

SUBLETTE COUNTY WYOMING

Community Wildfire Protection Plan



February, 2006

2006

**Sublette County
Community Wildfire Protection Plan**

Signature Authorization: My signature below verifies that I have reviewed and approved the Sublette County Community Wildfire Protection Plan.

Chair by
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Executive Summary

This document illustrates Sublette County’s commitment to its communities in mitigating the effects of uncontrolled wildfire to its firefighters, citizens and properties. Furthermore, this document illustrates an on-going collaborative effort between the county, state and federal jurisdictions regarding wildfires. It is also the intent of this plan to provide input from firefighters, citizens and the various agencies in the county involving wildfire and fuel mitigation issues.

Background and Significance

Sublette County has experienced significant wildfires in the years of 1988, 1996, 2001. Following the fires of 1988 and Yellowstone, local, state and federal jurisdictions began planning for a cooperative effort to fight wildfires occurring within the county. The agencies involved began the process of assessing subdivisions at risk and implementing fuels reduction management projects in those subdivisions. Also including various communities and locations involving public and private lands.

The 1996 and 2001 fire years proved the value of the interagency efforts. The significance to the community is that such cooperation brings together multiple disciplines, technical experts and specialties, political subdivisions and tactical resources to create a holistic approach to wildfire issues. In addition, such an approach maximizes resources regionally and makes each agency stronger.

Sublette County Community

Sublette County is the newest county in the state of Wyoming. It has a population of approx 7,343. Sublette County is located on the western side of the continental divide between Teton, Sweetwater, and Lincoln Counties. Sublette County is 4,876 square miles

The county consists of the following jurisdictions with their approximate number of acres for each:

Bridger Teton N.F.	500,000 acres
BLM	900,000 acres
State of Wyoming	122,178.8 acres
Private	602,433 acres

Collaboration

Sublette County has a long history of collaboration with regional partners. Following the wildland fires of 1988 in Sublette County and Yellowstone, federal, state and local agencies began the development of projects and programs that attempted to meet the needs of each agency and the public at large. Current government partners include Sublette County, Sublette County Firefighters, Bridger-Teton National Forest, Bureau of Land Management, Wyoming Game & Fish, and Wyoming State Forestry.

Codes and Regulations

Sublette County has adopted a number of strategies to protect firefighters, citizens and their property from the effects of uncontrolled wildfire. Some examples are Sublette County's resolutions for new subdivisions. The Resolutions for New Subdivisions is to ensure adequate emergency access/egress and a stable and adequate fire fighting water supplies. The purpose of these resolutions is to mitigate the risk to firefighters, citizens and their property from a wildfire. Also protect their exposures from adjacent property and to mitigate structure fires from spreading to wildland fuels.

Wildland-Urban Interface areas (WUI) – Priority Ranking

This section identifies those areas of top priority to the community as a whole. It should be noted that all interagency representatives have prioritized WUI areas within their jurisdiction for wildland projects, and as a result this section is not inclusive of all Sublette County wildland urban interface areas within public and private lands. It is the intent of the community to continue to work in all WUI areas to mitigate the effects of uncontrolled wildfire upon the lives of the citizens and their property. The ranking process is dynamic. WUI areas will be reviewed and ranked on a yearly basis to ensure the top communities at risk are listed and considered when requesting funding or approving projects. Appendix A gives further definition to all areas and the communities within the identified areas. Additionally there is a need to realize that although some communities are not listed or for that matter prioritized there has been fuel management work completed. And often projects will be funded due to priority funding availability, property owner involvement or other. The interagency representatives will assist in priorities and reviewing projects for Sublette County.

Four wildland/urban conditions have been identified for use in the wildland urban interface (Norton 2002). These include the Interface Condition, Intermix Condition, Occluded Condition, and Rural Condition. We have included a fifth one, Undeveloped Condition. Descriptions of each are as follows:

INTERFACE CONDITION: a situation where structures but wildland fuels. There is a clear line of demarcation between the structures and the wildland fuels along roads or back fences. The development density for an interface condition is usually 3+ structures per acre.

INTERMIX CONDITION: a situation where structures are scattered throughout a wildland area. There is no clear line of demarcation; the wildland fuels are continuous outside of and within the developed area. The development density is in the intermix ranges from structures very close together to one structure per 40 acres.

OCCLUDED CONDITION: a situation, normally within a city, where structures but an island of wildland fuels (park or open space). There is a clear line of demarcation between the structures and the wildland fuels along roads and fences. The development density for an occluded condition is usually similar to that found in the interface condition and the occluded area is usually less than 1,000 acres in size.

RURAL CONDITION: a situation where the scattered small clusters of structures (ranches, farms, resorts, or summer cabins) are exposed to wildland fuels. There may be miles between these clusters.

UNDEVELOPED CONDITION: parcels of land that have no structures, other than maybe fences, power lines, gas line, etc., that are of scenic, water, wildlife habitat, agricultural or other special value.

1. Interface Area A

Description

Area A consists of the Upper Green River Basin, The Bend (Darwin Ranch), and New Fork Lake Boy Scout Camp, Red Cliff Bible Camp, The Place, Black Butte, Gypsum, Green River Developed Recreation, Boulder Basin and the surrounding areas. Also included are the Bridger-Teton Forest and State of Wyoming School sections, and BLM. This is a large geographical area with moderate to high density subdivisions. The complexity of fire(s) in this area may necessitate evacuation of some portions of, or all of the area.

Hazard Level

The hazard level for this area is determined through assessment using the *International Urban-Wildland Interface Code*.

Interface Area A Hazard Level: **High to Extreme**

Predominant Hazard Fuel

Predominate hazardous fuels are mixed lodge pole pine and sub-alpine fir with areas of aspen and sage brush. Along the river and creek bottoms are large quantities of willows and thick grass.

Infrastructure

Single access points. Steep roads, narrow in spots. No fire hydrants with some access points along the river and creeks for water supply.

Evacuation

This plan will include both notification and evacuation order phases. Both phases will be activated by the following trigger points.

Notification Trigger: 1. if a fire escapes initial attack or spots within 1.5 miles of Area A

Evacuation Trigger: 2. if a fire escapes initial attack or spots within 1 mile of Area A

NOTE: any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight or poses an immediate threat to the area would trigger immediate evacuation.

2. Interface Area B

Description

Area B consists of the Rim Ranch, Hoback Ranches, Packer Miner, Flying A subdivisions and the surrounding areas. Also included are the Bridger-Teton Forest, BLM and State of Wyoming School sections. This is a relatively small geographical area with high-density subdivisions within the interface. The complexity of fire(s) in this area may necessitate evacuation of some portions of, or all of the area.

Hazard Level

The hazard level for this area is determined through assessment using the *International Urban-Wildland Interface Code*.

Interface Area B Hazard Level: **High to Extreme**

Predominant Hazard Fuel

Predominate hazardous fuels are mixed lodge pole pine and sub-alpine fir with areas of aspen and sage brush un grazed grass resulting in areas of heavy flashy fuel levels. Along the creek bottoms are large quantities of willows and thick grass.

Infrastructure

Single access points. Steep roads, narrow in spots, one way in, one way out. No fire hydrants with some access points along the creeks and a few ponds but as whole poor water supplies.

Evacuation

This plan will include both notification and evacuation order phases. Both phases will be activated by the following trigger points.

Notification Trigger: 1. if a fire escapes initial attack or spots within 1.5 miles of Area B

Evacuation Trigger: 2. if a fire escapes initial attack or spots within 1 mile of Area B

NOTE: any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight or poses an immediate threat to the area would trigger immediate evacuation.

3. Interface Area C

Description

Area C consists of the communities of Daniel, Cora, Merna, Forty-Rod, Jim Bridger, Horse Creek, Rye Grass, Box R Ranch, Aspen Ridge Estates and the surrounding areas. Also included are the Bridger-Teton Forest, BLM and State of Wyoming School sections. This is a very large geographical area with high-density subdivisions within the interface. The complexity of fire(s) in this area may necessitate evacuation of some portions of, or all of the area.

Hazard Level

The hazard level for this area is determined through assessment using the *International Urban-Wildland Interface Code*.

Interface Area C Hazard Level: **Moderate to High, High to Extreme**

Predominant Hazard Fuel

Predominate hazardous fuels are mixed lodge pole pine and sub-alpine fir with areas of aspen and large flat areas of sage brush and grazed grass. Along the river and creek bottoms are large quantities of willows and thick grass.

