
- Store firewood and flammable materials at least 30 feet away from buildings
- Landscape with fire-resistant vegetation
- Clean chimneys and heating systems annually
- Make sure water sources are accessible to the fire department

Recommended: Awareness of seasonal fire risk based on adjoining forest/grassland/agricultural use. Select from appropriate firewise techniques above.

1. Hazard Summary

2. Fire Map



Nez Perce County Planning & Building Services

P.O. Box 896/1225 Idaho Street

Lewiston, ID 83501-0896

Telephone (208) 799-3197

Fax (208) 799-3149

September 28, 2016

King's Thrones and Pumping Service

629 Thain Ave.

Lewiston, ID 83501

Parcel #: RP030740010010

FLOODPLAIN HAZARD: **ZONE C (LOW)**

EARTHQUAKE HAZARD: **MODERATE**

FIRE HAZARD: **MEDIUM**

LANDSLIDE HAZARD: **GTU-5 (HIGH)**



Appendix B:

Community-based Hazard Planning and Mitigation: Planning, Legal, and Policy Implications in the WUI

Risk Perception Survey (RPS)

Prepared by Thomas Wuerzer
twuerzer@nova.edu

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1 Introduction

In the submission package for the 2015 Western States Competitive Grant, the proposed project *Community-based Hazard Planning and Mitigation: Planning, Legal, and Policy Implications in the WUI* stated that, likely, high rates of development threaten wildland urban interface (WUI) areas, and Idaho's smaller local governments lack knowledge, planning and legal resources to develop land-use policies that mitigate WUI fire risk. Further we presented the argument that property owners potentially see hazard mitigation efforts as negatively impacting their property and likely limiting local governments' ability to enact sensible land-use policies to reduce fire risk.

This project seeks to understand and address landowners' risk perceptions and provides resources to rural communities to plan where demand for new development in the WUI is high. Among other steps and action items in the project, a multi-year and statewide survey was proposed.

The Risk Perception Survey (RPS, noted in the grant application as RPM, risk perception measure) is integral part of analyzing and setting a baseline on risk perception among households across the State of Idaho. The RPS is using a social science based approach in evaluating and assessing the current status in risk perception and related hazard readiness on the issues of wildfires in Idaho. A planned follow-up survey in 2017 will present the great opportunity in measuring the potential changes in perception and behavior among residents concerning wild fires and related hazards.

The RPS included a household based assessment in which approximately 20,000 households in four geographic regions of Idaho were invited to participate. This report summarizes the framework, methodology and survey, and key finding of the first RPS undertaken in late 2015.

2 Framework

The main purpose of the RPS is to identify risk and wildfire awareness levels at household level as state wide platform. The selection of representative PLAs also enables a comparison of regions and their survey results across the state. Both, state wide and regional, perspectives create a knowledge base that will benefit local government and agencies. In addition, this information platform can be used to communicate mitigation efforts across jurisdictions in conjunction with local, state and federal agencies.

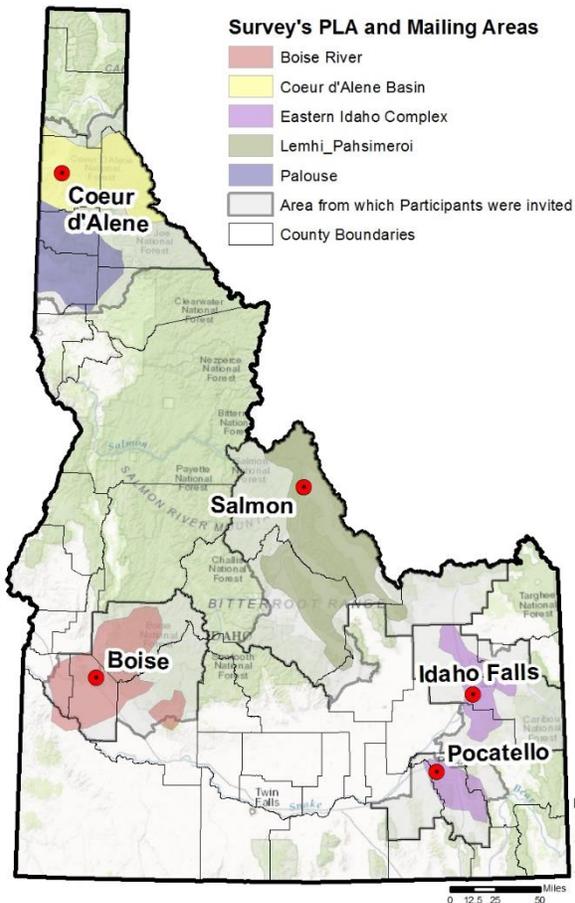
2.1 Definition of Risk Perception

The framework of the RPS operates with a "working" definition of risk perception which includes the judgement and estimations that people make about the characteristics and severity of wildfire risk. Perception of risk is a (personal or communicated) assessment and social construct that is likely influenced by a number factors such as values, history, and ideology. A person lacking in the area of risk perception may likely engage in risky behavior or in little actions to prepare for an event of wildfire. The RPS is designed to operationalize elements of this definition into set of questions and linkages between questions.

2.2 Geographic Context and Scale

To fulfill the statewide and regional perspective, the survey aims at five of Idaho's 13 Priority Landscape Areas (PLAs) across the 44 counties and 200 cities. These five areas are designated as the highest areas of need, and, are exemplar of many other Idaho rural landscapes that are at high risk for development and wildfire yet lack planning capacity to deal with these issues. These regions are following the coverage of five Priority Landscape Areas (PLAs) as noted in the Idaho Forest Action Plan (see Figure 1). They represent Idaho's landscapes in topography, vegetation, and pattern of human settlement, and create a basis to easily transfer results from the RPS' PLAs to comparable regions in Idaho as well to other fire prone states in the Intermountain West and U.S. West coast.

Figure 2.2: Selected Priority Landscape Areas and Survey Coverage



2.3 Methodology

2.3.1 Survey Design and Mailings

For the purpose of this project, an invite-by-mail-online-questionnaire process was selected. This means that participants for the survey are invited via postcard and asked to participate in the survey using a link to an online questionnaire.

For sampling and mailing purposes, the larger Coeur d'Alene area (Coeur d'Alene Basin and Palouse PLA) is aggregated into one region. Figure 1 shows the PLAs and the mailing areas. For each area, a random sample of registered mailing addresses was taken and controlled for primary residences. In sum, a total of 19,599 Idaho households (mailing addresses) were invited via a postcard-invitation in the beginning of December 2015. A reminder postcard was mailed a few weeks later encouraging participation.

The questionnaire asked across 59 questions about the characteristics of a participant's house, their interaction with neighbors and community, their actions and activities of mitigation efforts (done and planned), and sets of demographic and socio-economic questions, as well as question sets that measure attitude and trust towards i.e. mitigation actions by state or federal agencies. The median duration of a survey was 18 minutes. It appears that some respondents recorded their answers over multiple hours as mean duration was 45 minutes.

2.3.2 Responses' Statistical Representation

A total of 634 responses were recorded and error-checked by the RPS team. As a result, from cleaning and validation, and removal of redundant responses due to multiple attempts (the system is able to trace this) the final dataset contains 593 valid and unique responses. It is important to note that most respondents actually finished the questionnaire and therefore increasing the general strength of following statistics. For example, the last questions received a completion above 80%, meaning that respondents viewed the question and clicked an answer. These questions contain information about age, gender, political affiliation, and critical assessment about trust. These are questions on which participants are usually hesitant to answer.

The RPS 2015/16 delivers with 593 responses a strong statistical dataset that presents a relative high completion rate and statistical significance. In statistics, the representation of data that was sampled from a larger population, is indicated by the confidence or confidence interval, and a certain error percentage. A commonly accepted indicator-level would be 95% +/- 5% while expressing the high probability that the results/values of a sample of a population are close to values found in the that population.

The RPS shows with 593 responses a confidence interval of 95% +/- 4.02% (using 585,259 households as base; reported by the US Census for 2014) and, therefore, results are generalizable for all Idaho households.

3 Statewide Results

The RPS is conceptually broken in to three divisions containing indicators and variables to measure the current perceptions and attitudes toward wildfire mitigation. The following section entails a set of statistic items that cover the divisions of Individual Related, Home Related, and Activities and Trust/Responsibilities:

Participants were asked to allocate themselves in a specific region:

		RegionID			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	CDA	160	27.0	27.9	27.9
	BOI	147	24.8	25.6	53.5
	SAL	171	28.8	29.8	83.3
	IDF	96	16.2	16.7	100.0
	Total	574	96.8	100.0	
Missing	Opted Out	3	.5		
	Missing	16	2.7		
	Total	19	3.2		
Total		593	100.0		

CDA – Coeur D’Alene, BOI – Boise, SAL – Salmon, IDF – Idaho Falls/Pocatello

3.1 Individual Related

3.1.1 Demographics

3.1.1.1 Summary

- 552 respondent stated duration of living in the current residence: Approximately 14yrs in average.
- The RPS has dominant home owners in its 2015 sample: 91.2% of the respondents own their homes.
- Approximately 24% of the respondents are organized with/in a HOA
- About a 1/3 of the sample holds a college degree, or some college (16.7%), or a Masters degree education (18.1%).
- The RPS reports that about 35% of respondents are younger than 55 years. About a 1/3 says they are 55-64 years and then 1/3 state 65 or over.
- The RPS presents respondents identifying themselves as White (88.3%) and Native American (11.3%)
- The two-person household dominates the sample with 56.9%, single households are 15.1%, whereas family or multi-person households report as 28% when combined.
- The most frequently stated household income ranges between \$50,000 and \$74,999 (20.8%), followed by \$75-99,9k (17.7%) and 100-150 (16.5%) It is important to note that about 38.2% of the RPS reported their combined household income below \$50,000.
- There are 44% female and 66% male respondent.
- When asked about political affiliation (one of the last questions shown to participants) about 25% noted that they consider themselves moderate liberal to strong liberal, about 20% noted being moderate, and 55% stated that they are moderate conservative to strong conservative.

