A Manual to assist Fire Districts and Communities in the Development of an Action Plan for Wildfire Risk

WILDFIRE PROTECTION PLAN



Valley County Idaho

BOARD OF COUNTY COMMISSIONERS
FIRE WORKING GROUP COLLABORATIVE

Wildfire Prevention Associates, LLC May 2018

TABLE OF CONTENTS

INTRODUCTION	page 2
DEFINITIONS	page 4
PLAN CONTENTS	page 10
RESOURCES	page 12
EXAMPLE	page 13

Funding for this manual is through the Western Competitive Resource Allocation Grant distributed by the Idaho Department of Lands in cooperation with the United States Department of Agriculture Forest Service (USDA-FS). This funding initiative is part of the State and Private Forestry Competitive grant program which falls under the authority of the Cooperative Forestry Assistance Act of 1978, Public Law 95-313.

In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs.) To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

WILDFIRE PROTECTION PLAN - AN INTRODUCTION

The Community Wildfire Protection Plan (CWPP) concept is not new and for many years communities all over the nation have planned and developed documents to identify, discuss and reduce wildfire risk. Valley County is one of them and since 2004 has an official CWPP and endeavors to update the document regularly. The CWPP can be found on the Valley County Website, the link is included in the reference section.

This Wildfire Protection Plan (WFPP) is a community or neighborhood level version of the CWPP. The value of the document is to create a conversation between homeowners, fire personnel and the County. Typically a leader in the community is identified, or steps forward and agrees to be the starting contact for the WFPP. The County utilizes wildfire risk assessment data to formulate a statistical analysis of the risk factors identified throughout the neighborhood. Each structure is already individually rated with a hazard score. Included are wildfire response, hazard mitigation, community preparedness, and structure protection assessments. This allows the community to use the information to work towards reducing wildfire risk as a community managing shared needs and concerns.

In Valley County the Board of County Commissioners charters the Fire Working Group (FWG). Representatives from all land management and fire response agencies form this collaborative to influence planning and mitigation on private ownership. To date the County and the Fire Districts have met with community leaders to develop WFPP's. While the FWG may reach out to a specific high risk community, homeowners are encouraged to initiate contract directly with Valley County or with their local Fire District.

Valley County has a Subdivision Fire Plan that is required for new development. This document is for existing neighborhoods and can be initiated at any time. Resource list with email and phone numbers is included in this planning manual. Even if you are not certain your neighbor is high risk, it is recommended you meet with a representative and determine what next step is recommended.

Resources abound with information about how to create a fire plan. There are also organizations with volumes of information about this subject and are worthy of effort to explore and incorporate into your local plan. A resource list is provided to help navigate to those sites.

And yet, here is a new document and process and there is a reason for it. Idaho is a very independent state and many landowners are very protective of their property rights. Valley County believes in those rights and they are always foremost. However, a large majority of the county is located in the Wildland Urban Interface WUI). Learning to live with wildfire and create a fire adapted community is the best way to reduce wildfire risk.

To assist with the process of creating a WFPP we will utilize a basic plan format and provide examples throughout. The message is that starting the conversation is the first step towards understanding the needs of each community. The process of inquiry and discussion will help both homeowner and fire representative uncover the dynamics of the neighborhood and help create solutions to reduce wildfire risk. The WFPP is held by the Fire Working Group, the Fire District and the Community. Annual analysis and subsequent revisions are encouraged, as are the cataloging of milestones accomplished. Each WFPP starts with endless opportunity to create a plan that will fits the specific needs of the neighborhood.

DEFINITIONS

<u>ASPECT</u> Generally refers to the direction to which a mountain slope faces. For example: A slope that faces the sun in the afternoon has a westerly aspect or is a west facing slope.

BRUSH A collective term that refers to stands of vegetation dominated by shrubby, woody plants or low-growing treesusually of a type undesirable for livestock or timber management.

CANOPY The stratum containing the crowns of the tallest vegetation present (living or dead), usually above 20-feet.

<u>COMMUNITY WILDFIRE PROTECTION PLAN (CWPP)</u> Address issues such as wildfire response, hazard mitigation, community preparedness or structure protection. The process of developing a CWPP can help communities clarify and refine their priorities for the protection of life, property and critical infrastructure in the wildland urban interface.

CROWN FIRE A fire that advances from top to top of trees or shrubs more or less independent of a surface fire.

<u>DEFENSIBLE SPACE</u> Refers to that area between a building and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat. Defensible space is the natural and landscaped area around a structure that is designed and maintained to reduce fire danger. Defensible space is all about minimizing and rearranging fuels. By treating fuels around your home and outbuildings, you influence wildfire behavior, thereby decreasing ignition potential. Where homes are close to each other, defensible spaces may overlap to provide added protection for the neighborhood. A minimum defensible space of 100 feet is recommended for homes and outbuildings on flat ground.



http://idahofirewise.org/firewise-landscapes/

Defensible space is divided into zones

- Zone 1—Your Buildings and the First 30-feet (Clean and Green). The ignition zone begins with a structure and extends 3- feet out in all directions. Aside from the roof, the first 30-feet surrounding your home and outbuildings present the highest wildfire risk. In Zone 1, take steps to decrease and/or eliminate ignition potential. Remove highly flammable shrubs and replace them with low-growing, low-ignition plant materials, well-watered turf, and/or non-flammable mulch. Remove combustible materials, such as bark and leaf/needle litter, as they accumulate.
- Zone 2—From 30- to 100-feet (Pruned and Groomed) Zone 2 should consist of a well-maintained greenbelt.
 Surround islands of low-ignition plant materials with rock or brick retaining walls and/or well-watered turf. Place firewood and propane tanks on gravel or concrete pads at least 30-feet away from structures and surround them with non-flammable fencing.
- Zone 3—100-feet and Beyond (Natural vegetation) Zone 3 is composed of native vegetation. Thin trees to a 10-by 10-foot or 12- by 12-foot trunk spacing. If possible, remove highly flammable vegetation and replace it with lowignition species. Maintain Zone 3 by yearly thinning and pruning, removal of dead and dying plants, and periodic fertilization and irrigation, as needed.