Infrastructure

Single access points. Steep roads, narrow in spots, one way in, one way out. No fire hydrants. There are some access points along the river and creeks and a few ponds have access points for water sources.

Evacuation

This plan will include both notification and evacuation order phases. Both phases will be activated by the following trigger points.

Notification Trigger: 1. if a fire escapes initial attack or spots within 1.5 miles of Area C

Evacuation Trigger: 2. if a fire escapes initial attack or spots within 1 mile of Area C

NOTE: any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight or poses an immediate threat to the area would trigger immediate evacuation.

4. Interface Area D

Description

Area D consists of the community of Bondurant, Upper Hoback River, Dell Creek, and Fall Creeks and the surrounding areas. Also included are the Bridger-Teton Forest, and State of Wyoming School sections. This is a moderate geographical area with moderate-density subdivisions within the interface. The complexity of fire(s) in this area may necessitate evacuation of some portions of, or all of the area.

Hazard Level

The hazard level for this area is determined through assessment using the *International Urban-Wildland Interface Code*.

Interface Area D Hazard Level: **Moderate to High, High to Extreme**

Predominant Hazard Fuel

Predominate hazardous fuels are mixed lodge pole pine and sub-alpine fir with areas of aspen and large flat areas of sage brush and grazed grass. Along the river and creek bottoms are large quantities of willows and thick grass.

Infrastructure

Single access points. Steep roads, narrow in spots, one way in, one way out. No fire hydrants. There are some access points along the river and creeks and a few ponds have access points for water sources.

Evacuation

This plan will include both notification and evacuation order phases. Both phases will be activated by the following trigger points.

Notification Trigger: 1. if a fire escapes initial attack or spots within 1.5 miles of Area D

Evacuation Trigger: 2. if a fire escapes initial attack or spots within 1 mile of Area D

NOTE: any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight or poses an immediate threat to the area would trigger immediate evacuation.

5. Interface Area E

Description

Area E consists of the Town of Pinedale, and the communities of Pole Creek, Pocket Creek, Scab Creek, Fremont Lake, Sylvan Bay, Half Moon, White Pine, Chambers, Boulder Lake, and Bargerville and the surrounding areas. Also included are the Bridger-Teton Forest, and State of Wyoming School sections, and BLM. This is a large geographical area with High-density subdivisions within the interface. The complexity of fire(s) in this area may necessitate evacuation of some portions of, or all of the area.

Hazard Level

The hazard level for this area is determined through assessment using the *International Urban-Wildland Interface Code*.

Interface Area E Hazard Level: **Moderate to High, High to Extreme**

Predominant Hazard Fuel

Predominate hazardous fuels are mixed lodge pole pine and sub-alpine fir with areas of aspen and large flat areas of sage brush. Along the river and creek bottoms are large quantities of willows and thick grass.

Infrastructure

Single access points. Steep roads, narrow in spots, one way in, one way out. In the town itself there are fire hydrants that could be used in areas around town. However, no fire hydrants exist in the other communities. Some access points along the river, creeks, and a few ponds provide water sources for these other areas.

Evacuation

This plan will include both notification and evacuation order phases. Both phases will be activated by the following trigger points.

Notification Trigger: 1. if a fire escapes initial attack or spots within 1.5 miles of Area E

Evacuation Trigger: 2. if a fire escapes initial attack or spots within 1 mile of Area E

NOTE: any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight or poses an immediate threat to the area would trigger immediate evacuation.

6. Interface Area F

Description

Area F consists of the Towns of Big Piney, Marbleton, and high recreational and mineral development in Snyder Basin, Middle Piney, Riley Ridge and the surrounding areas. Also included are the Bridger-Teton Forest, and State of Wyoming School sections, and BLM. This is a large geographical area with high density subdivisions within the interface. The complexity of fire(s) in this area may necessitate evacuation of some portions of, or all of the area.

Hazard Level

The hazard level for this area is determined through assessment using the *International Urban-Wildland Interface Code*.

Interface Area E Hazard Level: **Moderate to High, High to Extreme**

Predominant Hazard Fuel

Predominate hazardous fuels are mixed lodge pole pine and sub-alpine fir with areas of aspen and large flat areas of sage brush. Along the river and creek bottoms are large quantities of willows and thick grass.

Infrastructure

Single access points. Steep roads, narrow in spots, one way in, one way out. In the towns there are fire hydrants that could be used in areas around town. In other areas water sources are found by access to some points along creeks, river, and ponds.

Evacuation

This plan will include both notification and evacuation order phases. Both phases will be activated by the following trigger points.

Notification Trigger: 1. if a fire escapes initial attack or spots within 1.5 miles of Area F

Evacuation Trigger: 2. if a fire escapes initial attack or spots within 1 mile of Area F

NOTE: any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight or poses an immediate threat to the area would trigger immediate evacuation.

7. Interface Area G

Description

Area G consists of the communities of Boulder, Big Sandy, Dutch Joe and the surrounding areas. Also included are the Bridger-Teton Forest, BLM and State of Wyoming School sections. This is a large geographical area with high density subdivisions within the interface. The complexity of fire(s) in this area may necessitate evacuation of some portions of, or all of the area.

Hazard Level

The hazard level for this area is determined through assessment using the *International Urban-Wildland Interface Code*.

Interface Area G Hazard Level: **Moderate to High, High to Extreme**

Predominant Hazard Fuel

Predominate hazardous fuels are mixed lodge pole pine and sub-alpine fir with areas of aspen and large flat areas of sage brush. Along the river and creek bottoms are large quantities of willows and thick grass.

Infrastructure

Single access points. Steep roads, narrow in spots, one way in, one way out. No fire hydrants however, there are a few dry hydrants and some access points along the river, creeks, and a few ponds for water sources.

Evacuation

This plan will include both notification and evacuation order phases. Both phases will be activated by the following trigger points.

Notification Trigger: 1. if a fire escapes initial attack or spots within 1.5 miles of Area G

Evacuation Trigger: 2. if a fire escapes initial attack or spots within 1 mile of Area G

NOTE: any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight or poses an immediate threat to the area would trigger immediate evacuation.

8. Interface Area H

Description

Area H consists of North and South Cottonwood Creeks, Antelope Run Ranch, Round Hill and the surrounding areas. Also included are the Bridger-Teton Forest, and State of Wyoming School sections. This is a large geographical area with a low to moderate-density of subdivisions within the interface. The complexity of fire(s) in this area may necessitate evacuation of some portions of, or all of the area.

Hazard Level

The hazard level for this area is determined through assessment using the *International Urban-Wildland Interface Code*.

Interface Area H Hazard Level: **Moderate to High, High to Extreme**

Predominant Hazard Fuel

Predominate hazardous fuels are mixed lodge pole pine and sub-alpine fir with areas of aspen and large flat areas of sage brush. Along the river and creek bottoms are large quantities of willows and thick grass.

Infrastructure

Single access points. Steep roads, narrow in spots, one way in, one way out. No fire hydrants. There are some access points along the river and creeks, and a few ponds have access points for water sources.

Evacuation

This plan will include both notification and evacuation order phases. Both phases will be activated by the following trigger points.

Notification Trigger: 1. if a fire escapes initial attack or spots within 1.5 miles of Area H

Evacuation Trigger: 2. if a fire escapes initial attack or spots within 1 mile of Area H

NOTE: any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight or poses an immediate threat to the area would trigger immediate evacuation.

9. Interface Area I

Description

Area I consists of the Green River, Mesa (Anticline Gas Fields), Paradise Road and the surrounding areas. Also included are Private, BLM, and State of Wyoming School sections. This is a moderate geographical area with low density subdivisions mostly ranches and gas industry developments within the interface. The complexity of fire(s) in this area may necessitate evacuation of some portions of, or all of the area.

Hazard Level

The hazard level for this area is determined through assessment using the *International Urban-Wildland Interface Code*.

Interface Area I Hazard Level: **Moderate to High**

Predominant Hazard Fuel

Predominate hazardous fuels are large flat areas of sage brush and grass meadows. Along the river and creek bottoms are large quantities of willows and thick grass.

Infrastructure

Single access points. Steep roads, narrow in spots, one way in, one way out. No fire hydrants. There are some access points along the river and creeks, and a few ponds have access points for water sources. No water on the Mesa.