3.1.1.2 Frequency Tables

		Residence Duration
N	Valid	552
	Missing	41
Mean		13.93

Ownership

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rent	50	8.4	8.8	8.8
	Own	520	87.7	91.2	100.0
	Total	570	96.1	100.0	
Missing	System	23	3.9		
Total		593	100.0		

HOA Membership

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	428	72.2	75.6	75.6
	Yes	138	23.3	24.4	100.0
	Total	566	95.4	100.0	
Missing	System	27	4.6		
Total		593	100.0		

Highest level of education completed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Elementary School	1	.2	.2	.2
	High school or Equivalent	41	6.9	8.2	8.5
	Vocational/Technical School (2 year)	21	3.5	4.2	12.7
	Some College	99	16.7	19.9	32.6
	Associate Degree (2 years)	46	7.8	9.3	41.9
	College degree (4 year)	164	27.7	33.0	74.8
	Master's Degree (MA, MS, MBA)	90	15.2	18.1	93.0
	Doctoral Degree (Ph.D)	18	3.0	3.6	96.6
	Professional Degree (MD, JD etc.)	17	2.9	3.4	100.0
	Total	497	83.8	100.0	
Missing	Prefer not to say	23	3.9		
	System	73	12.3		
	Total	96	16.2		
Total		593	100.0		

		Age Group			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	18-25	9	1.5	1.9	1.9
	26-34	33	5.6	6.8	8.7
	35-43	49	8.3	10.1	18.8
	44-54	79	13.3	16.4	35.2
	55-65	151	25.5	31.3	66.5
	65 or over	162	27.3	33.5	100.0
	Total	483	81.5	100.0	
Missing	Prefer not to say	27	4.6		
	System	83	14.0		
	Total	110	18.5		
Total		593	100.0		

		Race/Ethnicity self-identified as			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Asian	1	.2	.2	.2
	White/Caucasian	446	75.2	88.3	88.5
	African American/Black	1	.2	.2	88.7
	Native American	57	9.6	11.3	100.0
	Total	505	85.2	100.0	
Missing	Prefer not to say	12	2.0		
	System	76	12.8		
	Total	88	14.8		
Total		593	100.0		

		How many people live in your home (include yourself)			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1	77	13.0	15.1	15.1
	2	290	48.9	56.9	72.0
	3	47	7.9	9.2	81.2
	4	56	9.4	11.0	92.2
	5	20	3.4	3.9	96.1
	6 or more	20	3.4	3.9	100.0
	Total	510	86.0	100.0	
Missing	System	83	14.0		
Total		593	100.0		

Please indicate your combined household income.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under \$10,000	11	1.9	2.8	2.8
	\$10,000-\$19,999	23	3.9	5.8	8.6
	\$20,000-\$29,999	39	6.6	9.9	18.5
	\$30,000-\$39,999	41	6.9	10.4	28.9
	\$40,000-\$49,999	37	6.2	9.4	38.2
	\$50,000-\$74,999	82	13.8	20.8	59.0
	\$75,000-\$99,999	70	11.8	17.7	76.7
	\$100,000-\$150,000	65	11.0	16.5	93.2
	\$150,000-\$200,000	20	3.4	5.1	98.2
	\$200,000-\$250,000	3	.5	.8	99.0
	Over \$250,000	4	.7	1.0	100.0
	Total	395	66.6	100.0	
Missing	Prefer not to say	97	16.4		
	System	101	17.0		
	Total	198	33.4		
Total	593	100.0			

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	164	27.7	33.9	33.9
	Male	320	54.0	66.1	100.0
	Total	484	81.6	100.0	
Missing	Prefer not to say	35	5.9		
	System	74	12.5		
	Total	109	18.4		
Total	593	100.0			

How would you describe your political affiliation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong Liberal	27	4.6	6.9	6.9
	Moderate Liberal	70	11.8	17.9	24.7
	Moderate	78	13.2	19.9	44.6
	Moderate Conservative	111	18.7	28.3	73.0
	Strong Conservative	106	17.9	27.0	100.0
	Total	392	66.1	100.0	
	Missing	Other	15	2.5	
Prefer not to say		94	15.9		
System		92	15.5		
Total		201	33.9		
Total	593	100.0			

3.1.2 Past Experiences/ Most Recent Fire

3.1.2.1 Summary

- A fire impacted their home in the past: 13.8% [could have been any home used now and before]
- Current home was impacted: 10.3%

3.1.2.2 Frequency Tables

		fire impacted a previous home			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	No	476	80.3	86.2	86.2
	Yes	76	12.8	13.8	100.0
	Total	552	93.1	100.0	
Missing	System	41	6.9		
Total		593	100.0		

		fire impacted current home			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	No	496	83.6	89.7	89.7
	Yes	57	9.6	10.3	100.0
	Total	553	93.3	100.0	
Missing	System	40	6.7		
Total		593	100.0		

3.1.3 Information and Workshops

3.1.3.1 Summary

- Most participants stated that they knew already about the existing fire-prone area by themselves (38.2%).
- About 48.6% noted that this question does not apply to them thus they wouldn't live in a fire prone area.
- Other sources of information do not exist but City or County information with 2.3%. Other is 7%.
- A large share of participants (73.9%) has never talked to their neighbors about preventive actions and mitigation.
- The FIREWISE program is known by 35% of the participants.
- Only 8.6% attended a workshop regarding wildfire hazards.
- Most prominent information services utilized are websites (17%), brochures (16.1%), radio/tv (15.4%), and recommendations (14.0%).

3.1.3.2 Frequency Tables

Learned about fire-prone area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Knew myself	212	35.8	38.2	38.2
	Local fire department	7	1.2	1.3	39.5
	Firewise or other community program	11	1.9	2.0	41.4
	Homeowner Association	2	.3	.4	41.8
	Real Estate Agent	1	.2	.2	42.0
	City or County information	13	2.2	2.3	44.3
	Other	39	6.6	7.0	51.4
	Does not apply, I am not in a fire-prone area	270	45.5	48.6	100.0
	Total	555	93.6	100.0	
Missing	System	38	6.4		
Total		593	100.0		

Talked to neighbors about preventative actions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	417	70.3	73.9	73.9
	Yes	147	24.8	26.1	100.0
	Total	564	95.1	100.0	
Missing	System	29	4.9		
Total		593	100.0		

Have you heard about the FIREWISE Program?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	364	61.4	65.0	65.0
	Yes	196	33.1	35.0	100.0
	Total	560	94.4	100.0	
Missing	System	33	5.6		
Total		593	100.0		

Attended a workshop on wildfire mitigation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	512	86.3	91.4	91.4
	Yes	48	8.1	8.6	100.0
	Total	560	94.4	100.0	
Missing	System	33	5.6		
Total		593	100.0		

InfoServices Frequencies

Information and Services used ^a		Responses		Percent of Cases
		N	Percent	
Services RiskAssessment		42	5.5%	13.5%
Services Recommendations		107	14.0%	34.5%
Services FreeTreatment		14	1.8%	4.5%
Services Woodchipping		58	7.6%	18.7%
Services Websites		130	17.0%	41.9%
Services RadioTV		118	15.4%	38.1%
Services SoftwareVideo		21	2.7%	6.8%
Services Brochures		123	16.1%	39.7%
Services Demonstrations		29	3.8%	9.4%
Services SchoolPrograms		18	2.4%	5.8%
Services Neighborhood		41	5.4%	13.2%
Services CommunityAward		3	0.4%	1.0%
Workshop		20	2.6%	6.5%
Services Other		40	5.2%	12.9%
Total		764	100.0%	246.5%

a. Dichotomy group tabulated at value 1.

3.1.4 Perception and Awareness

3.1.4.1 Summary

As part of the RPS, the questionnaire asked across several points in the survey flow about perception and awareness:

- About half of the respondents believe they are not in a vulnerable area. Approximately 41% answered with Yes and about 7% are unsure.
- About 21% rank risk of fire in their **general area** as very low to low. About 28% level with ‘moderate’, whereas more than 51% rank as high and very high.
- About 60.5% rank risk of fire in **neighborhood area** as very low to low. About 22.6% level with ‘moderate’, whereas about 17% rank as high and very high.
- About 70.5% rank risk of fire for their **home/property** as very low to low. About 19.8% level with ‘moderate’, whereas about 9.5% rank as high and very high.
- At the point of purchasing, 19.1% noted that they have been not at all aware of wildfire risks
- At the point of purchasing, 31.8% noted that they have been very aware of wildfire risks
- Today, 6.7% noted that they have been not at all aware of wildfire risks.
- Today, 47.1% noted that they have been very aware of wildfire risks
- Wildfire risk was not important at all or neither important/unimportant fur the purchasing decision.
- There is a general positive attitude that the general area is somewhat prepared or very prepared (65.9%)
- There is a fair positive attitude that the **neighborhood/community** is somewhat prepared or very prepared (51.5%)
- There is an extreme positive attitude that **you/home** is somewhat prepared or very prepared (70.9%)
- About half of the households have an emergency preparedness kit. About 37% do not and

11.4% have not thought about one.