For more information

https://www.nfpa.org/Public-Education/By-topic/Wildfire/Firewise-USA/The-ember-threat-and-the-home-ignition-zone

http://idahofirewise.org/firewise-landscapes/

<u>DRY HYDRANT</u> An arrangement of pipe permanently connected to a water source other than a piped, pressurized water supply system that provides a ready means of water supply for firefighting purposes and that utilizes the suction capability of fire department pumpers.

<u>DUFF</u> The layer of decomposing organic materials lying below the litter layer of freshly fallen twigs, needles and leaves and immediately above the mineral soil.

EMBERS Hot, glowing pieces of fuel from a fire. Sometimes embers are airborne and can travel miles from the site of the fire.

ESCAPE ROUTE A pre-planned and clearly identified route of travel that firefighting personnel or evacuees are to take to access safety zones or other low risk areas.

EVACUATION The temporary movement of people and their possessions from locations threatened by wildfire or other disasters.

EXTREME FIRE A level of fire behavior characteristics that ordinarily precludes methods of direct control. One or more of the following is usually involved: high rates of speed, prolific crowning and/or spotting, presence of fire whirls and/or a strong convection column. Predictability is difficult because such fires often exercise some degree of influence on their environments and behave erratically, sometimes dangerously.

<u>FINE FUELS</u> Fast-drying dead fuels, generally characterized by a comparatively high surface area-to volume ratio, which are less than 1/4-inch in diameter. These fuels (grass, leaves and pine needles) ignite readily and are consumed rapidly by fire when dry.

FIRE BEHAVIOR The manner in which a fire reacts to the influences of fuel, weather, and topography.

FIRE BRAND Any burning material such as leaves, wood and glowing charcoal or sparks that could start a fire.

<u>FIRE BREAK</u> A natural or constructed barrier used to stop or check fires that may occur, or to provide a control line from which to work.

<u>FIRE HAZARD</u> A fuel complex, defined by volume, type condition, arrangement and location, that determines the degree of ease of ignition and of resistance to control.

<u>FIRE HISTORY</u> The chronological record of the occurrence of fire in an ecosystem or at a specific site. The fire history of an area may inform planners and residents about the level of wildfire hazard in that area..

<u>FIRE PREVENTION</u> Activities, including education, engineering, enforcement and administration, that are directed at reducing the number of wildfires, the costs of suppression, and fire-caused damage to resources and property.

<u>FIRE PROOFING</u> Removing or treating fuel with fire retardant to reduce the danger of fires igniting or spreading (fire-proofing roadsides, campsites, structural timber). Protection is relative, not absolute.

<u>FIRE REGIME</u> Time frame and pattern of naturally-occurring fires in a particular area or vegetative type, described in terms of frequency, biological severity and area extent. For example, frequent, low-intensity surface fires with one to 25-year return intervals occur in the southern pine forests of the Southeastern United States, the saw grass everglades of Florida, the mixed conifer forests of the western Sierras of California, and so forth.

<u>FIRE-RESISTANT RATING</u> The time that the material or construction will withstand fire exposure as determined by a fire test made in conformity with the standard methods of fire tests of building, construction and materials.

<u>FIRE-RESISTANT ROOF</u> 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, at a minimum, 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.

- Class A roofing is the preferred choice for any home, but this type of roofing is particularly important if you live in an area that is <u>prone to wildfires</u>. To achieve a Class A rating, the roof must be effective against severe fire exposure.
- Class B roofing is effective against moderate fire exposures.
- · Class C roofing provides only light fire protection. Roofing with a Class C rating is able to:
- Unrated Roofing. If roofing is unrated, this means it could not pass even the requirements for Class C roofing
 materials. This type of roofing provides little, if any, fire resistance and should be avoided. Most building codes will
 not accommodate any type of unrated roofing material.

Understanding the fire rating for your roofing materials will help you determine how safe your home is in the event of a fire. Depending on the requirements of your area's building code, these ratings may also determine whether a particular roofing material is even a viable option. With the right roofing, you can enjoy a durable construction that's both beautiful and safe. **

<u>FIRE-RESISTANT TREE</u> A species with compact, resin-free, thick corky bark and less flammable foliage that has a relatively lower probability of being killed or scarred by a fire than a fire sensitive tree. Most deciduous trees are fire-resistant.

<u>FIRE SEASON</u> (1) Period(s) of the year during which wildland fires are likely to occur, spread, and affect resources values sufficient to warrant organized fire management activities. (2) A legally enacted time during which burning activities are regulated by State or local authority.

<u>FIRE SERVICE ACCESS</u> A standard of access for firefighting equipment that address Width, Clearance, Surface, Radius, Dead Ends, Bridges and Grade.