Evacuation

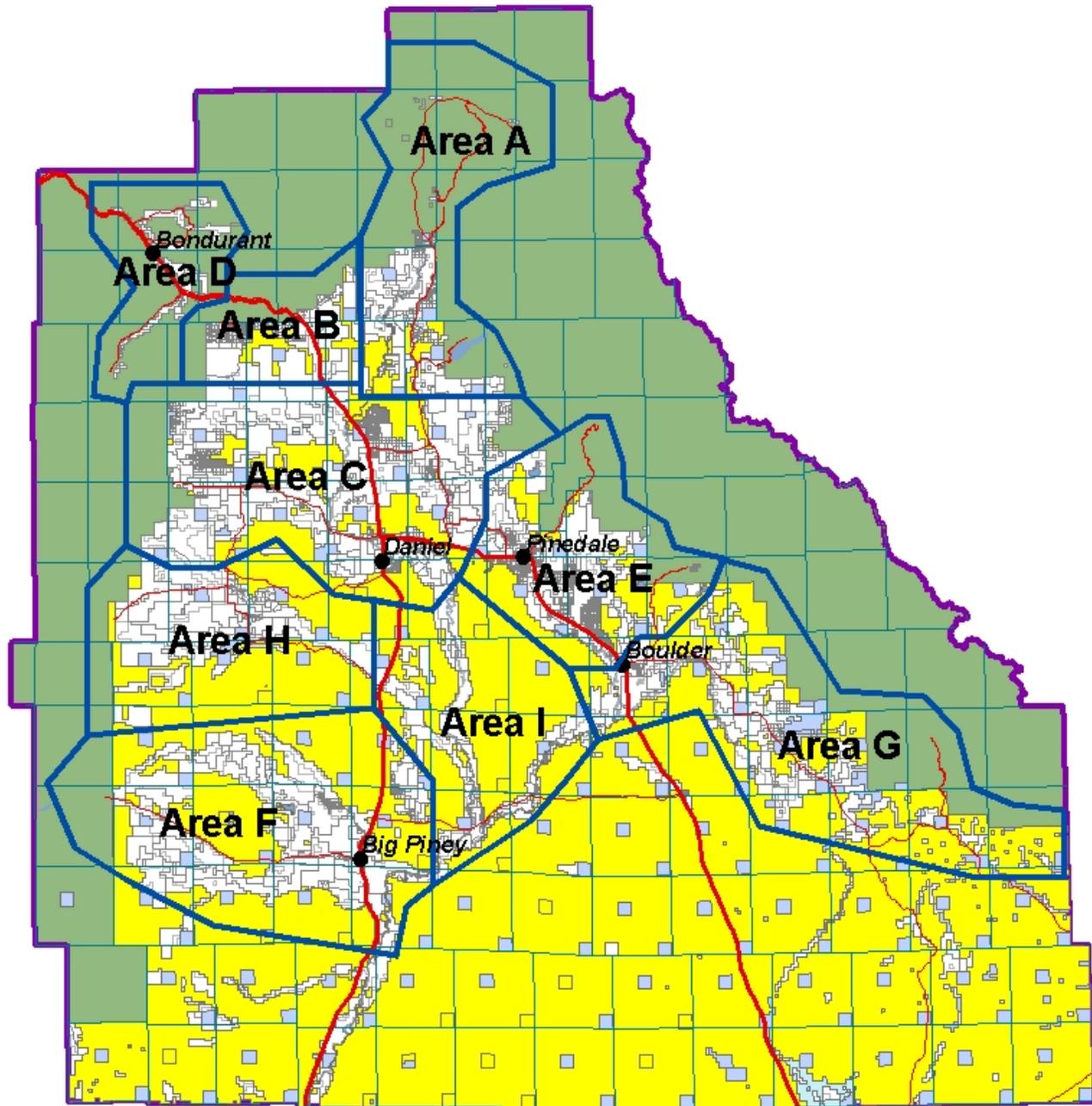
This plan will include both notification and evacuation order phases. Both phases will be activated by the following trigger points.

Notification Trigger: 1. if a fire escapes initial attack or spots within 1.5 miles of Area I

Evacuation Trigger: 2. if a fire escapes initial attack or spots within 1 mile of Area I

NOTE: any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight or poses an immediate threat to the area would trigger immediate evacuation.

Sublette County Interface Areas



Resources

Sublette County Firefighters Association collaborates with Bridger-Teton National Forest, Wyoming State Forestry and BLM in pre-fire planning, fuel reduction projects, training and public education within the communities of Sublette County. Prevention goals include:

- Increase public awareness of the effects of uncontrolled wildfire in interface areas.
- Increase public awareness of the positive effects of wildfire use.
- Increase public awareness of the importance of forest health and stewardship.
- Conduct fuel reduction and vegetation management projects within interface areas.

Sublette County Fire Fighters, Wyoming State Forestry, Bridger-Teton National Forest, and BLM each operate fire fighting programs. Sublette County consists of 103 Firefighters of which 82 are Red Card holders; 63 Engine Operators 11, Engine Bosses, and 8 various overhead. There are six fire departments in the county from which they respond. These agencies collaborate to staff initial attack resources. Cumulatively, resources include wildland fire resources, structural fire resources, aviation resources and support/logistical resources. These agencies operate through individual agreements and through a multi-agency Wildland Fire Management Annual Operating Plan. Reaction force goals include:

- Ensure an adequately trained, equipped and response ready force.
- Continue collaborative training programs.
- Increase cross-agency familiarity of operations.
- Ensure team cohesion and integrity at the agency level.

Plan Review and Approval

In order to be effective, this plan must be a dynamic document that addresses the changing wildland and the interface with it. The plan review, amendment and approval process will be as follows:

1. It will be the responsibility of the agencies involved to review this plan and recommend changes to decision makers. All meetings are open to the public and public input is encouraged.
2. The plan will be reviewed on an annual basis.
3. The amended plan will be approved by a 2/3 or greater vote.
4. The approved plan will be forwarded to the appropriate bodies for signature. The head of each agency or a designated deputy will be authorized to sign the plan. All signatures remain valid until the plan is amended and approved.

APPENDICES

- A. Communities at Risk**
- B. Fire Hazard Severity Form**
- C. Minimum Design Standards for Dry Hydrants**
- D. Fuel Treatment Objectives and Guidelines**
- E. Private Wildland Stewardship Program**
- F. Links**

APPENDIX A

Update to communities at risk ranking for Western Wyoming 3/19/2004

State, local and federal fire representatives from Lincoln, Teton and Sublette Counties each had meetings during the past few months to review the priority ranking of communities at risk. We also discussed upcoming projects and how we can best work together to accomplish the required work.

Sublette and Lincoln Counties adjusted their rankings, while Teton County did not change any rankings.

Here are the current rankings:

Sublette County

- | | |
|--|--------------|
| 1. Hoback Ranches (includes Rim Ranch, Packer Miner, Flying A) | BLM/FS |
| 2. Upper Green (includes Fremont Lake, Pine Creek, Gypsum, Red Cliff, Green River Developed Recreation, Boulder Basin) | BLM/FS/State |
| 3. Bondurant (includes upper Hoback) | FS |
| 4. Jim Bridger | BLM/FS/State |
| 5. Sylvan Bay (Half Moon, White Pine, Sylvan Bay, Chambers) | FS |
| 6. Forty-Rod | BLM/State |
| 7. Pocket Creek (Scab Creek) | BLM/State |
| 8. Boulder Lake | FS |
| 9. New Fork | BLM/FS/State |
| 10. Big Sandy (Dutch Joe and Big Sandy) | FS |
| 11. Antelope Run (Horse Creek to Rye Grass) | BLM/FS/State |
| 12. Round Hill (includes Middle Piney, Riley Ridge) | FS |
| 13. The Bend (Darwin Ranch) | FS |
| 14. Bargerville | BLM/State |
| 15. Pinedale (includes Anticline Gas Fields) | BLM |