3.1.4.2 Frequency Tables

Consider property as with vulnerable area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	291	49.1	51.4	51.4
	Yes	234	39.5	41.3	92.8
	Not Sure	41	6.9	7.2	100.0
	Total	566	95.4	100.0	
Missing	System	27	4.6		
Total		593	100.0		

Rank risk of wildland fires in your general area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	50	8.4	9.1	9.1
	Low	64	10.8	11.7	20.8
	Moderate	153	25.8	27.9	48.6
	High	168	28.3	30.6	79.2
	Very High	114	19.2	20.8	100.0
	Total	549	92.6	100.0	
Missing	System	44	7.4		
Total		593	100.0		

Rank risk of wildland fires in your neighborhood

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	160	27.0	28.9	28.9
	Low	175	29.5	31.6	60.5
	Moderate	125	21.1	22.6	83.0
	High	66	11.1	11.9	94.9
	Very High	28	4.7	5.1	100.0
	Total	554	93.4	100.0	
Missing	System	39	6.6		
Total		593	100.0		

Rank risk of wildland fires in your home/property

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	208	35.1	37.7	37.7
	Low	181	30.5	32.8	70.6
	Moderate	109	18.4	19.8	90.4
	High	38	6.4	6.9	97.3
	Very High	15	2.5	2.7	100.0
	Total	551	92.9	100.0	
Missing	Don't know	7	1.2		
	System	35	5.9		
	Total	42	7.1		
Total		593	100.0		

Purchasing: how aware of potential wildland fire risk were you

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	being not at all aware	105	17.7	19.1	19.1
	1	38	6.4	6.9	26.0
	2	35	5.9	6.4	32.4
	3	49	8.3	8.9	41.3
	4	48	8.1	8.7	50.0
	5	54	9.1	9.8	59.8
	6	46	7.8	8.4	68.2
	being very aware	175	29.5	31.8	100.0
	Total	550	92.7	100.0	
Missing	System	43	7.3		
Total		593	100.0		

Today: how aware of potential wildland fire risk are you

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	being not at all aware	37	6.2	6.7	6.7
	1	22	3.7	4.0	10.7
	2	18	3.0	3.3	14.0
	3	39	6.6	7.1	21.1
	4	48	8.1	8.7	29.8
	5	50	8.4	9.1	38.9
	6	77	13.0	14.0	52.9
	being very aware	259	43.7	47.1	100.0
	Total	550	92.7	100.0	
Missing	System	43	7.3		
Total		593	100.0		

Was wildfire risk an important factor in purchasing decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all Important	244	41.1	44.3	44.3
	Very Unimportant	27	4.6	4.9	49.2
	Neither Important nor Unimportant	218	36.8	39.6	88.7
	Very Important	50	8.4	9.1	97.8
	Extremely Important	12	2.0	2.2	100.0
	Total	551	92.9	100.0	
Missing	System	42	7.1		
Total		593	100.0		

How well prepared is your area for potential wildland fire hazards

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unprepared	22	3.7	4.6	4.6
	Somewhat Unprepared	50	8.4	10.5	15.2
	Neutral	90	15.2	18.9	34.1
	Somewhat Prepared	215	36.3	45.3	79.4
	Very Prepared	98	16.5	20.6	100.0
	Total	475	80.1	100.0	
Missing	System	118	19.9		
Total		593	100.0		

How well prepared is your neighborhood/community for potential wildland fire hazards

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unprepared	34	5.7	7.1	7.1
	Somewhat Unprepared	72	12.1	15.0	22.1
	Neutral	127	21.4	26.5	48.5
	Somewhat Prepared	188	31.7	39.2	87.7
	Very Prepared	59	9.9	12.3	100.0
	Total	480	80.9	100.0	
Missing	System	113	19.1		
Total		593	100.0		

How well prepared is you/home for potential wildland fire hazards

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unprepared	28	4.7	5.3	5.3
	Somewhat Unprepared	41	6.9	7.8	13.0
	Neutral	85	14.3	16.1	29.1
	Somewhat Prepared	227	38.3	42.9	72.0
	Very Prepared	148	25.0	28.0	100.0
	Total	529	89.2	100.0	
Missing	System	64	10.8		
Total		593	100.0		

Do you have an Emergency Preparednes kit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	195	32.9	37.0	37.0
	Yes	265	44.7	50.3	87.3
	Don't Know	7	1.2	1.3	88.6
	Haven't thought about one	60	10.1	11.4	100.0
	Total	527	88.9	100.0	
Missing	System	66	11.1		
Total		593	100.0		

3.2 Home/Property Related

3.2.1 Characteristics

3.2.1.1 Summary

The RPS did not ask in-depth questions about i.e. siding and vegetation care close to the residence. This was a decision made as this would lengthen the questionnaire and was not priority focus regarding risk perception and behavior. RPS asked specifically for

- Approximately 29% reported that their house has a metal roof.
- When asked whether participants would plan to upgrade to current fire building codes, about 58% stated No, about 10% Yes.
- Approximately 15% stated that they recently upgraded to current code
- 18% stated in the category of “Don't have time or money to do so”

3.2.1.2 Frequency Tables

Does your house currently have a metal roof

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	366	61.7	71.1	71.1
	Yes	149	25.1	28.9	100.0
	Total	515	86.8	100.0	
Missing	Prefer not to say	3	.5		
	System	75	12.6		
	Total	78	13.2		
Total		593	100.0		

Are you planning to upgrade to current fire building codes?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	244	41.1	57.8	57.8
	Yes	41	6.9	9.7	67.5
	Just recently did	61	10.3	14.5	82.0
	Don't have time or money to do so	76	12.8	18.0	100.0
	Total	422	71.2	100.0	
Missing	prefer not to say	81	13.7		
	System	90	15.2		
	Total	171	28.8		
Total		593	100.0		

3.2.2 Actions Taken or Planned

3.2.2.1 Summary

The section Actions Taken or Planned contrast the typical efforts of wildfire mitigation at a home. RPS dated the time horizon for “taken” as by July 2015 and “planned” by July 2016 to contrast behavior between fire seasons.

- Common actions taken are Raked the Leaves (20%), new roof installed (20%), cleaned chimneys (12.6%), posted a clear visible address (16%)
- Common planned actions are Rake the Leaves (~32%), Cleaned chimneys (15.4%), talk to the neighbors (14%), prepare safe firepit

Please indicate if you have done any of the following additional actions to protect your property from wildfire.
(Check all that apply)

- Cleared leaves and pine needles from your roof, gutters, foundation area and yard
- Planted fire-resistant plants around your home
- Installed a fire-resistant roof, made of asphalt shingles, tile or metal
- Installed fire-resistant siding on your house or other buildings stucco, cement board, stone or wood treated with fire-retardant chemicals
- Ensured that any chimneys have been maintained and include spark arrestors
- Installed your address numbers in a contrasting color that is clearly visible from the street
- Had local fire department conduct a wildland fire risk assessment of your home and property
- Refrained from burning in fire pits or engaging in other open burning around your home
- Worked with neighbors to clear common areas

3.2.2.2 Frequency Tables

\$ActionsTaken Frequencies

		Responses		Percent of Cases
		N	Percent	
Mitigation efforts taken (by July 2015) ^a	Actions taken: Leaves	376	20.2%	77.8%
	Actions taken: Plants	91	4.9%	18.8%
	Actions taken: Roof installed	372	20.0%	77.0%
	Actions taken: Siding	136	7.3%	28.2%
	Actions taken: Chimneys	235	12.6%	48.7%
	Actions taken: Address	304	16.4%	62.9%
	Actions taken: Firedepartment	32	1.7%	6.6%
	Actions taken: Firepit	237	12.7%	49.1%
	Actions taken: Neighbors	76	4.1%	15.7%
Total		1859	100.0%	384.9%

a. Dichotomy group tabulated at value 1.

\$ActionsPlanned Frequencies

		Responses		Percent of Cases
		N	Percent	
Mitigation efforts planned (by July '16) ^a	Actions planned: Leaves	294	31.8%	58.3%
	Actions planned: Plants	51	5.5%	10.1%
	Actions planned: Roof installed	28	3.0%	5.6%
	Actions planned: Siding	14	1.5%	2.8%
	Actions planned: Chimneys	142	15.4%	28.2%
	Actions planned: Address	78	8.4%	15.5%

	Actions planned: Firedepartment	33	3.6%	6.5%
	Actions planned: Firepit	152	16.4%	30.2%
	Actions planned: Neighbors	133	14.4%	26.4%
Total		925	100.0%	183.5%

a. Dichotomy group tabulated at value 1.

3.2.3 Activities and Trust/Responsibilities

3.2.3.1 Code and Regulations

3.2.3.1.1 Summary

Code and Regulations questions tried to encompass the participants' attitude towards zoning and land use regulations and their support whether new regulations should be introduced.

- Approximately 55% of respondents stated that WUI codes should differ from other areas (less fire prone).
- About 30% are unsure about different WUI codes
- Approximately 44% do not believe that living in fire-prone areas is somewhat an entitlement. 29 % stated a maybe, and 26.1% stated probably yes and definitely yes.
- Support for more restrictive code and regulation exists with 23% maybe, 30% no's and 46% yes.
- When asked whether they would be willing to pay a premium to be more "firewise", about 15% stated yes, ~36% maybe, and probably not combined with definitely not are almost 49%.
- When asked whether they would support legislation to be more "firewise", about 37% stated yes, ~27% maybe, and probably not combined with definitely not are almost 35%.

3.2.3.1.2 Frequency Tables

Should WUI codes differ from other areas			
Frequency	Percent	Valid Percent	Cumulative Percent

Valid	No	85	14.3	15.6	15.6
	Yes	300	50.6	55.0	70.6
	Not sure	160	27.0	29.4	100.0
	Total	545	91.9	100.0	
Missing	System	48	8.1		
Total		593	100.0		

Do you think that people living in fire-prone areas receive some sort of entitlement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Definitely yes	50	8.4	9.2	9.2
	Probably yes	92	15.5	16.9	26.1
	Maybe	160	27.0	29.4	55.4
	Probably not	167	28.2	30.6	86.1
	Definitely not	76	12.8	13.9	100.0
	Total	545	91.9	100.0	
Missing	System	48	8.1		
Total		593	100.0		

Would you support more restrictive building & property regulations in your community

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Definitely yes	109	18.4	20.1	20.1
	Probably yes	146	24.6	26.9	47.0
	Maybe	126	21.2	23.2	70.2
	Probably not	96	16.2	17.7	87.8
	Definitely not	66	11.1	12.2	100.0
	Total	543	91.6	100.0	
Missing	System	50	8.4		
Total		593	100.0		

Willing to pay a premium (or extra) for a "firewise" home

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Definitely yes	10	1.7	1.9	1.9
	Probably yes	70	11.8	13.3	15.2
	Maybe	188	31.7	35.8	51.0
	Probably not	175	29.5	33.3	84.4
	Definitely not	82	13.8	15.6	100.0
	Total	525	88.5	100.0	
Missing	System	68	11.5		
Total		593	100.0		

Support legislation requiring homeowners to maintain their homes as "firewise"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Definitely yes	76	12.8	14.4	14.4
	Probably yes	121	20.4	22.9	37.3

	Maybe	144	24.3	27.3	64.6
	Probably not	100	16.9	18.9	83.5
	Definitely not	87	14.7	16.5	100.0
	Total	528	89.0	100.0	
Missing	System	65	11.0		
Total		593	100.0		