<u>FIRE SMART</u> A proactive fuel reduction and education service, that is designed to increase awareness of wildfire risk in the wildland urban interface and to help homeowners protect their homes by creating survivable space.

<u>FIRE STORM</u> Violent convection caused by a large continuous area of intense fire. This is often characterized by destructively violent surface in-drafts, near and beyond the perimeter, and sometimes by tornado-like whirls.

<u>FIRE SUPPRESSANT</u> Any agent used to extinguish or reduce the flaming and glowing phases of combustion by direct application to the burning fuel.

<u>FIRE TRIANGLE</u> Instructional visual aid in which the sides of a triangle are used to represent the three factors (oxygen, heat, fuel) necessary for combustion and flame production; removal of any of the three factors causes flame production to cease.

<u>FIRE WEATHER</u> Weather conditions which influence fire starts, fire behavior or fire suppression.

<u>FIREWISE USA™ PROGRAM</u> National Fire Protection Association's Firewise USA® program teaches people how to adapt to living with wildfire and encourages neighbors to work together and take action now to prevent losses.

FLAME A mass of gas undergoing rapid combustion, generally accompanied by evolution of heat and incandescence.

FLAMMABILITY The relative ease with which fuels ignite and burn regardless of the quantity of the fuels.

<u>FORESTED</u> A <u>thickly/densely/heavily</u> forested <u>area</u>, covered in forest. Idaho Code title 38, chapter 1 (Idaho forestry act) defines "forestland" as meaning "any land which has upon it sufficient brush or flammable forest growth of any kind or size, living or dead, standing or down, including debris or growth following a fire or removal of forest products, to constitute a fire menace to life (including animal) or property."

FUEL All combustible material within the wildland/urban interface or intermix, including vegetation and structures.

<u>FUEL BREAK</u> An area, strategically located for fighting anticipated fires, where the native vegetation has been modified or replaced so that fires burning into it can be more easily controlled. Fuel breaks divide fire-prone areas into smaller areas for easier fire control and to provide access for firefighting.

FUEL CONDITION Relative flammability of fuel as determined by fuel type and environmental conditions.

FUEL LOADING The volume of fuel in a given area generally expressed in tons per acre.

<u>FUEL MANAGEMENT/FUEL REDUCTION</u> This is the process of manipulation or removal of fuels to reduce the likelihood of ignition and to reduce potential damage in case of a wildfire. Fuel reduction methods include prescribed fire, mechanical

treatments (mowing, chopping), herbicides, biomass removal (thinning or harvesting or trees, and/or harvesting of pine needles) and grazing. Fuel management techniques may sometimes be combined for greater effect.

<u>FUEL MODIFICATION</u> Any manipulation or removal of fuels to reduce the likelihood of ignition or the resistance to fire control.

<u>FUEL TYPE</u> An identifiable association of fuel elements of distinctive species, form, size, arrangement or other characteristics that will cause a predictable rate of spread or resistance to control under specified weather conditions.

<u>GREENBELT</u> A fuel break designated for use other than fire protection, such as a well-watered lawn; recommended for maintaining a Firewise home.

GROUND FUELS All combustible materials such as grass, duff, loose surface litter, tree, shrub roots, rotting wood, leaves, peat or sawdust that typically support combustion.

<u>HARDSCAPE</u> Concrete patio or cement pad in proximity to a structure that creates a fuel break; recommended for a Firewise home.

<u>HAZARD</u> The degree of flammability of the fuels once a fire starts. This includes the fuel (type, arrangement, volume and condition), topography and weather.

<u>HAZARDOUS AREAS</u> Those wildland areas where the combination of vegetation, topography, weather, and/or the threat of fire to life and property create difficult and dangerous problems.

<u>HAZARDOUS FUELS REDUCTION</u> Any treatment of living and dead fuels that reduces the threat of ignition and spread of fire.

IGNITION PROBABILITY Chance that direct flame contact, radiant heat or a firebrand will cause an ignition.

IGNITION TIME Time between application of an ignition source and self-sustained combustion of a fuel

<u>INGRESS, EGRESS</u> In terms of Wildfire: Emergency access and egress are critical during an emergency situation such as a fire. During a fire, timing and quick response are essential to save lives and property. Effective emergency access ensures that fire trucks can reach a building in time to extinguish the fire. Unobstructed emergency egress ensures that building occupants can exit a building to safety.

<u>LADDER FUELS</u> Fuels that provide vertical continuity allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease.

<u>LITTER</u> The top layer of forest floor composed of loose debris of dead sticks, branches, twigs or recently fallen leaves or needles; little altered in structure by decomposition.

<u>LOW-IGNITION CONSTRUCTION</u> The use of materials and systems in the design and construction of a building or structure to safeguard against the spread of fire within a building or structure and the spread of fire to or from buildings or structures to the wildland urban interface area.

<u>LOW-IGNITION LANDSCAPING</u> Vegetative management that removes flammable fuels from around a structure to reduce ignition potential. The flammable fuels may be replaced with green lawn, gardens, certain individually spaced green, ornamental shrubs, individually spaced and pruned trees, decorative stone or other non-flammable or flame-resistant materials.

MITIGATION Action that moderates the severity of a fire hazard or risk.

NATURAL BARRIER Any area where lack of flammable material obstructs the spread of wildfires.