APPENDIX A

SUBBLETTE COUNTY COMMUNITIES AT RISK

Communities at Risk	Priority Ranking	Risk Category	Associated Communities, Areas, & Developments	General Legal Description by Township and Range
ANTELOPE RUN	8 11	INTERMIX	(Federal Register)	T33N, R114W
BIG SANDY	5 10	INTERMIX	(Federal Register)	S5,8 T31N, R104W
BONDURANT	6 3	INTERMIX	(Federal Register)	T37&38N, R113W
BOULDER	14 0	INTERMIX	Scattered ranches and residential homes (Federal Register)	T32N, R108W
BOULDER LAKE	9 8	RURAL	Scattered ranches, Boulder Lake subdivision (Federal Register)	S3 T33N, R107W
DANIEL	16 0	INTERMIX	(Federal Register)	T33N, R111W
FORTY ROD	13 6	INTERMIX	(Federal Register)	T35N, R111W
HOBACK RANCHES	1 1	INTERMIX	(Federal Register)	T36N,R112 & 113W
JIM BRIDGER	7 4	INTERMIX	(Federal Register)	T35N, R113W
NEW FORK	3 9	INTERMIX	(Federal Register)	T36N,R110W
PINEDALE	15 15	INTERMIX	(Federal Register)	T33 & 34N, R109W
POCKET CREEK	11 7	INTERMIX	(Federal Register)	T31 & 32N, R106W
ROUND HILL RANCH	12 12	INTERMIX	(Federal Register)	S20,21,22,27,28,29 T39N, R109W
SYLVAN BAY	4 5	INTERMIX	summer, recreational cabins(Federal Register)	S31,32 T35N, R108W
THE BEND	10 13	INTERMIX	(Federal Register)	S6 T39N,R109W S1,11 T39N,R110W
UPPER GREEN	2 2	INTERMIX	(Federal Register)	T37N,R110W
BARGERVILLE	14	INTERMIX		???????

The green numbers (or second number if the color doesn't come thru the "priority ranking" column) is what the ranking was changed to in 2004.

APPENDIX B

FIRE HAZARD SEVERITY FORM

A. Subdivision Design

	Points
1. Ingress/Egress	
Two or more primary roads	1___
One road	2___
One-way road in, one-way road out	5___

2. Width of Primary Road

20 feet or more	1___
Less than 20 feet	3___

3. Accessibility

Road grade 5% or less	1___
Road grade more than 5%	3___

4. Secondary Road Terminus

Loop roads, cul-de-sacs with an outside turning radius of 45 feet or greater	1___
Cul-de-sac turnaround, Dead-end roads 200 feet or less in length	3___
Dead-end roads greater than 200 feet in length	5___

5. Street Signs

Present	1___
Not present	3___

B. Vegetation (IUWIC Definition)

1. Fuel Types

Light	1___
Medium	5___
Heavy	10___

2. Defensible Space

70% or more of site	1___
30% or more, but less than 70% of site	10___
Less than 30% of site	20___

C. Topography

8% or less	1___
More than 8%, but less than 20%	4___
20% or more, but less than 30%	7___
30% or more	10___

D. Roofing Material

Class A Fire Rated	1___
Class B Fire Rated	5___
Class C Fire Rated	10___
Non-rated	20___

E. Fire Protection Water Source

500 GPM hydrant within 1000 feet	1___
Hydrant farther than 1000 feet or Draft site	2___
Water source 20 min. or less round trip	5___
Water source farther than 20 min., And 45 min. or less, round trip	7___
Water source farther than 45 min., round trip	10___

F. Existing Building Construction

Non-combustible siding/deck	1___
Non-combustible siding, combustible deck	5___
Combustible siding and deck	10___

G. Utilities (gas and/or electric)

All underground utilities	1___
One underground, one aboveground	3___
All above ground	5___

Total for Subdivision

Moderate Hazard	40-59
High Hazard	60-74
Extreme Hazard	75+

APPENDIX C

Minimum design standards for Dry Hydrants

The following have been provided to allow the contractor an acceptable design and materials for dry hydrants. The following design features are suggested and are to be used for a basis for design for dry hydrants using PVC pipes. All designs are required to be approved by the Sublette County Fire Board prior to installation. Each dry hydrant design is reviewed on an individual basis and is approved specific to that location. Not all dry hydrants work the same or in all locations.

- All dry hydrants shall be capable of providing a year round water supply with a desirable flow of 500 to 1000 gallons per minute.
- Dry hydrants constructed of PVC pipe and or steel pipe and shall not be less than schedule 40 PVC.
- Pipe shall not be less than 6" diameter.
- The outlet shall consist of a 6" female fitting, with National Standard Thread with a cap to prevent the introduction of foreign material into the pipe.
- The riser, including the underground portion, shall not exceed 12 feet of rise. And not less than 24" and not more than 36" extend above adjacent ground level.
- Dry hydrant installation depth must be sufficiently below the frost-free depth for the area also below the average 50-year drought.
- For streambed installation the strainer section may be buried below bed of stream and covered with gravel.
- The total area of strainer holes must exceed 4 times the area of the diameter of the pipe.
- The dry hydrant should be as close as practical to the water source and the road itself should be at least 12 feet wide with a 30 foot turn radius and the site itself should have proper drainage.
- Following installation, flow tests shall be conducted by the owner or installer and documentation of flows shall be forwarded to the Fire Board.
- It shall be the responsibility of the owner to ensure proper maintenance of the hydrant.

APPENDIX D

Generalized fuel treatment objectives and guidelines

These options provide example management techniques that can be generally applied to vegetative cover types found in Sublette County. Nonetheless, a professional should be consulted in determining management techniques in specific forest stands.

Management Objectives:

The greatest reduction in potential wildfire intensity will be achieved by prioritizing treatment as follows in conifer stands:

1. Remove excessive down material.
2. Remove ladder fuels.
3. Reduce canopy closure/density.

Raise canopy base heights to at least 10-15 feet above the ground in mixed species stands (lodge pole, Douglas fir, aspen). Basal area (BA*) less than 80 square feet; open canopy, crowns at least 20 feet apart; multiple ages especially with aspen recruitment.

Rejuvenate aspen stands as they typically exhibit much lower intensity fire behavior.

Break up sagebrush continuity to reduce potential wildfire intensity. Achieve a canopy coverage of no more than 30%.

Along roads, perimeters of parking areas and property lines between federal and private lands in rural communities and undeveloped parcels construct shaded fuel breaks a minimum of 50 feet, preferably 100 feet, from the edge of the travel surface both sides or on both sides of the property line.

Along trails use the shaded fuel break prescription a minimum of 25 feet both sides.

Around all structures use a defensible space prescription. **Note:** Because of the nature of the fire service in Wyoming; 95% of the departments are volunteer, and of the remoteness of many of the structures to the nearest fire department, areas around structures and the structures themselves should be made as survivable (able to withstand a fire before the fire department arrives) as possible.

Vegetation Objectives:

Remove ladder fuels within all cover types and maintain this condition over time. Open canopy to prevent proliferation of a crown fire and maintain this over the life of the stand. Remove over-story trees in stands that would require the removal of mature trees for generative success of the stand as well as increased safety within the forest. Remove conifers from aspen stands to set back succession. Provide structural diversity in aspen community type across the landscape.

Break up sagebrush continuity to achieve a canopy coverage of no more than 30%.

Treatment objectives:

Thin all conifer stands to a BA of 80 to 100 square feet with an average crown spacing of 20 feet. Remove ladder fuels. Raise crown base heights on eight (8) inch diameter trees and larger to 8-16 feet throughout the treatment units. Reduce surface fuels of large down woody material to 5-7 tons/acre and maintain this condition over time. Remove conifers from aspen clumps and increase aspen regeneration in these areas.

Shaded Fuel breaks Prescription:

Minimum spacing of 30 feet between tree canopies,
Spacing between under story and over story fuels a minimum of 15 feet to prevent laddering
All trees pruned to a minimum height of 12 feet from the ground but no more than 2/3 of the total live crown height
Density of the under story canopy a maximum of 30% cover.
Clumps of trees (no more than 4 stems per clump) may be left and treated as a single tree. Crown spacing to the nearest tree should be a minimum of 40 feet from clumps.
All spruce, sub alpine fir, Douglas fir, and lodge pole pine currently infested with bark beetles will be removed.

Defensible Space Prescription:

Zone 1 (30 feet around all structures):

Grass should be maintained as a lawn.
Shrubs should be no taller than 18" and should be fire resistant. (see Appendix D for a potential list)
Use of broadleaf trees or conifers that lend themselves to lower branch pruning.
Spacing between tree crowns should be a minimum of 30 feet.
All trees should be pruned to a minimum of 12' above the ground but no more than 1/3 of the living crown.
No down dead material on the ground.
Maximum of one standing dead (no needles) tree.
All conifers infested with bark beetles shall be removed.