3.2.3.2 Trust and Responsibilities

3.2.3.2.1 Summary

- 68% of respondents stated that they see themselves responsible to protect home and property.
- 18% of respondents stated that they see the local fire department responsible to protect their home and property.
- **About 43% believe that the city or county government is responsible to protect home and property.** Whereas 37% decline this and about 18% are not sure about it.
- **About 63% believe that the city or county government is responsible to protect public lands.** Whereas 23% decline this and about 19% are not sure about it.
- Frequencies and Means about agencies are listed under (0

- Trust and Responsibilities page 150 (graphs) and tables (5.1 Trust and Responsibilities page 155)

3.2.3.2.2 Frequency Tables

Who do you consider to have the primary responsibility to protect your home or property

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Self	375	63.2	68.9	68.9
	Home Owners Association	5	.8	.9	69.9
	Local Fire Department	98	16.5	18.0	87.9
	Bureau of Land Management	13	2.2	2.4	90.3
	United States Forest Service	15	2.5	2.8	93.0
	Not Sure	15	2.5	2.8	95.8
	other	23	3.9	4.2	100.0
	Total	544	91.7	100.0	
Missing	System	49	8.3		
Total		593	100.0		

In your view is it the city or county governments job to protect your property

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	204	34.4	37.4	37.4
	Yes	235	39.6	43.1	80.6
	Not sure	106	17.9	19.4	100.0
	Total	545	91.9	100.0	
Missing	System	48	8.1		
Total		593	100.0		

In your view is it the city or county governments job to protect public lands

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	129	21.8	23.7	23.7
	Yes	345	58.2	63.4	87.1
	Not sure	70	11.8	12.9	100.0
	Total	544	91.7	100.0	
Missing	System	49	8.3		
Total		593	100.0		

4 Selected Variables in Regional Comparison

Using cross tabulations by the RPS regionid some variables have been selected and are listed below. In doing so, it is possible to identify possible regional differences.

Some of these tendencies need to be seen carefully as their actual count (i.e. 9 respondents = 8%) might not a statistical representation that allow to generalize.

4.1 Demographics

How would you describe your political affiliation? * RegionID Crosstabulation

		RegionID				Total	
		CDA	BOI	SAL	IDF		
How would you describe your political affiliation?	Strong Liberal	Count	7	7	9	4	27
		% within RegionID	6.4%	6.7%	8.0%	6.3%	6.9%
	Moderate Liberal	Count	19	25	15	11	70
		% within RegionID	17.3%	24.0%	13.3%	17.2%	17.9%
	Moderate	Count	25	25	17	11	78
		% within RegionID	22.7%	24.0%	15.0%	17.2%	19.9%
	Moderate Conservative	Count	34	22	33	21	110
		% within RegionID	30.9%	21.2%	29.2%	32.8%	28.1%
	Strong Conservative	Count	25	25	39	17	106
		% within RegionID	22.7%	24.0%	34.5%	26.6%	27.1%
	Total	Count	110	104	113	64	391
		% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%

Please indicate your combined household income. * RegionID Crosstabulation

		RegionID				Total	
		CDA	BOI	SAL	IDF		
Please indicate your combined household income.	Under \$10,000	Count	2	1	7	1	11
		% within RegionID	1.8%	1.0%	5.9%	1.7%	2.8%
	\$10,000-\$19,999	Count	6	8	8	1	23
		% within RegionID	5.3%	7.8%	6.8%	1.7%	5.8%
	\$20,000-\$29,999	Count	8	8	16	7	39
		% within RegionID	7.0%	7.8%	13.6%	11.9%	9.9%
	\$30,000-\$39,999	Count	15	5	15	6	41
		% within RegionID	13.2%	4.9%	12.7%	10.2%	10.4%
	\$40,000-\$49,999	Count	11	12	13	1	37
		% within RegionID	9.6%	11.7%	11.0%	1.7%	9.4%
	\$50,000-\$74,999	Count	27	18	27	9	81
		% within RegionID	23.7%	17.5%	22.9%	15.3%	20.6%
	\$75,000-\$99,999	Count	17	19	23	11	70
		% within RegionID	14.9%	18.4%	19.5%	18.6%	17.8%
	\$100,000-\$150,000	Count	20	22	6	17	65
		% within RegionID	17.5%	21.4%	5.1%	28.8%	16.5%
	\$150,000-\$200,000	Count	7	6	2	5	20
		% within RegionID	6.1%	5.8%	1.7%	8.5%	5.1%
	\$200,000-\$250,000	Count	0	2	0	1	3
		% within RegionID	0.0%	1.9%	0.0%	1.7%	0.8%
Over \$250,000	Count	1	2	1	0	4	
	% within RegionID	0.9%	1.9%	0.8%	0.0%	1.0%	
Total	Count	114	103	118	59	394	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

Gender * RegionID Crosstabulation

		RegionID				Total	
		CDA	BOI	SAL	IDF		
Gender	Female	Count	46	46	49	23	164
		% within RegionID	32.9%	37.4%	34.3%	29.9%	34.0%
	Male	Count	94	77	94	54	319
		% within RegionID	67.1%	62.6%	65.7%	70.1%	66.0%
Total		Count	140	123	143	77	483
		% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%

Age Group * RegionID Crosstabulation

		RegionID				Total	
		CDA	BOI	SAL	IDF		
Age Group	18-25	Count	3	3	1	2	9
		% within RegionID	2.1%	2.4%	0.7%	2.5%	1.9%
	26-34	Count	13	6	7	7	33
		% within RegionID	9.2%	4.8%	5.1%	8.8%	6.8%
	35-43	Count	17	14	10	8	49
		% within RegionID	12.0%	11.3%	7.3%	10.0%	10.1%
	44-54	Count	23	22	21	13	79
		% within RegionID	16.2%	17.7%	15.3%	16.3%	16.4%
	55-65	Count	51	43	33	24	151
		% within RegionID	35.9%	34.7%	24.1%	30.0%	31.3%
	65 or over	Count	35	36	65	26	162
		% within RegionID	24.6%	29.0%	47.4%	32.5%	33.5%
Total		Count	142	124	137	80	483
		% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%

4.2 Past Experiences/ Most Recent Fire

fire impacted a previous home * RegionID Crosstabulation

		RegionID					Total
		CDA	BOI	SAL	IDF		
fire impacted a previous home	No	Count	135	116	139	85	475
		% within RegionID	88.2%	82.3%	83.7%	93.4%	86.2%
	Yes	Count	18	25	27	6	76
		% within RegionID	11.8%	17.7%	16.3%	6.6%	13.8%
Total	Count	153	141	166	91	551	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

fire impacted current home * RegionID Crosstabulation

		RegionID					Total
		CDA	BOI	SAL	IDF		
fire impacted current home	No	Count	145	127	137	86	495
		% within RegionID	94.2%	90.1%	82.5%	94.5%	89.7%
	Yes	Count	9	14	29	5	57
		% within RegionID	5.8%	9.9%	17.5%	5.5%	10.3%
Total	Count	154	141	166	91	552	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

4.3 Information and Workshops

Talked to neighbors about preventative actions * RegionID Crosstabulation

		RegionID					Total
		CDA	BOI	SAL	IDF		
Talked to neighbors about preventative actions	No	Count	106	110	120	80	416
		% within RegionID	67.5%	76.4%	70.6%	87.0%	73.9%
	Yes	Count	51	34	50	12	147
		% within RegionID	32.5%	23.6%	29.4%	13.0%	26.1%
Total	Count	157	144	170	92	563	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

Have you heard about the FIREWISE Program? * RegionID Crosstabulation

		RegionID					Total
		CDA	BOI	SAL	IDF		
Have you heard about the FIREWISE Program?	No	Count	107	84	108	64	363
		% within RegionID	68.6%	59.2%	63.9%	69.6%	64.9%
	Yes	Count	49	58	61	28	196
		% within RegionID	31.4%	40.8%	36.1%	30.4%	35.1%
Total	Count	156	142	169	92	559	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

4.4 Perception and Awareness

Consider property as with vulnerable area * RegionID Crosstabulation

			RegionID				
			CDA	BOI	SAL	IDF	Total
Consider property as with vulnerable area	No	Count	57	96	71	66	290
		% within RegionID	36.3%	66.7%	41.8%	70.2%	51.3%
	Yes	Count	86	43	84	21	234
		% within RegionID	54.8%	29.9%	49.4%	22.3%	41.4%
	Not Sure	Count	14	5	15	7	41
		% within RegionID	8.9%	3.5%	8.8%	7.4%	7.3%
Total	Count	157	144	170	94	565	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

Rank risk of wildland fires in your general area * RegionID Crosstabulation

			RegionID				
			CDA	BOI	SAL	IDF	Total
Rank risk of wildland fires in your general area	Very Low	Count	7	28	5	10	50
		% within RegionID	4.6%	20.1%	3.0%	11.1%	9.1%
	Low	Count	11	24	14	15	64
		% within RegionID	7.2%	17.3%	8.4%	16.7%	11.7%
	Moderate	Count	59	31	27	35	152
		% within RegionID	38.6%	22.3%	16.3%	38.9%	27.7%
	High	Count	59	31	55	23	168
		% within RegionID	38.6%	22.3%	33.1%	25.6%	30.7%
	Very High	Count	17	25	65	7	114
		% within RegionID	11.1%	18.0%	39.2%	7.8%	20.8%
	Total	Count	153	139	166	90	548
		% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%

Rank risk of wildland fires in your neighborhood * RegionID Crosstabulation

			RegionID				
			CDA	BOI	SAL	IDF	Total
Rank risk of wildland fires in your neighborhood	Very Low	Count	26	63	33	38	160
		% within RegionID	16.9%	44.7%	19.9%	41.3%	28.9%
	Low	Count	50	41	57	26	174
		% within RegionID	32.5%	29.1%	34.3%	28.3%	31.5%
	Moderate	Count	42	19	45	19	125
		% within RegionID	27.3%	13.5%	27.1%	20.7%	22.6%
	High	Count	30	12	19	5	66
		% within RegionID	19.5%	8.5%	11.4%	5.4%	11.9%
	Very High	Count	6	6	12	4	28
		% within RegionID	3.9%	4.3%	7.2%	4.3%	5.1%
	Total	Count	154	141	166	92	553
		% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%