NON-COMBUSTIBLE A material that will not aid combustion or add appreciable heat to an ambient fire.

OVERSTORY That portion of the trees in a forest which forms the upper or uppermost layer.

<u>PRESCRIBED BURNING/FIRE PRESCRIPTION</u>: Application of fire to wildland fuels in either their natural or modified state, under specified environmental conditions, which allows the fire to be confined to a predetermined area, and to produce the fire behavior and fire characteristics required to attain planned fire treatment and resource management objectives.

<u>PROTECTION AREA</u> That area for which a particular fire protection organization has the primary responsibility for attacking an uncontrolled fire and for directing the suppression action. Such responsibility may develop through law, contract or personal interest of the fire protection agent. Several agencies or entities may have some basic responsibilities without being known as the fire organization having direct protection responsibility.

RISK The chance of a fire starting from any cause.

RURAL FIRE DISTRICT (RFD) An organization established to provide fire protection to a designated geographic area outside of areas under municipal fire protection. Usually has some taxing authority and officials may be appointed or elected.

<u>SLASH</u> Debris left after logging, pruning, thinning, or brush cutting. Slash includes logs, chips, bark, branches, stumps and broken trees or brush that may be fuel for a wildfire.

<u>SLOPE</u> The variation of terrain from the horizontal; the number of feet rise or fall per 100 feet measured horizontally, expressed as a percentage.

<u>SNAG</u> A standing dead tree, part of a dead tree, or a burned dead tree from which at least the leaves and smaller branches have fallen or burned.

<u>STREET SIGNS</u> Reflective signs with numbers greater than four inches are considered minimum standard for visibility and preferably of fire resistant material.

<u>STRUCTURE</u> That which is built or constructed, an edifice or building of any kind or any piece of work artificially built up or composed or parts joined together in some manner.

<u>STRUCTURAL PROTECTION</u> The protection of a structure from interior and exterior fire ignition sources. This fire protection service is normally provided by municipal fire departments, but wildland fire agencies will act within their training and capabilities to prevent a wildland fire from igniting structures.

STRUCTURE FIRE Fire originating in and burning any part of all of any building, shelter, or other structure.

<u>STRUCTURE TRIAGE</u> – The sorting and prioritizing of structures requiring protection from wildfire based upon firefighters' educated assessment designed to maximize the number saved.

SUPPRESSION – The most aggressive fire protection strategy. It leads to the total extinguishing of a fire.

SURFACE FIRE A fire that burns leaf litter, fallen branches and other surface fuels on the forest floor.

<u>SURFACE FUEL</u> Fuels lying on or near the surface of the ground, consisting of leaf and needle litter, dead branch material, downed logs, bark, tree cones and low-stature living plants.

TREE CROWN The primary and secondary branches growing out from the main stem, together with twigs and foliage.

<u>UNDERSTORY</u> Low-growing vegetation (herbaceous, brush or reproduction) growing under a stand of tree or a portion of trees in a forest stand below the overstory.

<u>VALLEY COUNTY FIRE WORKING GROUP</u> Chartered in 2007 by the Board of County Commissioners. The Valley County Fire Working Group is a collaborative, advisory group comprised of representatives from the multiple public land management agencies, structural fire districts, wildland fire management agencies and state parks located in Valley County. Responsible for the continued update of the County Wildfire Protection Plan (CWPP), the group utilizes the National Cohesive Strategy for Wildland Fire: "To safely and effectively extinguish fire when needed; use fire where allowable; manage our natural resources; and as a nation, to live with wildland fire." The Cohesive Strategy will address the nation's wildfire problems by focusing on three key areas: Restore and Maintain Landscapes; Fire Adapted Communities; and Response to Fire.

The Fire Working Group is comprised of its general membership and four sub-committees for action items. Lands, Response, Education and Legislative which focus on, but at not limited to, the following goals and actions:

- Fire Mitigation Goals:
 - o Emphasize prevention of wildland urban interface fires using a proactive, cooperative approach.
 - o Ensure that the land development ordinances and building codes in Valley County support mitigation of wildland urban interface fire danger.
 - o Promote effective fuel reduction programs in all wildland urban interface areas in Valley County.

- o Promote the development of water resources and use agreements for wildland resources throughout Valley County.
- o Facilitate and maintain a County-wide mutual aid agreement.
- o Produce and distribute functional maps for Rural Fire Departments.
- o Facilitate wildfire training for responding agencies
- Fire Mitigation Actions:
 - o Prevention- promote local jurisdictions working together and with Federal and State agencies to establish on-going local prevention programs.
 - Regulation- monitor and support and supplement local and national fire codes and wildland fire strategies and ordinances to reduce wildfire risk.
 - o Fuel reduction- Identify priority fuel reduction projects and pursue the appropriate grant.

WATER SUPPLY A ready source of water for firefighting activities; recommended for maintaining a firewise home.

<u>WILDFIRE</u> An uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures.

<u>WILDLAND</u> An area in which development is essentially non-existent, except for roads, railroads, power lines and similar transportation facilities. Structures, if any, are widely scattered.

<u>WILDLAND FIRE</u> Any fire occurring on the wildlands, regardless of ignition source, damages or benefits. Wildland fires are part of the normal life cycle of some forests and grasslands.