Zone 2 (the area between 30 feet and 60 feet from structure):

Grass should be no higher than 8 inches and should be cut when curing has occurred

Spacing between shrubs should be twice the diameter of the shrub foliage.

All trees should be pruned a minimum of 10' from the ground but no more than 1/3 of the live crown.

All down dead material that is 50 % sound should be removed from the ground.

Spacing between tree crowns should be a minimum of 15 feet.

All conifers infested with bark beetles shall be removed.

Zone 3 (the area from 60 feet to 200 feet from the structure):

Trees should have a minimum of 6' between crowns

Trees should be pruned a minimum of 6' above the ground

Clumps of trees (no more than 4 stems per clump) may be left and treated as a single tree with a minimum crown spacing of 15' to the nearest crown.

Down dead material should be no higher than 12 inches from the ground.

Heavy accumulations (more than 30 % coverage of down dead material) of sound (more than 50% sound) down dead material should be removed.

A maximum of 2 standing dead trees (no needles present) per acre.

All conifers infested with bark beetles shall be removed.

Brush Communities

Convert brush communities to grass communities 50 to 100 feet around structures; fences, compressor sites, above ground pipelines, power lines, buildings, and well sites. Maintain thru mechanical or prescription burning practices.

Continue with a cooperative prescribe burn program involving private, state and federal lands when possible.

Leave Trees

Aspen Areas – Leave all aspen trees. Aspen clumps (clump = 3 or more aspen). Leave **NO** live conifers within the clumps and within 10-20 feet of the clump if the clump is composed of mature trees. If clump is composed of seedlings or saplings, remove all live conifers within clump and within 10-20 feet of the clump.

Conifer stands should be thinned to a basal area* of 80. This will be about 100 to 150 trees per acre. The spacing would be between 20 to 25 feet between tree stems. If clumps of trees are to be left, clumps should include no more than 8 stems and the surrounding vegetation should have a spacing of 30 feet between the outer edges of the crown of the clump. All ages and species can be maintained within the stand for diversity, however, if pruning is not done, sub alpine fir and spruce trees would be the preferred species for removal over Douglas fir and lodge pole pine.

In pure lodge pole pine stands and other coniferous stands where the succession stage would like to be changed to the initial stage, small clear-cuts no larger than 30 acres in size may be utilized. All down dead material (that is at least 60% sound) and slash created from cuttings that is 3 inches in diameter and larger should be piled for burning, chipped and spread, or removed from the stand. All other slash and remaining chipped material should scattered to lie within 6 inches of the ground. Standing dead trees left for snags should be 80% needle less and should be no more than 3 per acre. When leaving snags, consider spike topped, dead topped living trees, trees as alternatives to standing dead. Prune limbs on remaining trees 6'-15' from the ground. Do not remove more than 50% of the live crown of the tree.

Prescribed Burn Aspen Objectives

Aspen – Immediately post burn attain 70-90% of under story vegetation scorched.

Immediately following burn 50-80% removal of duff and litter.

Attain > 50-80% mortality of aspen trees (>5.9"DBH) within one year of burn.

Attain > 85% conifer mortality within one year of burn.

Attain < 20% bare ground cover, within 5 years post-treatment.

Attain 2000-5000 aspen stems/acre at 6ft height over 70% of the treatment area with a strong terminal leader.

Attain at least 1000-2000 aspen stems/acre at 10-15 ft. height with a strong terminal leader, within < 15 years post treatment.

Maintain ungulate herbivore levels at < 30% browse levels of terminal, main leader.

(***BA**: Basal Area. A measure of relative density of trees in a stand. A measure of the square footage of tree stem material per acre.)

Roads

There are several roads that provide access to fire suppression apparatus thus allowing the suppression forces to keep wild land fires small. These roads should be kept open for recreational use, fuel reduction projects and access for suppression activities. If roads need to be closed for public safety, wildlife habitat protection, or other reasons, they should be reclaimed to prevent erosion by out sloping, water barring, and seeding and blocked with a gate and or signed to prevent public vehicular access but could allow for travel by fire suppression action resources.

Generally speaking, all wild land interface subdivisions in the county lack the necessary road width to safely evacuate homeowners and at the same time allow for ingress of emergency response vehicles. The majority of these subdivisions have one way in and one way out, with little or no turn around space for fire trucks, and very few pull outs or widening. An effort should be made to widen and improve these roads for better access for fire equipment.

Signing of state, county and subdivision roads is very important. Work needs to continue in the maintenance of these signs and new street signing in subdivisions along with correct rural numbering be put up. With the purchase of new fire apparatus, weight limits of existing bridges should be checked and upgraded where needed.

APPENDIX E

Private Wildland Stewardship Program And Wildfire Mitigation Program

Approximately ??? % of Sublette County's population lives within the wild land interface. Most properties of larger size or acreage within the county consist of forested or brush covered lands.

The purpose of this document is to be used as a format for developing a wild land stewardship program for private properties in order to reduce the on-going risk of wildfire. The goal of this program is to assist property owners in developing long range wildfire protection for their property.

I. Definitions

Chipping: A method of grinding or chipping branches or brush into small chips.

Defensible Space: An area surrounding structures which consists of green space, limited fuels or fire resistive fuels. This space slows advance of the fire and allows for fire fighting operations.

Fuel: Any type of vegetation available to burn during a wild land fire.

Fuel Modification: A method of changing fuel types, species or arrangement of fuels in order to reduce the wildfire risk.

Fuel Reduction: A method of removal of hazardous fuels, including over-growth, downed dead or standing dead vegetation.

Ladder Fuels: Ground fuels of sufficient height to come in contact with lower hanging branches of trees.

Liming: Cutting lower branches of a tree in order to increase the space between ground fuels and limbs.

Prescriptive Treatment: Prescriptive treatment is a process by which vegetation is identified for removal. Vegetation to be removed should meet one or more of the following criteria:

1. Entirely or substantially within the drip line of another tree.
2. Diseased or insect infested.
3. Providing a significant ladder fuel effect.
4. Dead, dying or damaged by wind or mechanical means.
5. Hazardous to life, improvements, or property.

Professional Forester: A graduate of an accredited institution of higher education with a degree in Forest Management or related field, or equivalent training, education and job experience who is actively working in the field.

Slash: Waste vegetation remaining following cutting operations.

Thinning: Removal of vegetation in order to reduce the density of growth on a particular parcel of property.

Vegetation Management Plan: A plan for managing growth of vegetation after prescriptive treatment has been accomplished.

Wildland/Urban Interface: A mix of developed and undeveloped properties where development poses a fire risk to undeveloped resources, and the risk of wildfire pose a risk to developed properties.

Wildland Stewardship Plan: A plan for managing the overall health and wildfire resistance of forested, undeveloped property or wild land/urban interface property.

Zone: A Zone is an area which surrounds your house. Zone 1 is a measurement of 0'-30'. Zone 2 is 30'-60'. And Zone 3 is 60'-100'.

II. Property Assessment

The Wild land Stewardship Plan should be developed by a Professional Forester with adequate knowledge of the property in question. All Wild land Stewardship Plans must include the following information:

Wildland Stewardship Plan

Objectives:

1. A statement outlining the property owner's overall goals and objectives for the plan.

Ownership Information:

1. Name, address and phone number of the property owner.
2. Name, address and phone number of the person or Professional Forester preparing the plan.
3. Legal description and physical address of the property.

Property Description:

1. Acreage.
2. Elevation.
3. Aspect.
4. Vegetation types.
5. Soil types.
6. Existing improvements and property activities.
7. Cultural features on-site.
8. Hazards to the property.
9. Property Access.
10. Visual assessment.
11. Site map.

Property Management:

1. Current Conditions:
 - a. Vegetation data (timber, brush, grasses, age, density, etc.).
 - b. Disease / insect impacts.
 - c. Wildfire hazards.
 - d. Erosion issues.
 - e. Flora / fauna issues (wildlife assessment, Endangered Species Act issues, etc.).
 - f. Previous mitigation activities.

2. Proposed activities:
 - a. Fuel Reduction
 1. Thinning (fuel types, volume, size, methodology, etc.).
 2. Liming.
 3. Ladder fuel reduction.