Rank risk of wildland fires in your home/property * RegionID Crosstabulation

			RegionID				
			CDA	BOI	SAL	IDF	Total
Rank risk of wildland fires in your home/property	Very Low	Count	34	77	44	52	207
		% within RegionID	22.1%	54.6%	26.5%	58.4%	37.6%
	Low	Count	55	36	71	19	181
		% within RegionID	35.7%	25.5%	42.8%	21.3%	32.9%
	Moderate	Count	45	16	37	11	109
		% within RegionID	29.2%	11.3%	22.3%	12.4%	19.8%
	High	Count	15	8	9	6	38
		% within RegionID	9.7%	5.7%	5.4%	6.7%	6.9%
Very High	Count	5	4	5	1	15	
	% within RegionID	3.2%	2.8%	3.0%	1.1%	2.7%	
Total	Count	154	141	166	89	550	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

How well prepared is your area for potential wildland fire hazards * RegionID Crosstabulation

			RegionID				
			CDA	BOI	SAL	IDF	Total
How well prepared is your area for potential wildland fire hazards	Very Unprepared	Count	9	7	3	3	22
		% within RegionID	7.0%	5.8%	2.0%	3.8%	4.6%
	Somewhat Unprepared	Count	18	11	16	5	50
		% within RegionID	14.1%	9.2%	10.8%	6.4%	10.5%
	Neutral	Count	25	32	19	13	89
		% within RegionID	19.5%	26.7%	12.8%	16.7%	18.8%
	Somewhat Prepared	Count	54	39	84	38	215
		% within RegionID	42.2%	32.5%	56.8%	48.7%	45.4%
Very Prepared	Count	22	31	26	19	98	
	% within RegionID	17.2%	25.8%	17.6%	24.4%	20.7%	
Total	Count	128	120	148	78	474	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

How well prepared is your neighborhood/community for potential wildland fire hazards * RegionID Crosstabulation

			RegionID				
			CDA	BOI	SAL	IDF	Total
How well prepared is your neighborhood/community for potential wildland fire hazards	Very Unprepared	Count	13	9	2	10	34
		% within RegionID	10.0%	7.5%	1.3%	12.5%	7.1%
	Somewhat Unprepared	Count	23	19	25	5	72
		% within RegionID	17.7%	15.8%	16.8%	6.3%	15.0%
	Neutral	Count	41	32	33	20	126
		% within RegionID	31.5%	26.7%	22.1%	25.0%	26.3%
	Somewhat Prepared	Count	39	40	78	31	188
		% within RegionID	30.0%	33.3%	52.3%	38.8%	39.2%
Very Prepared	Count	14	20	11	14	59	
	% within RegionID	10.8%	16.7%	7.4%	17.5%	12.3%	
Total	Count	130	120	149	80	479	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

How well prepared is you/home for potential wildland fire hazards * RegionID Crosstabulation

			RegionID				
			CDA	BOI	SAL	IDF	Total
How well prepared is you/home for potential wildland fire hazards	Very Unprepared	Count	9	10	4	5	28
		% within RegionID	6.2%	7.4%	2.5%	5.7%	5.3%
	Somewhat Unprepared	Count	10	13	10	8	41
		% within RegionID	6.8%	9.6%	6.3%	9.2%	7.8%
	Neutral	Count	23	31	13	17	84
		% within RegionID	15.8%	23.0%	8.1%	19.5%	15.9%
	Somewhat Prepared	Count	73	41	75	38	227
		% within RegionID	50.0%	30.4%	46.9%	43.7%	43.0%
	Very Prepared	Count	31	40	58	19	148
		% within RegionID	21.2%	29.6%	36.3%	21.8%	28.0%
Total	Count	146	135	160	87	528	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

4.5 Characteristics

Does your house currently have a metal roof * RegionID Crosstabulation

			RegionID				
			CDA	BOI	SAL	IDF	Total
Does your house currently have a metal roof	No	Count	114	116	69	66	365
		% within RegionID	78.1%	86.6%	45.4%	80.5%	71.0%
	Yes	Count	32	18	83	16	149
		% within RegionID	21.9%	13.4%	54.6%	19.5%	29.0%
Total	Count	146	134	152	82	514	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

Are you planning to upgrade to current fire building codes? * RegionID Crosstabulation

			RegionID				
			CDA	BOI	SAL	IDF	Total
Are you planning to upgrade to current fire building codes?	No	Count	74	58	66	45	243
		% within RegionID	62.2%	50.9%	52.8%	71.4%	57.7%
	Yes	Count	14	16	8	3	41
		% within RegionID	11.8%	14.0%	6.4%	4.8%	9.7%
	Just recently did	Count	12	17	23	9	61
		% within RegionID	10.1%	14.9%	18.4%	14.3%	14.5%
	Don't have time or money to do so	Count	19	23	28	6	76
		% within RegionID	16.0%	20.2%	22.4%	9.5%	18.1%
Total	Count	119	114	125	63	421	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

4.6 Trust and Responsibilities

4.6.1 Responsibilities for Protection

Who do you consider to have the primary responsibility to protect your home or property * RegionID Crosstabulation

			RegionID				Total
			CDA	BOI	SAL	IDF	
Who do you consider to have the primary responsibility to protect your home or property	Self	Count	95	95	115	69	374
		% within RegionID	63.3%	68.3%	70.1%	76.7%	68.9%
	Home Owners Association	Count	1	4	0	0	5
		% within RegionID	0.7%	2.9%	0.0%	0.0%	0.9%
	Local Fire Department	Count	32	29	20	17	98
		% within RegionID	21.3%	20.9%	12.2%	18.9%	18.0%
	Bureau of Land Management	Count	4	3	5	1	13
		% within RegionID	2.7%	2.2%	3.0%	1.1%	2.4%
	United States Forest Service	Count	4	1	10	0	15
		% within RegionID	2.7%	0.7%	6.1%	0.0%	2.8%
	Not Sure	Count	5	4	5	1	15
		% within RegionID	3.3%	2.9%	3.0%	1.1%	2.8%
	other	Count	9	3	9	2	23
		% within RegionID	6.0%	2.2%	5.5%	2.2%	4.2%
Total	Count	150	139	164	90	543	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

In your view is it the city or county governments job to protect your property * RegionID Crosstabulation

			RegionID				Total
			CDA	BOI	SAL	IDF	
In your view is it the city or county governments job to protect your property	No	Count	46	38	75	45	204
		% within RegionID	30.5%	27.3%	45.7%	50.0%	37.5%
	Yes	Count	67	68	68	31	234
		% within RegionID	44.4%	48.9%	41.5%	34.4%	43.0%
	Not sure	Count	38	33	21	14	106
		% within RegionID	25.2%	23.7%	12.8%	15.6%	19.5%
Total	Count	151	139	164	90	544	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

In your view is it the city or county governments job to protect public lands * RegionID Crosstabulation

			RegionID				Total
			CDA	BOI	SAL	IDF	
In your view is it the city or county governments job to protect public lands	No	Count	18	20	68	23	129
		% within RegionID	11.9%	14.5%	41.5%	25.6%	23.8%
	Yes	Count	106	102	79	57	344
		% within RegionID	70.2%	73.9%	48.2%	63.3%	63.4%
	Not sure	Count	27	16	17	10	70
		% within RegionID	17.9%	11.6%	10.4%	11.1%	12.9%
Total	Count	151	138	164	90	543	
	% within RegionID	100.0%	100.0%	100.0%	100.0%	100.0%	

4.6.2 Means -- Summary and Example

Example how the following graphs have been assessed in RPS

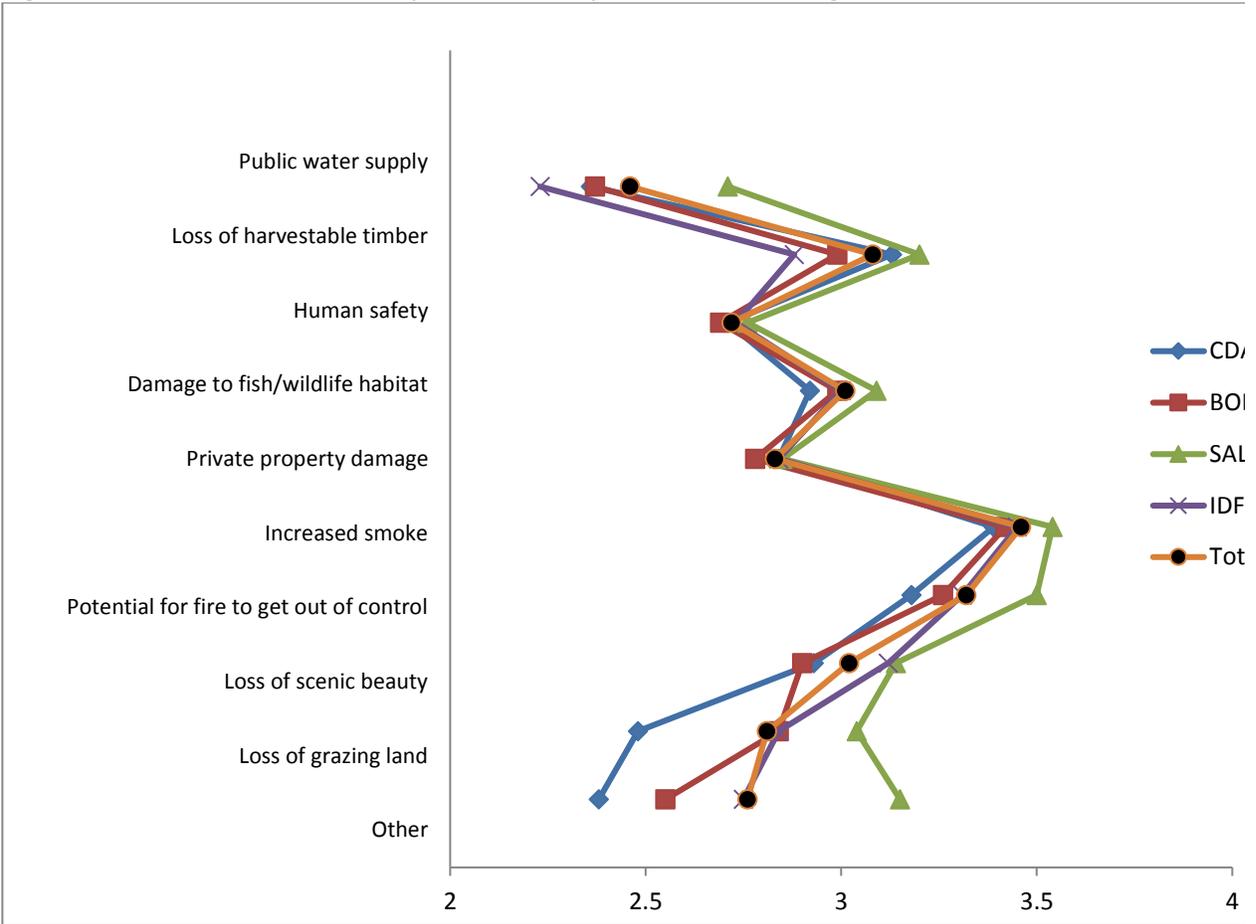
	No risk	Minor risk	Moderate risk	Serious risk	Do not know
Public water supply	<input type="radio"/>				
Loss of harvestable timber	<input type="radio"/>				
Human safety	<input type="radio"/>				
Damage to fish/wildlife habitat	<input type="radio"/>				
Private property damage	<input type="radio"/>				
Increased smoke	<input type="radio"/>				
Potential for fire to get out of control	<input type="radio"/>				
Loss of scenic beauty	<input type="radio"/>				
Loss of grazing land	<input type="radio"/>				
Other	<input type="radio"/>				