<u>WILDLAND URBAN INTERFACE AREA</u> That geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels. (Ord. 10-07, 8-26-2010) A wildland–urban interface (or WUI) refers to the zone of transition between unoccupied land and human development. Communities that are within 0.5 miles (0.80 km) of the zone may also be included.

PLAN CONTENTS

I. Objectives

Create a neighborhood collaborative to provide input into a plan to manage wildfire risk in their own community. Communities may be defined by a subdivision boundary, may be a portion of a larger development, a neighborhood with similar objectives, a group of homes with a desire to reach a common objective, or an area identified by the Fire Working Group to be at risk.

II. Community Collaboration

Identify the community lead. This may be an HOA member assigned to the task, a concerned neighbor, or a group of neighbors who wish to find a way to identify and reduce the risk of wildfire. This collaboration also includes the Fire District representative, the County Firewise representative and the Fire Working Group. Organizations contributing to this effort should be listed.

III. Community Background and Existing Situation

Is there a history of fire? What is the layout of the community, are there flammable building materials required in covenants, is this a predominantly second home occupancy? What mitigation efforts has the community implemented, what were the results, how was the effort supported? How many parcels, asset value, current hazard rating analysis. Anything else that is important to understanding what the needs and concerns are of this particular neighborhood.

IV. Fire District Response Distance

Includes risk assessment hazard ratings, imagery, parcel data and community outline.

Proximity map for fire district location includes transportation infrastructure and ideally route information and distance.

V. Community Hazards Map

Includes risk assessment hazard ratings, imagery, parcel data and community outline.

VI. Community Wildfire Risk Assessment

Based on the County fire risk assessment combined with other fire district, state and national data germane to the location. The county data focuses on accessibility, vegetation (based on fuel models), topography, roof material, building construction, availability of fire protection resources, placement of gas and electric utilities, and additional rating factors. A hazard score is derived from the metric values given to parameters describing each parcel. A summation of these descriptive metric values represents the Hazard Rating for each parcel.

Individual ratings are combined and an outcome is projected for the community. Once the analysis is complete the team assembled to create the plan can identify factors increasing risk. There are many factors that may not be possible to change or mitigate, but there are typically several items contributing to risk that can be changed, and often with minimal out of pocket cost.

VII. Prioritized Mitigation Recommendations

The recommendations are prioritized based on the pragmatic reality that few if any parcel owners will expend resources to re-engineer roads, roofs, structure siding materials, water supplies, etc. However, it is expected that an owner will become 'fire hazard aware' and when/if the time comes to remodel/upgrade structures, they will use materials and methods that reduce fire hazard. Based on these analyses, it is strongly recommended that all parcels start and maintain a program to remove any heavy, dense vegetation within 30ft of all structures. Proper address signage is extremely important to first responders.

VIII. Personal Wildfire Action Plan

Being prepared is your best defense in the event of a wildfire. Planning will vary slightly depending on your location. Your local fire district can assist you with this process. There are also excellent resources online from FEMA, Idaho Firewise, Ready Set Go from the USDA Forest Service and others.

IX. Action Plan between Community, Fire District and Fire Working Group

This is the opportunity to include the community's input, risk assessment, fire district and county input.

RESOURCES

Valley County - County Wildfire Protection Plan

http://www.co.valley.id.us/community/wildfire-mitigation/

McCall Fire and EMS

https://mccallfire.weebly.com/

Donnelly Rural Fire Protection District

http://www.donnellyfire.com/

Cascade Fire

https://cascadeid.us/city-government/cascade-rural-fire-department/

Southern Idaho Timber Protective Association

http://www.sitpa.org/

Valley County Fire Working Group

https://www.facebook.com/VCFWG

Idaho Firewise http://idahofirewise.org/

https://www.forestsandrangelands.gov/communities/documents/cwpphandbook.pdf

How to prepare for a wildfire

https://www.fema.gov/media-library-data/1409003859391-

0e8ad1ed42c129f11fbc23d008d1ee85/how to prepare wildfire 033014 508.pdf

National Fire Prevention Association

https://www.nfpa.org/News-and-Research/News-and-media/Press-Room/News-releases/2012/Firewise-Communities-Program-launches-new-complimentary-online-toolkit

Planning for Wildfire in the Wildland-Urban Interface: A Resource Guide for Idaho Communities https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2845046

EXAMPLE OF A DRAFT WILDFIRE PROTECTION PLAN

[NAME OF COMMUNITY]

[City], Idaho Community Wildfire Protection Plan

An Action Plan for Wildfire Mitigation

[Date]

Background and Preamble

In 2013 each Valley County Rural Fire District supervised the collection of information about Wildfire Risk in the Wild land Urban Interface. The project is funded by Valley County with resources gleaned from the Secure Rural Schools Title III legislation. This, ongoing, County wide assessment was first completed in 2105 and the project is updated on a rotational basis. Your Wildfire Protection Plan (WFPP) is an analysis and review of your specific community's risk assessment based on the information collected about each parcel in your neighborhood.

The intent of this WFPP is to start or continue a conversation about improving risk factors that you can control as a homeowner. Each community contact is encouraged to bring this information to your neighbors and discuss methods to proactively change the landscape in your area. Community work days to reduce vegetation, discussions about water source options, efforts to improve address signage are all examples of positive outcomes hoped for from the WFPP. At the forefront of any community dialog should be the creation of an evacuation plans for each parcel. Such a reality check for each owner most certainly needs to address a plan for your pets, valuables and personal safety.