 - b. Fuel modification
 1. Plant type conversion.
 2. Thinning / arrangement.

 - c. Defensible space:
 1. Zone 1 plan.
 2. Zone 2 plan.
 3. Zone 3 plan.

 - d. Waste management:
 1. Hauling.
 2. Chipping.
 3. Recycling (firewood, product sales).
 4. Slash burning.

 - e. Proposed schedule.

Vegetation Management:

1. Short term objectives and activities.
2. Long term objectives and activities.

III. Mitigation Strategies

Wild land/Urban Interface fires have destroyed thousands of homes in the last decade. While building your home in the trees not only enhances its appearance and value and can also increase its warm, friendly feeling, one must understand, however, that a "home in the woods" is not without risk. These risks can be reduced if you plan ahead and are aware of your surroundings.

This program is designed to give you information to use to develop a plan to build and maintain your home in a way that reduces the potential for tragedy. This program is meant to enhance your knowledge and allow you to make fire safe decisions. Those whose homes have survived wildfire have put to use information like this to protect themselves.

BUILDING YOUR HOME IN THE WOODS

1. Choosing Your Building Site:

One of the more important things you can plan is where to build. From a fire response point of view, seclusion can work against you. It helps to understand a little about fire behavior when choosing your site.

Avoid building in a natural draw or swale. Homes located in natural chimneys, such as narrow canyons and saddles, are especially fire-prone because wind is funneled into them. This accelerates fire's rate of spread by forming an uphill draft.

Locate your home on the most level portion of the site. Fire spreads at a remarkably faster rate as slope increases. Even minor grades, like ten percent, can accelerate the spread of wildfire. Homes on narrow ridges without adequate setback are often lost because flames and convection heat hit the home directly. Homes located on the slope, especially stilt and cantilevered homes, are particularly vulnerable.

Avoid dense stands of timber, especially if that timber is aged or over-mature. Choose property and a building site which is accessible or can be made accessible.

Building Site Checklist

Site:

- Building site is not in a draw or canyon.
- Building site does not overhang slope.
- Building site does not utilize steep slope.
- Building site is not in heavily timbered area.
- Building site has acceptable access.

2. Access:

Access to your home is crucial. There is a difference between access and good access. Good access provides the fire department the ability to reach your home to protect it.

Good access consists of a roadway which is 20 feet wide that is capable of supporting the weight of fire trucks. The grade of the road should not exceed 8%. The side slope of the road should not exceed 2%. Branches and overhangs should be trimmed overhead to a height of 13'6". Good access has more than one way in and out.

If your access design uses a cul-de-sac you should access it with a 20' wide road. The minimum radius of the cul-de-sac should be 45' and its length less than 800'.

Curves should be maintained with radius of not less than 50' for all access roads.

Clearly mark your roadway. Road names and/or numbers are important. If your home is visible from the road be sure to put your house numbers where they can be seen.

Bridges can be a serious problem for fire apparatus. Ensure that the load limit is capable of supporting the loads of fire apparatus. Make sure the width of the bridge will allow trucks to pass across.

Access Checklist

Roads:

- _____ Two different points of access to development.
- _____ Roads dedicated to the public and maintained.
- _____ Minimum 60' right of way with 20' paved surface.
- _____ Curves not less than 50' radius.
- _____ No dead-ends, cul-de-sacs no longer than 600-800'.
- _____ Cul-de-sacs not less than 90' diameter.
- _____ Direct access from residences to street.
- _____ Grades do not exceed 8%.
- _____ Clearly marked house numbers visible from street.

Bridges:

- _____ Same width of paved surface as adjoining road.
- _____ Minimum load limit 20,000 lbs. (10 tons) per axle.
- _____ Built of non-combustible material.

3. Building of Your Home

There are a few things you must consider in a wild land area when deciding how you want your home to look. What type of roof will I have? What type of siding will I use? Will I have a deck? Does my home have a woodstove in it? Will I have large picture windows?

All of these questions can be answered in a way that will provide you with a higher level of fire protection. You must consider both the interior and exterior aspects of your construction.

Overhangs and vents can pose serious problems to your home when subjected to a fire. Reduce overhangs or box eaves to protect the house from ignition and heat or flame entrapment. Under-eave vents should be located near the roofline rather than near the wall. Orient exterior attic and under-floor vents away from possible fire corridors and cover them with wire screen, not to exceed 1-1/2 inch mesh. Screen unenclosed, under-floor areas.

Roof: It is strongly recommended that the roof be constructed of noncombustible or fire resistant materials. If you must use cedar shakes, use shakes which have been pressure treated with fire retardant materials.

Siding: Wood is very popular in our area but it burns. Metal siding, stucco, brick or stone, or fire retardant treated materials will lessen the chance of ignition.

Deck: Most homes in our area have a deck. Avoid building a deck that overhangs a slope. Fire resistant materials are a good idea.

Wood stove: Wood stove related fires are the largest single cause of fires in our area. It is extremely important that your stove is properly installed. In a wild land area part of the installation must include spark arresters to prevent sparks from igniting the trees around your home.

Windows: Install only thick, tempered safety glass in large picture windows. Shutters made of fire resistant materials can protect glass which is exposed to fire.

Building Your Home Checklist

The following checklist covers structures hazard reduction measures that homeowners can take.

Chimney:

- _____ Spark arrestor (max. 1/2" holes).
- _____ Clearance: 15' all sides.
- _____ 2' higher than surrounding roof within 10' of chimney.

Combustible exposure control:

- _____ Eaves extend less than 3' and enclosed.
- _____ Decks or balconies enclosed beneath.
- _____ Stilt construction fire resistant.
- _____ Firewood and other materials fully enclosed or more than 25' from structure.
- _____ Outbuilding 50' from structure.
- _____ Non-combustible patio or deck covers and mats.

Louvers/Windows/Openings:

- _____ Louvers covered with 1/4" mesh wire screen.
- _____ Louvers located in vertical wall rather than soffit of overhang.
- _____ Protection of windows and glazed areas.
- _____ All openings (e.g. garage) have doors or means to cover opening.

Roofs:

- _____ Fire resistant to level required by hazard.
- _____ Roof in good condition.
- _____ Gutters cleared of debris.
- _____ Overhanging trees minimum 15' from chimney thinned, maintained or cut down.

Other Building Issues:

- _____ House number clearly visible from street.
- _____ Storage tanks for hydrocarbon fuels or propane minimum 10' from building.
- _____ Outside hose bibs/faucets with garden hose attached.

Mobile Homes:

- _____ Under trailer area skirted in non-combustible material.
- _____ Roof of metal or non-combustible material.
- _____ Added decks, porches, or fences of fire-resistant materials.

Building Spacing:

- _____ Minimum spacing between buildings: 60'.
- _____ Minimum property line setback: 30'.
- _____ Minimum separation between primary and accessory buildings: 50'.

Water: (See APPENDIX C)

- _____ Hydrants available. Spacing _____. (According to local conditions).
- _____ Dependable power source for water.
- _____ Individual emergency water storage (minimum 2500 gallons per structure). If no public water, must be accessible with 1-1/2" line from the source for individual protection use.

Electric Power:

- _____ Underground transmission.
- _____ Above ground power lines, trimmed free of vegetation preferably 10' clear.
- _____ Use of large cross arms to prevent shunting of circuits by vegetation.

LANDSCAPING FOR SAFETY

Landscaping for safety may be the most important feature of your wild land/urban plan. Vegetation management is a process by which you can minimize your exposure to wildfire.

Provide a fuel break around your home to a distance of thirty feet. Thin out stands of trees to create some clearance between trees to within 100 feet of your home. Be sure to remove any dead-fall or standing dead timber from these areas.

A number of strategies can be used within these “zones” to reduce your risk. Fuel removal, fuel reduction, fuel type conversion, or combinations can be used. It is recommended that in “zone 1”, within 0'-30', any or all of these be utilized. In “zone 2” or , within 30'-60', reduction, conversion and combination can be used, as well as in “zone 3”, which is within 60'-100'. The aspect or slope of your property can influence the effects of landscaping. The steeper the slope the faster the fire moves upward. If you live on or adjacent to a steep slope, it may be necessary to extend your zones by 100' or more. In other words, a house at the top of a steep slope may need to reduce fuel for several hundred feet below in order to reduce the speed of a fire moving up hill.