Detailed Frequencies tables are located in section (5.1 Trust and Responsibilities page 155)

Categories are stated below the graphs. Attitudes of agreement or statement are associated with a numeric value. Graphs show the mean of such numeric value as tendencies by region. For example, a question has a 3.8 on risk; this means that respondents have likely stated more Serious Risk (value 4 to associate this category) and i.e. no risk (1) or serious risk (3).

4.6.3 Means on Risk

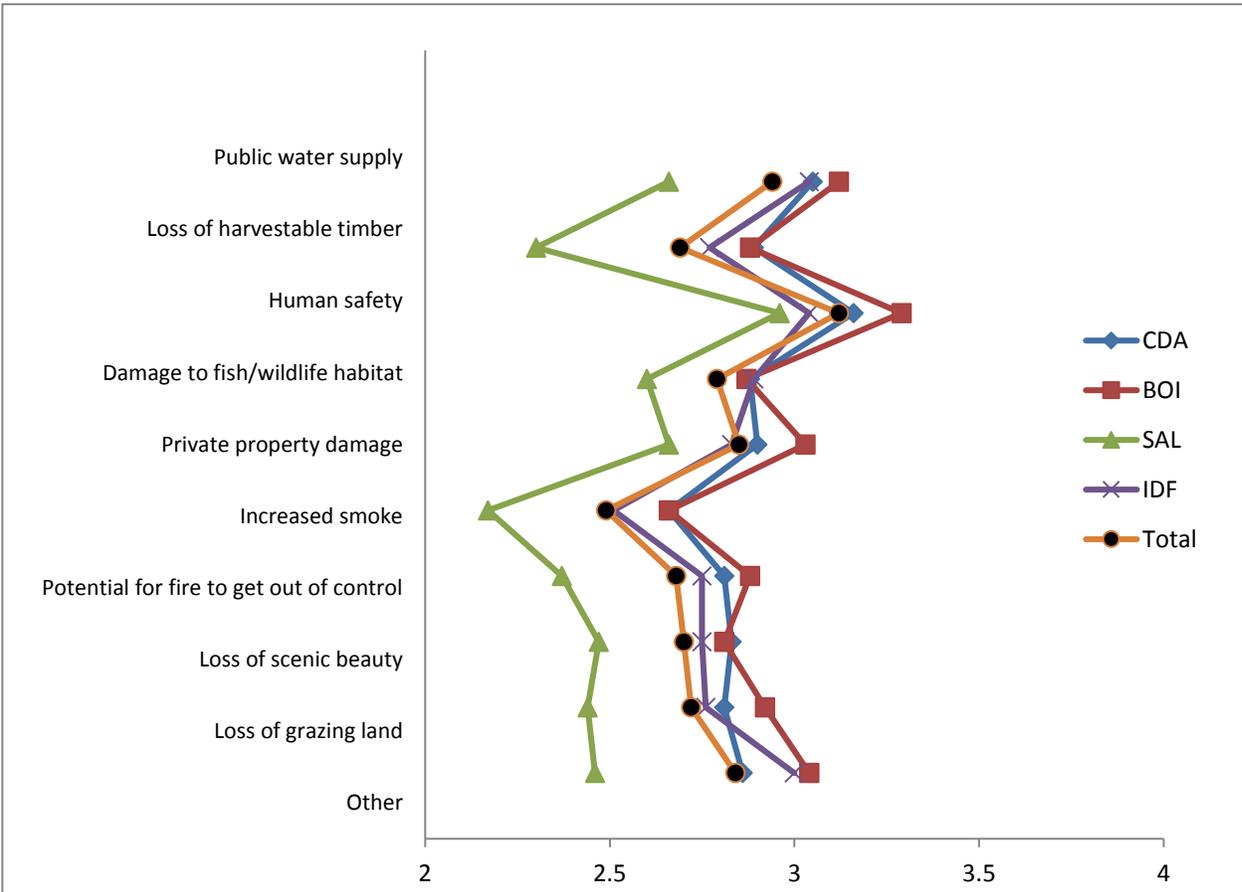
Figure 4.6.3: How much risk does prescribed fire pose to the following areas?



With values associated as (1) No risk, (2) Minor risk, (3) Moderately risk, and (4) Serious risk
 [approximation of means for visualization not statistical comparison]

4.6.4 Means on Trust

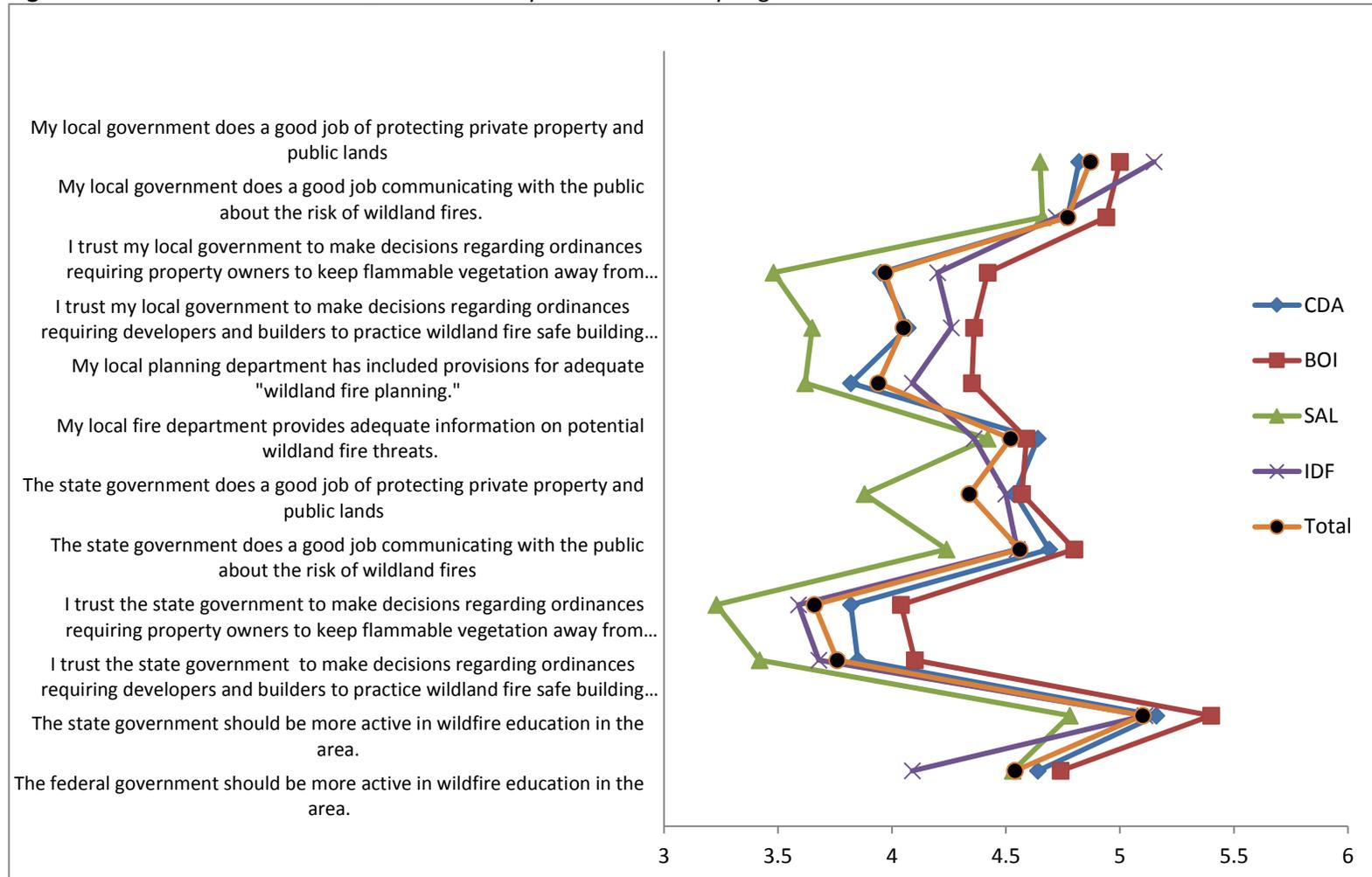
Figure 4.6.4: To what extent do you trust natural resource managers to manage the risk to these areas?