Each of the three Fire Districts, McCall, Donnelly and Cascade are ready to assist homeowners with information, further assessments and the development of actions plans tailored for each community. In addition you can schedule an assessment update through the Fire Working Group.

Additional resources include The Valley County Fire Working Group which is a collaborative, advisory group comprised of representatives from the multiple public land management agencies, structural fire districts, wildland fire management agencies and state parks located in Valley County. Programs developed by this group include Bring It Don't Burn It, Wildfire Community Preparedness Day, Fire Camp for Kids, and others. Wildfire Prevention Associates LLC assembled this WFPP utilizing data collected by Valley County. The National Cohesive Strategy for Wildland Fire is the basis for the continued update of the County's Wildfire Presenting Plan as well as these individual community plans. The Strategy premates the following: "To safely

Protection Plan as well as these individual community plans. The Strategy promotes the following: "To safely and effectively extinguish fire when needed; use fire where allowable; manage our natural resources; and as a nation, to live with wildland fire." The Cohesive Strategy will address the nation's wildfire problems by focusing on three key areas: Restore and Maintain Landscapes; Fire Adapted Communities; and Response to Fire.

Community Leader: [Name of Community Leader]

[Contact Information]

I. Objectives

The objective of this document is to describe the community and identify clear priorities for the implementation of wildfire mitigation in [community]. This document will include prioritized recommendations intended to lower the risk hazard score for the community. It is self-evident that by doing the diligence necessary to address the hazard score, the [community name] community fire safety will be improved.

II. Community Collaboration

A task force convened to assess risks and develop the Community Wildfire Protection Plan. The group, Valley County, Idaho, Fire Working Group (VCFirewise@gmail.com), is comprised of representatives from the following organizations:

An example of stakeholders in Valley County

Donnelly Rural Fire Protection District

Idaho Department of Lands

United States Forest Service, Payette National Forest

United States Forest Service, Boise National Forest

Southern Idaho Timber Protective Association

McCall Fire & EMS

Cascade Rural Fire District

Bureau of Reclamation

Wildfire Prevention Associates, LLC

III. Community Background and Existing Situation

[community name]

The [community name] can be described as follows:

7 individual parcels

The estimated total acreage is 7 acres for the [community name], each parcel is 1-3 acres

Based on recent Valley County Assessor valuations for the 12 taxable parcels

Minimum value: \$289,093 Maximum value: \$622,106 Median value: \$428,873 Average value: \$440,193

Of the 7 parcels, there are 2 (28%) parcels that have owners with Valley County contact addresses.

Hazard Rating

The Valley County Fire Working Group conducted a wildland fire mobile risk assessment for all structures in Valley County.

[community name] received an average score of 110 (min=99, max=116). A total of 3(43%) parcels were in the "high risk" hazard range and the remaining 4(57%) parcels are in the "moderate risk" hazard range.

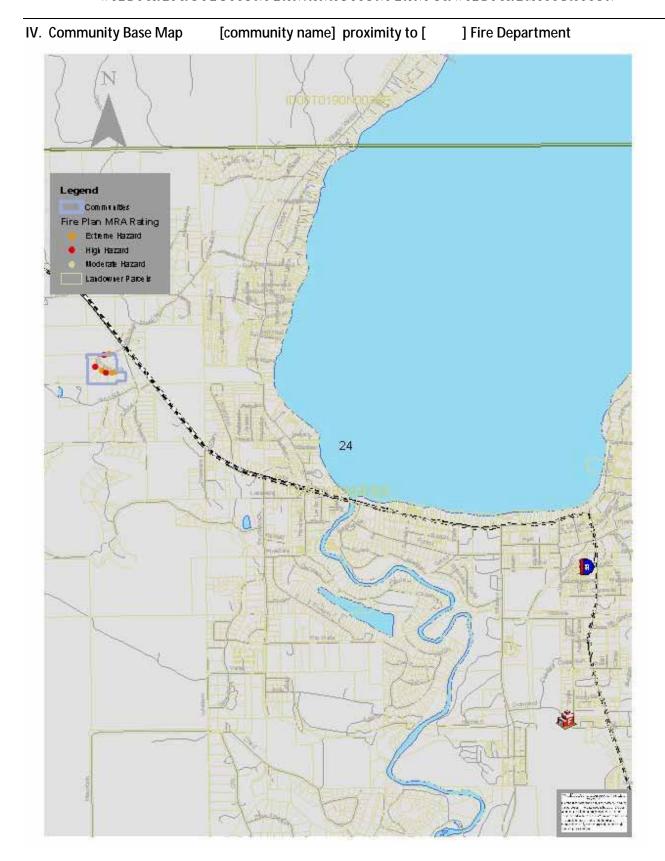
Fire History

Fire was once an integral function of the majority of ecosystems in Idaho. The seasonal cycling of fire across the landscape was as regular as the July, August and September lightning storms plying across the canyons and mountains. Depending on the plant community composition, structural configuration, and buildup of plant biomass, fire resulted from ignitions with varying intensities and extent across the landscape. Shorter return intervals between fire events often resulted in less dramatic changes in plant composition (Johnson 1998). The fires burned from 1 to 47 years apart, with most at 5- to 20-year intervals (Barrett 1979). With infrequent return intervals, plant communities tended to burn more severely and be replaced by vegetation different in composition, structure, and age (Johnson et al. 1994). Native plant communities in this region developed under the influence of fire, and adaptations to fire are evident at the species, community, and ecosystem levels.