Within these zones the ground need not be bare, but can include a lawn of green grass, ornamental shrubbery, or individual trees pruned so limbs do not touch the ground. These plants should not allow fire to move from natural growth to structures. Prune all branches around your residence to a height of eight to ten feet. Remove all dead limbs and accumulations of needles and debris. This greatly reduces the probability of fires reaching the crowns of trees, and also can add to the visual quality of your landscape.

Do not allow any portion of any vegetation to extend to within 15 feet of the outlet of a stovepipe or chimney. Keep all trees adjacent to any building or structure free of dead or dying wood and moss.

Many fires are ignited by the electrical lines leading from the main power line to the house. Install these lines underground whenever possible. If this cannot be done, trim all limbs that come in contact with the wires. Stone walls can act as sheet shields and deflect flames. Use swimming pools, decks, and patios to create a safety zone.

Incorporate natural water supplies such as ponds or streams into your landscaping. These may become important sources of water for fire fighting purposes. Ensure that you have ample number of hose bibs on the exterior of your home.

The use of fire resistance plants can also play an important role in designing your home. Not all of the following plants may grow in our area. We recommend you contact your local landscaper.

Ground Cover:

Replace bare spaces and weedy patches near your home with ground covers, including turf, perennial flower beds, vegetable gardens, fire resistant clump grasses, and mulches.

If irrigated, turf can provide an effective firebreak.

Herbaceous perennials and annuals also require irrigation. These species include low growing or spreading plants like sedums, sempervivum, potentilla, snow in summer, vinca, virginia creeper, wheat grass, rice grass, tall fescue, marigold, zinnia, strawberries, clover, and others.

Plant perennial bunch grass, such as crested wheat grass, at least ten to twenty feet and as much as three hundred feet wide around the perimeter of your property to create a fire break. Crested wheat grass is largely fire resistant and does not usually require irrigation. It will help suppress the growth of highly flammable annuals such as cheat grass. Grass can be grazed or occasionally mowed to further reduce fuel accumulation.

Mulch helps control erosion, conserve moisture, and reduce weed growth. It can be organic, such as straw, compost, leaf mold, bark chips, shredded leaves, or lawn clippings; or it can be inorganic, including plastic materials, gravel, rock, and decomposed granite. Avoid using pine bark and thick layers of pine needles; they tend to smolder and are difficult to extinguish.

Perennials:

Choose hardy perennial flowers that are adapted to the climate. These green, leafy, succulent plants are harder to burn. Irrigation and regular weeding improves the fire resistance of yarrow, flax, columbine, penstemon, low sage, shasta daisy, pinks, sulfurflower, gillardia, daylily, candytuft, iris, lupine, primrose, poppy, dusty miller, lambs ears, and others.

Shrubs:

Some deciduous shrubs can be used in foundation plantings if maintained, watered, and well spaced. Evergreens such as dwarf conifers and junipers tend to ignite easily; avoid them unless well-spaced. Place them at least twenty feet from any structure and prune regularly.

If maintained, hedge rows can deflect wind and filter wind-blown embers. Plant continuous deciduous hedges at least thirty feet from your home only if you will irrigate and remove dead branches regularly. Fire resistant shrubs include bush cherries, hedging roses, bush honeysuckles, currant, cotoneaster, sumac, tamarisk lilac, shrub apples, and buffalo berry.

Trees:

Deciduous trees can be clumped, scattered, or planted in green belts or windbreak patterns. Evergreen trees tend to ignite easily and should be avoided unless well spaced.

Selection of trees is not as important as placement. Inside the yard, space trees at least thirty feet apart and prune to a height of eight to ten feet. Crowns should not touch and branches should not overhang your house. Reduce combustible material under and between trees. Large areas or difficult sites may require professional assistance.

A well designed deciduous windbreak can slow or even stop a fire before it reaches structures. Plant windbreak trees no more than ten feet apart and at least five times the mature tree height from the area to be protected, or one hundred feet. Plant on flat areas or at the base of slopes. Fast growing trees require frequent irrigation to keep them healthy. Maples, poplars, willows, aspen, and birch all require moist root zones to remain fire resistant.

LANDSCAPING CHECKLIST

- _____ Use of zone management for landscaping.
- _____ Zone 1 is 0'-30' with fuel reduction used.
- _____ Zone 2 is 30'-60' with heavy brush or trees thinned out.
- _____ Zone 3 is 60'-90' with heavy brush or trees thinned out.
- _____ Branches trimmed to a height of 8'-10'.
- _____ Branches trimmed 15' from chimney.
- _____ Branches trimmed away from electrical lines.
- _____ Water sources incorporated into the landscape.
- _____ Fire resistant plants used or intermingled into landscapes.

HOME MAINTENANCE

Once your home is built there are some simple things which you should do to maintain that level of fire safety which you have already built in. Keep tree branches trimmed back away from your roof to prevent transfer of fire. Keep the branches trimmed at least 15 feet from the terminus of your chimney. Keep the plants surrounding your home well watered to prevent excessive drying. The green zone within thirty feet of the home is most critical for fire and watershed safety. Maintain nonflammable landscaping such as lawns, border plantings, flower gardens and vegetable beds.

Structures such as pools, concrete decks, and recreation areas help to reduce fire hazard close to the home. In the thirty to one-hundred foot green zone around the home, remove dead woody plants. Occasionally prune trees and shrubs and eradicate weedy species. Beyond one-hundred feet, reduce the amount of vegetation and thin out the most flammable species. Remove older vegetation while favoring younger plants to reduce the possibility of major wildfires.

Make sure that electrical lines are kept clear of vegetation. Keep pine needles and deciduous leaves from building up on the roof and rain gutters. Be careful with the use of outdoor cooking equipment. Use of outdoor cooking equipment has started a number of serious fires. Equip permanently installed fireplaces with a screen over the outlet and a method of controlling in-draft. Clear at least five feet of flammable material around fireplaces and trim overhanging limbs to within 15 feet. Portable barbecues present a special problem; use extra caution in disposing of briquettes remaining after use. Place them in a closed metal container located in a safe place or extinguish them in a bucket of water. If you have a gasoline, diesel or propane tank, make sure it is at least 10 feet from structures. Make sure all vegetation is cleared away from the tanks. Be especially careful with ignition sources around tanks.

HOME MAINTENANCE CHECKLIST

- _____ Branches trimmed 15' away from chimney.
- _____ Gutters are cleaned of debris.
- _____ Tree limbs trimmed to a height of 8'-10'.
- _____ Vegetation trimmed away from electrical lines.
- _____ Vegetation is trimmed 30' from the house.
- _____ Vegetation is well watered.
- _____ Permanent barbecues have appropriate screens.
- _____ Portable barbecues are in a stable location.
- _____ You have a bucket for ashes from the barbecue with a tight fitting lid.
- _____ Vegetation is cleared away from fuel tanks.

IV. DEVELOPING YOUR FIRE PLAN

It is important that you have a plan to respond to a wildfire. Remember, like most fires, wildfires start small. With a plan and preparation you may avert the large ones.

Report the fire right away. 911 is used in most areas.

You must know how to get out of your house. Two ways out is critical. You must know your evacuation routes so when it is time to leave you have a clear understanding of where to go. Know places of refuge in case the fire approaches too quickly. If you must leave, leave the lights on in your home. If the electrical power does not fail, such lights will call attention to out-of-the-way homes during hours of darkness. Leave doors and windows closed but unlocked. It may be necessary for firemen to gain quick entry into your home to fight fire. If it becomes necessary to drive through fire, roll up the car windows, turn on the headlights, and drive slowly. A motor vehicle can be driven through considerable fire provided the driver remains calm. Look out for other vehicles and pedestrians when driving through smoke-filled streets.

Part of your plan should include fighting the fire if necessary. You should be prepared with proper equipment. The following list gives you some ideas.

EQUIPMENT CHECKLIST

- _____ Hoses pre-connected to all faucets; hoses should be 5/8 inch or larger inside diameter, and 100 feet long.
- _____ One or more long-handle, round-point shovel.
- _____ One ladder long enough to reach the roof of the building easily.
- _____ One rake (leaf, garden, asphalt, or special firefighting).
- _____ One or more 5-pound multipurpose fire extinguisher.
- _____ Axe.
- _____ Hoe (heavy duty or special firefighting).
- _____ One or more fire buckets.
- _____ Backpack water pump.
- _____ Portable gasoline-powered water pump.
- _____ Protective clothing for anyone who may not evacuate before the arrival of a fire. This includes boots, long trousers, long-sleeved shirt or jacket, helmet or other head covering, gloves, and goggles. Cotton clothing is a "must;" synthetics can melt onto your skin.