With values associated as (1) No trust at all, (2) Slightly trusted, (3) Moderately trust, and (4) A great deal of trust [approximation of means for visualization not statistical comparison]

4.6.5 Means on Attitude and Trust

Figure 4.6.5.: Trust and Attitude Questions side-by-side visualized by Region



With values associated as (1) Strongly Disagree, (2) Disagree, (3) Somewhat Disagree, (4) Neither Agree or Disagree, (5) Somewhat Agree, (6) Agree, (7) Strongly Agree [approximation of means for visualization not statistical comparison]

5 Appendix A: Additional Tables Material

5.1 Trust and Responsibilities

5.1.1 Frequencies Tables for all Idaho

5.1.1.1 Trust

To what extent do you trust natural resource managers to manage the risk to these areas?-Public water supply

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	42	7.1	9.9	9.9
	Slightly trusted	65	11.0	15.3	25.2
	Moderately trust	192	32.4	45.2	70.4
	A great deal of trust	126	21.2	29.6	100.0
	Total	425	71.7	100.0	
Missing	Do not know	68	11.5		
	System	100	16.9		
	Total	168	28.3		
Total		593	100.0		

To what extent do you trust natural resource managers to manage the risk to these areas?-Loss of harvestable timber

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	80	13.5	18.3	18.3
	Slightly trusted	76	12.8	17.4	35.7
	Moderately trust	181	30.5	41.4	77.1
	A great deal of trust	100	16.9	22.9	100.0
	Total	437	73.7	100.0	
Missing	Do not know	53	8.9		
	System	103	17.4		
	Total	156	26.3		
Total		593	100.0		

To what extent do you trust natural resource managers to manage the risk to these areas?-Human safety

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	31	5.2	6.9	6.9
	Slightly trusted	56	9.4	12.4	19.3
	Moderately trust	193	32.5	42.9	62.2
	A great deal of trust	170	28.7	37.8	100.0
	Total	450	75.9	100.0	
Missing	Do not know	42	7.1		
	System	101	17.0		
	Total	143	24.1		
Total		593	100.0		

To what extent do you trust natural resource managers to manage the risk to these areas?-Damage to fish/wildlife habitat

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	65	11.0	14.6	14.6
	Slightly trusted	74	12.5	16.6	31.2
	Moderately trust	195	32.9	43.8	75.1
	A great deal of trust	111	18.7	24.9	100.0
	Total	445	75.0	100.0	
Missing	Do not know	46	7.8		
	System	102	17.2		
	Total	148	25.0		
Total		593	100.0		

To what extent do you trust natural resource managers to manage the risk to these areas?-Private property damage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	51	8.6	11.3	11.3
	Slightly trusted	83	14.0	18.4	29.8
	Moderately trust	199	33.6	44.2	74.0
	A great deal of trust	117	19.7	26.0	100.0
	Total	450	75.9	100.0	
Missing	Do not know	42	7.1		
	System	101	17.0		
	Total	143	24.1		
Total		593	100.0		

To what extent do you trust natural resource managers to manage the risk to these areas?-Increased smoke

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	95	16.0	21.7	21.7
	Slightly trusted	108	18.2	24.7	46.5
	Moderately trust	161	27.2	36.8	83.3
	A great deal of trust	73	12.3	16.7	100.0
	Total	437	73.7	100.0	
Missing	Do not know	53	8.9		
	System	103	17.4		
	Total	156	26.3		
Total		593	100.0		

To what extent do you trust natural resource managers to manage the risk to these areas?-Potential for fire to get out of control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	85	14.3	19.2	19.2
	Slightly trusted	76	12.8	17.2	36.3
	Moderately trust	176	29.7	39.7	76.1
	A great deal of trust	106	17.9	23.9	100.0
	Total	443	74.7	100.0	
Missing	Do not know	45	7.6		
	System	105	17.7		
	Total	150	25.3		
Total		593	100.0		

To what extent do you trust natural resource managers to manage the risk to these areas?-Loss of scenic beauty

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	70	11.8	16.0	16.0
	Slightly trusted	87	14.7	19.9	35.9
	Moderately trust	184	31.0	42.1	78.0
	A great deal of trust	96	16.2	22.0	100.0
	Total	437	73.7	100.0	
Missing	Do not know	54	9.1		
	System	102	17.2		
	Total	156	26.3		
Total		593	100.0		

To what extent do you trust natural resource managers to manage the risk to these areas?-Loss of grazing land

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	77	13.0	18.2	18.2
	Slightly trusted	76	12.8	18.0	36.2
	Moderately trust	160	27.0	37.8	74.0
	A great deal of trust	110	18.5	26.0	100.0
	Total	423	71.3	100.0	
Missing	Do not know	63	10.6		
	System	107	18.0		
	Total	170	28.7		
Total		593	100.0		

To what extent do you trust natural resource managers to manage the risk to these areas?-Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No trust at all	17	2.9	16.3	16.3
	Slightly trusted	13	2.2	12.5	28.8
	Moderately trust	44	7.4	42.3	71.2
	A great deal of trust	30	5.1	28.8	100.0
	Total	104	17.5	100.0	
Missing	Do not know	78	13.2		

	System	411	69.3	
	Total	489	82.5	
Total		593	100.0	

5.1.1.2 Risk

How much risk does prescribed fire pose to the following areas?-Public water supply

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	84	14.2	20.6	20.6
	Minor risk	136	22.9	33.4	54.1
	Moderate risk	104	17.5	25.6	79.6
	Serious risk	83	14.0	20.4	100.0
	Total	407	68.6	100.0	
Missing	Do not know	87	14.7		
	System	99	16.7		
	Total	186	31.4		
Total		593	100.0		

How much risk does prescribed fire pose to the following areas?-Loss of harvestable timber

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	26	4.4	5.9	5.9
	Minor risk	108	18.2	24.7	30.6
	Moderate risk	110	18.5	25.1	55.7
	Serious risk	194	32.7	44.3	100.0
	Total	438	73.9	100.0	
Missing	Do not know	52	8.8		
	System	103	17.4		
	Total	155	26.1		
Total		593	100.0		

How much risk does prescribed fire pose to the following areas?-Human safety

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	34	5.7	7.6	7.6
	Minor risk	158	26.6	35.1	42.7
	Moderate risk	155	26.1	34.4	77.1
	Serious risk	103	17.4	22.9	100.0
	Total	450	75.9	100.0	
Missing	Do not know	41	6.9		
	System	102	17.2		
	Total	143	24.1		
Total		593	100.0		

How much risk does prescribed fire pose to the following areas?-Damage to fish/wildlife habitat

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	31	5.2	7.0	7.0
	Minor risk	122	20.6	27.5	34.5
	Moderate risk	102	17.2	23.0	57.6
	Serious risk	188	31.7	42.4	100.0
	Total	443	74.7	100.0	
Missing	Do not know	49	8.3		
	System	101	17.0		
	Total	150	25.3		
Total		593	100.0		

How much risk does prescribed fire pose to the following areas?-Private property damage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	28	4.7	6.3	6.3
	Minor risk	144	24.3	32.1	38.4
	Moderate risk	152	25.6	33.9	72.3
	Serious risk	124	20.9	27.7	100.0
	Total	448	75.5	100.0	
Missing	Do not know	42	7.1		
	System	103	17.4		
	Total	145	24.5		
Total		593	100.0		

How much risk does prescribed fire pose to the following areas?-Increased smoke

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	9	1.5	2.0	2.0
	Minor risk	50	8.4	10.9	12.9
	Moderate risk	122	20.6	26.6	39.5
	Serious risk	277	46.7	60.5	100.0
	Total	458	77.2	100.0	
Missing	Do not know	33	5.6		
	System	102	17.2		
	Total	135	22.8		
Total		593	100.0		

How much risk does prescribed fire pose to the following areas?-Potential for fire to get out of control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	2	.3	.4	.4
	Minor risk	86	14.5	18.8	19.2
	Moderate risk	132	22.3	28.8	48.0
	Serious risk	238	40.1	52.0	100.0
	Total	458	77.2	100.0	
Missing	Do not know	34	5.7		
	System	101	17.0		
	Total	135	22.8		
Total		593	100.0		

How much risk does prescribed fire pose to the following areas?-Loss of scenic beauty

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	33	5.6	7.2	7.2
	Minor risk	117	19.7	25.7	32.9
	Moderate risk	114	19.2	25.0	57.9
	Serious risk	192	32.4	42.1	100.0
	Total	456	76.9	100.0	
Missing	Do not know	35	5.9		
	System	102	17.2		
	Total	137	23.1		
Total		593	100.0		

How much risk does prescribed fire pose to the following areas?-Loss of grazing land

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	56	9.4	12.8	12.8
	Minor risk	122	20.6	28.0	40.8
	Moderate risk	108	18.2	24.8	65.6
	Serious risk	150	25.3	34.4	100.0
	Total	436	73.5	100.0	
Missing	Do not know	54	9.1		
	System	103	17.4		
	Total	157	26.5		
Total		593	100.0		

How much risk does prescribed fire pose to the following areas?-Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No risk	15	2.5	20.0	20.0
	Minor risk	16	2.7	21.3	41.3
	Moderate risk	16	2.7	21.3	62.7
	Serious risk	28	4.7	37.3	100.0
	Total	75	12.6	100.0	
Missing	Do not know	84	14.2		
	System	434	73.2		
	Total	518	87.4		
Total		593	100.0		

5.1.1.3 Rating/Benchmarking of agencies' work

My local government does a good job of protecting private property and public lands

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	17	2.9	3.6	3.6
	Disagree	15	2.5	3.1	6.7
	Somewhat Disagree	46	7.8	9.6	16.4
	Neither Agree or Disagree	94	15.9	19.7	36.1
	Somewhat Agree	113	19.1	23.7	59.7
	Agree	146	24.6	30.6	90.4
	Strongly Agree	46	7.8	9.6	100.0
	Total	477	80.4	100.0	
Missing	No Opinion	47	7.9		
	System	69	11.6		
	Total	116	19.6		
Total		593	100.0		

My local government does a good job communicating with the public about the risk of wildland fires.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	14	2.4	2.9	2.9
	Disagree	25	4.2	5.2	8.2
	Somewhat Disagree	53	8.9	11.1	19.2
	Neither Agree or Disagree	95	16.0	19.9	39.1
	Somewhat Agree	110	18.5	23.0	62.1
	Agree	139	23.4	29.1	91.2
	Strongly Agree	42	7.1	8.8	100.0
	Total	478	80.6	100.0	
Missing	No Opinion	46	7.8		
	System	69	11.6		
	Total	115	19.4		
Total		593	100.0		

I trust my local government to make decisions regarding ordinances requiring property owners to keep flammable vegetation away from their homes and other buildings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	45	7.6	9.4	9.4
	Disagree	58	9.8	12.1	21.4
	Somewhat Disagree	74	12.5	15.4	36.8
	Neither Agree or Disagree	116	19.6	24.1	60.9
	Somewhat Agree	79	13.3	16.4	77.3
	Agree	92	15.5	19.1	96.5
	Strongly Agree	17	2.9	3.5	100.0
	Total	481	81.1	100.0	
Missing	No Opinion	41	6.9		
	System	71	12.0		
	Total	112	18.9		
Total		593	100.0		

I trust my local government to make decisions regarding ordinances requiring developers and builders to practice wildland fire safe building in new developments at the WUI.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	36	6.1	7.5	7.5
	Disagree	54	9.1	11.2	18.7
	Somewhat Disagree	81	13.7	16.8	35.6
	Neither Agree or Disagree	112	18.9	23.3	58.8
	Somewhat Agree	89	15.0	18.5	77.3
	Agree	93	15.7	19.3	96.7
	Strongly Agree	16	2.7	3.3	100.0
	Total	481	81.1	100.0	
Missing	No Opinion	40	6.7		
	System	72	12.1		
	Total	112	18.9		
Total		593	100.0		

My local planning department has included provisions for adequate "wildland fire planning."