The history of wildfire in Valley County; from 1984 to 2013.

During this nearly 30year time period, 160 wildfires burned within 50 miles of the city. These fires ranged in size from just over 400 acres (Whitehawk Complex in 2010) to more than 318,000 acres (East Zone Complex in 2007 that burned to within seven miles north of McCall). The year 2007 shattered the previous record years for acreage burned and money spent. In total, more than 600,000 acres of the Payette and Boise National Forests burned at a cost of over \$82.6 million. In 2015 two large wildfires near McCall burned more than 100,000 acres, the Rapid fire located 12 miles southeast of McCall burned 10,055 acres and the Tepee Springs fire 3 miles east of Riggins burned 95,709 acres.

Fortunately, there is no reportable fire history for [community name] Subdivision.



V. [community name] map with parcel hazard rating.



VI. Community Wildfire Risk Assessment

Executive Summary – [community name], [city], Idaho.

A fire risk assessment was completed by the Valley County. The instrument used takes into consideration accessibility, vegetation (based on fuel models), topography, roof material, building construction, availability of fire protection resources, placement of gas and electric utilities, and additional rating factors. A hazard score is derived from the metric values given to parameters describing each parcel. A summation of these descriptive metric values represents the Hazard Rating for each parcel.

Ingress/Egress	In [community name], 100% (n=7) of the parcels are accessible by only one road in/out.		
Road width	All of parcels 100% (n=7) of all parcels in [community name] are serviced by roads that are LESS THEN 20ft wide.		
Road Condition	All the parcels, n=7 (100%) of the parcels in [community name] are serviced by roads that are surfaced with a grade LT 5%.		
Fire service access	100%(n=7) of [community name] parcels are serviced by roads that are less than 300ft in length with a turn around.		
Street signs	For a 'first responder', Being able to find the correct address is critical to rendering service. Missing or improper address signage is extremely important. All 7(100%) of the parcels in [community name] DO NOT have correct address signage, at least 4" tall of a reflective material.		
Vegetation	Heavy, dense brush in proximity to the dwellings and structures can pose an extreme fire hazard. 7 parcels (100%) of [community name] parcels were observed to have heavy, dense vegetation close to the dwellings.		
Defensible Space	Maintaining a space between the dwelling structures and combustible foliage has been shown to be extremely effective at reducing fire hazard. In [community name], 7(100%) parcels have heavy, dense vegetation within 30ft from structures.		
Roofing Construction	The majority of [community name] parcels (n=5, 71%) have Class B roofing which is considered moderately fire resistant. 2(29%) parcels are Class A roofing, which is most fire resistant.		
Building materials	All parcels (100%, n=7) of [community name] parcels are constructed with combustible siding.		
Water Source for	None (n=7, 0%) of parcels in [community name] have a water supply source that is		
fire suppression	adequate for fire suppression.		
Utilities	In [community name], 2 parcels (29%) are served with one utility that is above ground. The other 5 parcels (71%) have all utility services under ground.		

FIRE HAZARD RATING SCALE

Moderate Risk below 70 High Risk 70 – 110 Extreme Risk over 110 In the spirit of transparency and to stimulate community discussion, the following table is an extraction of the major parameters that contribute to the 'Hazard score/rating' for [community name].

[COMMUNI	TY NAME]							
ROADS IN AND OUT	ROAD CONDITION	FIRE SERVICE ACCESS	STREET ADDRESS SIGNAGE	PREDOMINATE VEGETATION	DEFENSIBLE SPACE	WATER SOURCE AVAILABILITY	PARCEL ID VALLEY COUNTY	HAZARD RATING AND SCORE
One road in/out								
	Surfaced, grade	LT 300 ft with	Not present	Heavy (dense br	0 to 30 ft	No water source	RPM##########	Extreme Hazard(113)
One road in/out								
	Surfaced, grade	LT 300 ft with	Not present	Heavy (dense br	0 to 30 ft	No water source	RPM##########	High Hazard(99)
One road in/out								
	Surfaced, grade	LT 300 ft with	Not present	Heavy (dense br	0 to 30 ft	No water source	RPM##########	High Hazard(110)
One road in/out								
	Surfaced, grade	LT 300 ft with	Not present	Heavy (dense br	0 to 30 ft	No water source	RPM##########	Extreme Hazard(114)
One road in/out								
	Surfaced, grade	LT 300 ft with	Not present	Heavy (dense br	0 to 30 ft	No water source	RPM##########	High Hazard(110)
One road in/out								
	Surfaced, grade	LT 300 ft with	Not present	Heavy (dense br	0 to 30 ft	No water source	RPM##########	Extreme Hazard(113)
One road in/out								
	Surfaced, grade	LT 300 ft with	Not present	Heavy (dense br	0 to 30 ft	No water source	RPM##########	Extreme Hazard(116)

VI. Prioritized Mitigation Recommendations

The recommendations are prioritized based on the pragmatic reality that few if any parcel owners will expend resources to re-engineer roads, roofs, structure siding materials, water supplies, etc. However, it is expected that an owner will become 'fire hazard aware' and when/if the time comes to remodel/upgrade structures, they will use materials and methods that reduce fire hazard. Based on these analyses, it is strongly recommended that all parcels start and maintain a program to remove any heavy, dense vegetation within 30ft of all structures. Finally, proper address signage is extremely important to first responders. All parcel owners will be expected to review their address markers and ask themselves a simple question, "at night, will a stranger know what my address is?" If the answer is 'NO', then parcel owner should install correct address signage.