Members of your family should have tasks to avoid duplication of effort in an emergency. Equipment should be assembled and easily located to avoid searching for what you need.

If you must stay, evacuate your pets and all family members who are not essential to protecting the home, if possible.

Dress properly to survive the fire. Wear cotton fabrics, not synthetics. Wear long pants and boots and carry with you for protection a long-sleeved shirt or jacket, gloves, a handkerchief to shield your face, and goggles.

Remove combustible items from around the house. This includes lawn and poolside furniture, umbrellas, and tarp coverings. If they catch fire, the added heat could ignite your house.

Close outside attic, eave, and basement vents. This will eliminate the possibility of sparks blowing into hidden areas within the house. Close window shutters.

Shut off any natural gas, LPG, or fuel oil supplies at a point as far from the structure as the plumbing allows.

Test the water system including any pumps on the property, each valve, and each hose.

Connect all garden hoses and leave them coiled loosely in a convenient location.

Place large plastic trash cans or buckets around the outside of the house and fill them with water. Soak burlap sacks, small rugs, and large rags. They can be helpful in beating out burning embers or small fires. Inside the house, fill bathtubs, sinks, and other containers with water. Toilet tanks and water heaters are important water reservoirs.

Shut off all water except fire fighting valves. The house should be plumbed so that closing one valve will accomplish this. If it is not, close each interior faucet and valve.

Locate garden hoses so they will reach any place on the house. Use a spray-gun type nozzle, adjusted to spray.

If you have portable gasoline-powered pumps to take water from a swimming pool or tank, make sure they are operating and in place.

Place a ladder against the house opposite the side of the approaching fire. If you have a combustible roof, wet it down only when fire is imminent. Premature use of water will only waste a resource that could save your home once the fire arrives. Back your car into the garage and roll up the car windows. Disconnect the automatic garage door opener so that, if the power fails, you can still open the door by hand. Close all garage doors.

Place valuable papers and mementos inside the car in the garage for quick departure. Any pets still with you should also be put in the car.

Close house to prevent sparks from blowing inside. Close all doors inside the house to prevent draft. Open the damper on your fireplace to help stabilize outside-inside pressure, but close the fireplace screen so sparks will not ignite the room. Turn on a light in each room to make the house more visible in heavy smoke.

Turn off pilot lights to minimize the possibility of igniting a ruptured fuel line.

If you have time, take down flammable drapes and curtains. Close all metal blinds or noncombustible window coverings to reduce the amount of heat radiating into your home. This gives added safety in case the windows give way because of heat or wind. If coverings are not available, cover windows with aluminum foil or other heat reflective material.

SUMMARY

The protection of your home from wildfire is something on which you can have a great deal of influence. This information gives only the very basic steps for protection from the devastation of an uncontrolled wildfire. For more information concerning prevention of wildfire and steps to take when wildfire occurs please contact.

Sublette County Firefighters Association.
P.O. Box 117
Boulder, WY 82923

APPENDIX F

BLM Continues Hazardous Fuels Removal in Hoback Ranch Subdivision

BLM's Pinedale Field Office plans to resume work on a fuel break in the Hoback Ranches Subdivision this summer as part of the Wildland-Urban Interface Communities at risk program.

Hoback Ranches was identified as a Community-at-Risk for wildfire in 2001. It was determined to be the number one BLM priority in Wyoming for Communities-at-Risk. As a result of the National Fire Plan, the Wyoming Division of Forestry began offering grants for removal of hazardous fuels on private lands in the subdivision.

Summit Forestry was awarded an Indefinite Deliver-Indefinite Quality contract last year and been working on a fuel break in the 75-acre section. Due to inclement weather, the project was not completed.

In May 2002, a contract was awarded for Risk Assessment and Mitigation Plan of the Hoback Ranches Subdivision. This plan was funded and administered by BLM and prepared by the Dynamic Corporation. The plan determined the buildup of wood, brush and grass in the area to be hazardous and identified what measures needed to be taken to prevent wildfire.

In October 2002, the completed Risk Assessment and Mitigation Plan identified four needs for the area as fuel breaks and fuel reduction, water storage facilities, road improvements, and community education and outreach. The survey identified the area as a risk to lives, homes, property, wildlife habitat, recreation, potentially historic sites, grazing, soil stability, water quality and timber due to the buildup of vegetation.

The mitigation plan identified actions to reduce hazards of wildfire as continual cooperation among state, federal and local agencies, reduction of diseased timber and fuel loadings on public lands, private lands and roads, construction of shaded fuel breaks along the borders between public and private lands, and shaded fuel breaks are areas where shorter trees and large shrubs are removed to create an area free of ladder fuels.

In 2003 the U.S. Forest Service and BLM co-funded a contract to determine if the project was in compliance with the National Environmental Policy Act. This was signed on June 24, 2004. A contract was awarded last year to survey the private and federal land boundaries to assist in project development. The contract was funded by the Forest Service and BLM.

In 2004, BLM began developing an assistance agreement with Hoback Ranch Subdivision to fund mitigation, education and planning activities on private lands. The funds from the agreement were used to provide qualified volunteer firefighters with the equipment necessary to fight wildfire within the subdivision. The funds also began a fuel-thinning project along Rim Road.

BLM and the U.S. Forest Service committed funds last year to begin the first phase of construction of shaded fuel breaks along boundaries. The agencies used the National Indefinite Deliver-Indefinite Quality contract for fuels contractors.

Bids for a stewardship contract under the authority of the Healthy Forest Restoration Act are being accepted. This contract would assign responsibility to complete the fuel break to the company or organization awarded the contract. Bidding continues for the stewardship contract.

BLM is currently working with Hoback Ranches Community for further assistance agreement funding to contusion projects.



Home in Wyoming's Hoback Ranch Subdivision. (7-8-WY-1.tif)

Wyoming State Forestry Division		SUBLETTE COUNTY FIREFIGHTERS (FP09)	
District4			
National Fire Plan Accomplishments			
Category	Sub-Category	Number	Category Description
Assessments	Acres Assessed	1090	broad, general, not specific to an ownership
	Residences/Businesses	50	structures lived in or occupied for business
	Other buildings	17	outbuildings, not lived in or occupied for business
	Miscellaneous		
Mitigation	Acres Treated	70	fuel treatments to reduce fuel loading
	Volume Harvested		MBF, tons, cubic feet, cords
	Defensible Spaces Created	41	fuel treatment around residences/businesses/buildings
Water Sources	Dry Hydrants	0	new dry hydrants
	Cisterns	0	new cisterns
Stewardship Plans	Number of Plans	42	number of stewardship plans written
	Acres covered	1090	total acres of stewardship plans written
Communities Assisted	Communities	1	as defined by Western Governor's Assoc. (3/01)
Economic Action	New Businesses Started	1	new business as a result of fire plan work
	Businesses Expanding Capacity	2	existing business expanding to meet demand
Info and Educ. Outreach	People - Individuals	200	Contacts with individuals
	Groups	8	Contacts with groups
	Publications		Letters/brochures/etc.
	News Releases	4	Newspaper/radio/tv.
	Media Tours/Events	4	site visits with media
Training	Number of People	54	mitigation related training of public/volunteers
Forest Health	Suppression		acres and/or trees
	Prevention (acres)		acres treated
	Survey (acres)		acres surveyed
New Project Planning	Plans		New plans for previously and newly identified communities and unfunded projects. Identify, coordinate, and prioritize future projects through 2010.

APPENDIX G

Links

Bridger-Teton National Forest: www.fs.fed.us/btnf

BLM: www.wy.blm.gov/pfo/nepa.htm.

Wyoming State Forestry: <http://slf-web.state.wy.us/forestry.aspx>

FIREWISE: www.firewise.org

FIREWISE Wyoming: <http://www.firewisewyoming.com>

Firewise Landscaping and Construction Checklists:
<http://www.tetonfires.com/pdf/fwlists.pdf>

National Interagency Fire Center (NIFC): www.nifc.gov