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	14	2.4	4.0	4.0
	Disagree	42	7.1	12.0	16.0
	Somewhat Disagree	39	6.6	11.1	27.1
	Neither Agree or Disagree	163	27.5	46.4	73.5
	Somewhat Agree	51	8.6	14.5	88.0
	Agree	34	5.7	9.7	97.7
	Strongly Agree	8	1.3	2.3	100.0
	Total	351	59.2	100.0	
Missing	No Opinion	170	28.7		
	System	72	12.1		
	Total	242	40.8		
Total		593	100.0		

My local fire department provides adequate information on potential wildland fire threats.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	18	3.0	4.2	4.2
	Disagree	34	5.7	7.9	12.0
	Somewhat Disagree	33	5.6	7.6	19.7
	Neither Agree or Disagree	122	20.6	28.2	47.9
	Somewhat Agree	98	16.5	22.7	70.6
	Agree	101	17.0	23.4	94.0
	Strongly Agree	26	4.4	6.0	100.0
	Total	432	72.8	100.0	
Missing	No Opinion	90	15.2		
	System	71	12.0		
	Total	161	27.2		
Total		593	100.0		

The state government does a good job of protecting private property and public lands

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	29	4.9	6.3	6.3
	Disagree	40	6.7	8.7	15.0
	Somewhat Disagree	59	9.9	12.8	27.8
	Neither Agree or Disagree	91	15.3	19.8	47.6
	Somewhat Agree	117	19.7	25.4	73.0
	Agree	105	17.7	22.8	95.9
	Strongly Agree	19	3.2	4.1	100.0
	Total	460	77.6	100.0	
Missing	No Opinion	61	10.3		
	System	72	12.1		
	Total	133	22.4		
Total		593	100.0		

The state government does a good job communicating with the public about the risk of wildland fires

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	24	4.0	5.1	5.1
	Disagree	34	5.7	7.2	12.3
	Somewhat Disagree	58	9.8	12.3	24.6
	Neither Agree or Disagree	85	14.3	18.0	42.6
	Somewhat Agree	109	18.4	23.1	65.7
	Agree	132	22.3	28.0	93.6
	Strongly Agree	30	5.1	6.4	100.0
	Total	472	79.6	100.0	
Missing	No Opinion	48	8.1		
	System	73	12.3		
	Total	121	20.4		
Total		593	100.0		

I trust the state government to make decisions regarding ordinances requiring property owners to keep flammable vegetation away from their homes and other buildings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	60	10.1	12.6	12.6
	Disagree	74	12.5	15.5	28.0
	Somewhat Disagree	84	14.2	17.6	45.6
	Neither Agree or Disagree	98	16.5	20.5	66.1
	Somewhat Agree	79	13.3	16.5	82.6
	Agree	74	12.5	15.5	98.1
	Strongly Agree	9	1.5	1.9	100.0
	Total	478	80.6	100.0	
Missing	No Opinion	42	7.1		
	System	73	12.3		
	Total	115	19.4		
Total		593	100.0		

I trust the state government to make decisions regarding ordinances requiring developers and builders to practice wildland fire safe building in new developments at the WUI.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	53	8.9	11.1	11.1
	Disagree	73	12.3	15.3	26.5
	Somewhat Disagree	76	12.8	16.0	42.4
	Neither Agree or Disagree	97	16.4	20.4	62.8
	Somewhat Agree	95	16.0	20.0	82.8
	Agree	71	12.0	14.9	97.7
	Strongly Agree	11	1.9	2.3	100.0
	Total	476	80.3	100.0	
Missing	No Opinion	43	7.3		
	System	74	12.5		
	Total	117	19.7		
Total		593	100.0		

The state government should be more active in wildfire education in the area.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	2.0	2.5	2.5
	Disagree	13	2.2	2.7	5.2
	Somewhat Disagree	22	3.7	4.5	9.7
	Neither Agree or Disagree	104	17.5	21.4	31.1
	Somewhat Agree	119	20.1	24.5	55.7
	Agree	149	25.1	30.7	86.4
	Strongly Agree	66	11.1	13.6	100.0
	Total	485	81.8	100.0	
Missing	No Opinion	34	5.7		
	System	74	12.5		
	Total	108	18.2		
Total		593	100.0		

The federal government should be more active in wildfire education in the area.

		Frequency	Percent	Valid Percent	Cumulative Percent
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Valid	Strongly Disagree	50	8.4	10.2	10.2
	Disagree	32	5.4	6.6	16.8
	Somewhat Disagree	28	4.7	5.7	22.5
	Neither Agree or Disagree	110	18.5	22.5	45.1
	Somewhat Agree	88	14.8	18.0	63.1
	Agree	121	20.4	24.8	87.9
	Strongly Agree	59	9.9	12.1	100.0
	Total	488	82.3	100.0	
Missing	No Opinion	31	5.2		
	System	74	12.5		
	Total	105	17.7		
Total		593	100.0		

5.1.1.4 Mean listings by Region

Report

Mean

	RegionID				Total
	CDA	BOI	SAL	IDF	
To what extent do you trust natural resource managers to manage the risk to these areas?- Public water supply	3.05	3.12	2.66	3.04	2.94
To what extent do you trust natural resource managers to manage the risk to these areas?- Loss of harvestable timber	2.89	2.88	2.30	2.77	2.69
To what extent do you trust natural resource managers to manage the risk to these areas?- Human safety	3.16	3.29	2.96	3.04	3.12
To what extent do you trust natural resource managers to manage the risk to these areas?- Damage to fish/wildlife habitat	2.88	2.87	2.60	2.89	2.79
To what extent do you trust natural resource managers to manage the risk to these areas?- Private property damage	2.90	3.03	2.66	2.83	2.85
To what extent do you trust natural resource managers to manage the risk to these areas?- Increased smoke	2.66	2.66	2.17	2.51	2.49
To what extent do you trust natural resource managers to manage the risk to these areas?- Potential for fire to get out of control	2.81	2.88	2.37	2.75	2.68
To what extent do you trust natural resource managers to manage the risk to these areas?- Loss of scenic beauty	2.83	2.81	2.47	2.75	2.70
To what extent do you trust natural resource managers to manage the risk to these areas?- Loss of grazing land	2.81	2.92	2.44	2.76	2.72
To what extent do you trust natural resource managers to manage the risk to these areas?- Other	2.86	3.04	2.46	3.00	2.84

Report

Mean

	RegionID				Total
	CDA	BOI	SAL	IDF	
How much risk does prescribed fire pose to the following areas?-Public water supply	2.36	2.37	2.71	2.23	2.46
How much risk does prescribed fire pose to the following areas?-Loss of harvestable timber	3.13	2.99	3.20	2.88	3.08
How much risk does prescribed fire pose to the following areas?-Human safety	2.71	2.69	2.76	2.73	2.72
How much risk does prescribed fire pose to the following areas?-Damage to fish/wildlife habitat	2.92	2.99	3.09	3.00	3.01
How much risk does prescribed fire pose to the following areas?-Private property damage	2.84	2.78	2.85	2.84	2.83
How much risk does prescribed fire pose to the following areas?-Increased smoke	3.39	3.42	3.54	3.45	3.46
How much risk does prescribed fire pose to the following areas?-Potential for fire to get out of control	3.18	3.26	3.50	3.31	3.32
How much risk does prescribed fire pose to the following areas?-Loss of scenic beauty	2.93	2.90	3.14	3.12	3.02
How much risk does prescribed fire pose to the following areas?-Loss of grazing land	2.48	2.84	3.04	2.84	2.81
How much risk does prescribed fire pose to the following areas?-Other	2.38	2.55	3.15	2.75	2.76

Report

Mean

	RegionID				Total
	CDA	BOI	SAL	IDF	
My local government does a good job of protecting private property and public lands	4.82	5.00	4.65	5.15	4.87
My local government does a good job communicating with the public about the risk of wildland fires.	4.77	4.94	4.66	4.72	4.77
I trust my local government to make decisions regarding ordinances requiring property owners to keep flammable vegetation away from their homes and other buildings	3.95	4.42	3.48	4.20	3.97
I trust my local government to make decisions regarding ordinances requiring developers and builders to practice wildland fire safe building in new developments at the WUI.	4.07	4.36	3.65	4.26	4.05
My local planning department has included provisions for adequate "wildland fire planning."	3.82	4.35	3.62	4.09	3.94
My local fire department provides adequate information on potential wildland fire threats.	4.64	4.59	4.42	4.36	4.52
The state government does a good job of protecting private property and public lands	4.54	4.57	3.88	4.50	4.34
The state government does a good job communicating with the public about the risk of wildland fires	4.69	4.80	4.24	4.55	4.56
I trust the state government to make decisions regarding ordinances requiring property owners to keep flammable vegetation away from their homes and other buildings	3.82	4.04	3.23	3.59	3.66
I trust the state government to make decisions regarding ordinances requiring developers and builders to practice wildland fire safe building in new developments at the WUI.	3.85	4.10	3.42	3.68	3.76
The state government should be more active in wildfire education in the area.	5.16	5.40	4.78	5.11	5.10
The federal government should be more active in wildfire education in the area.	4.64	4.74	4.53	4.09	4.54