VII. Create a personal Wildfire Action Plan

Wildland fires are real and must be taken seriously. Idaho is experiencing unprecedented population growth and will mean greater expansion into the areas described as Wildland Urban Interface (WUI). WUI is where human infrastructure meets areas such as forest and grasslands. Only one mistake, from a resident or visitor, will make emergency preparedness and evacuation a reality. Each family will have different and unique issues. Please consider the following for the sake of your family and friends. This will be a starter conversation for preparedness that hopefully won't ever be needed.

- 1. Do what you feasibly can to 'harden' your property. [Vegetation density thinning, clean eaves and soffits, maintain and widen roads, visible address signage, any remodeling should be fire aware construction materials.]
- 2. Are you financially prepared for a Wildfire? [Do annual insurance check-up to confirm coverage, make a home inventory video noting special contents and expensive items.]
- 3. Really ask yourself when is the right time to evacuate? [Make sure you are enrolled in the local emergency alert system, fire officials and law enforcement will have voluntary, precautionary, mandatory or immediate options, earlier departure will be prudent and advised, Do Not wait until the last minute to leave.]
- 4. Prepare your family and friends by discussing evacuation issues. [Gathering toddlers and small children, preparing disabled members, assemble an emergency supply kit.]
- 5. Discuss your Wildfire action plan with family members. [Discuss what items will be taken, discuss how to deal with pets, where is the emergency meeting location away from the fire hazard, who will be the family contact person outside the fire hazard area, think about departure routes, develop a departure check-list.]
- 6. Create a Wildfire action plan for large animals, horses, farm animals. [When to move these animals, where to take them, what to feed them and any special equipment needed for management, as well as, ownership and health records.]
- 7. Ask yourself and think about what to do if you become trapped? [While in your vehicle, on foot, or in your Valley County residence.]

VIII. Action Plan

Completion of the following action plan by community stakeholders and a fire professional will help achieve Firewise goals and reduce wildfire risk.

Roles and Responsibilities

[IDENTIFY EACH OF THE ROLES AND THEIR ACCOMPANYING RESPONSIBILITIES NEEDED TO IMPLEMENT THE ACTION PLAN.]

Funding Needs

[OUTLINE NEEDED FUNDING AND POTENTIAL SOURCES.]

Project	Estimated Cost	Potential Funding Source(s)
 Address signage-4" tall reflective address numbers posted at the street expedite Fire/EMS response in the summer and winter 	\$0	Numbers available at Fire Department
Defensible Space-Follow the guidelines on page 4	\$1500/acre	Grants, HOA fees, woodcutting, logging
3. Driveway Access-20' wide by 12' overhead clearance with minimal grade to allow fire engine access	Estimates can be obtained from a local excavator	Homeowner

Timetables (highest priority projects)

[FOR EACH PROJECT, PROVIDE AN ESTIMATED DURATION, START DATE, AND FINISH DATE. LIST PROJECTS IN ORDER OF PRIORITY.]

Project (in order of priority)	Duration	Start Date	Finish Date
Defensible Space	On going	Summer 2018	
2. Driveway Access	1 day	Summer 2018	
3. Address signage	1 hr	Summer 2018	

Assessment Strategy

[DESCRIBE THE STRATEGY YOU WILL USE TO ASSESS YOUR PLAN'S EFFECTIVENESS.]

A risk assessment will be conducted to re-assess wildfire hazards. The hazard mitigation plan will be updated as needs arise or priorities change.

WILDFIREPROTECTIONPLAN: ANACTIONPLANFORWILDFIREMITIGATION

Annual Firewise Work Days (clean-up days) is recommended. Volunteer time can count toward meeting financial requirement for Firewise Community USA recertification as in-kind contribution.

Mitigation efforts that are recurring (such as mowing, burning, clearing of defensible space) will be incorporated into an annual renewal of the original action plan and reflected on the Firewise USA recertification application.

Project	Priority	Description	Method	Funding
Apply		Annually, clean the 100-	Apply Dr. Cohens methods	Homeowner and
Firewise	1	foot radius around homes	using hand and mechanical	possible grant
defensible		and structures. Apply	methods of removing	funding for
space		Firewise standards of	hazardous fuels, and	communities
standards		removing needles from	mowing	
in Zone 1A,		gutters and roof, thinning		
1 and 2		and limbing trees and		
		shrubs.		
Install	2	Install address signs to	Recommended Standard:	Homeowner with
Address		improve locating homes	4" reflective numbering on	assistance from
Signs		during medical and fire	blue backing, double sided	Cascade Fire
		emergencies.		
Identify	3	Homeowners identify	Assist homeowners with	Grants
acres for		acres in Firewise Zones 3+	identifying acres available	
large scale		(100 Feet plus) for hazard	for hazard fuels reduction	
treatments		fuels treatment. This		
		would include thinning,		
		limbing, chipping, piling		
		and burning.		
Curb Side	1	Homeowners collect	This will tie to long term	Grants
Chipping		woody debris and stage	funding grant from the	
		near road for curb side	VCFWG to establish funding	
		chipping once per month	and a contract to provide	
		in the snow -free months.	this service	

Assessed by Fire Professional:	Date: