

# **Lincoln County, Wyoming**

## **Community Wildfire Protection Plan**



**2015**

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Community Wildfire Protection Plan**

**SIGNATURE AUTHORIZATION: My signature below verifies that I have reviewed and approved the Lincoln County Community Wildfire Protection Plan.**

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STATE FORESTER Date  
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CHAIRMAN Date  
ALPINE FIRE DISTRICT  
ALPINE, WY 83128

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# **Lincoln County, Wyoming Community Wildfire Protection Plan**

## **Executive Summary**

This plan will guide land managers, elected officials, planning departments and other citizen groups in their efforts to minimize the effects of wildfire upon the communities within Lincoln County. Implementation will require the collaboration of several jurisdictions including the US Forest Service, Bureau of Land Management, Wyoming State Forestry Division, National Park Service, County Fire, Fire Districts, and local Fire Departments. Mitigation of fuels that increase wildfire potential is an ongoing task and the plan will require periodic review and amendment.

## **County Background**

Lincoln County is a diverse community with several types of land use patterns, vegetation, precipitation, and access issues. In the recent past, the Alpine 2 Fire and the Commissary Fire illustrated the need for comprehensive fire planning. Fuels reduction, road and water access improvement, homeowner education, and subdivision design will be the basic goals of the plan.

The county is 4,000 square miles in size. Approximately three fourths of the land area is publicly managed. The population is approximately 18,000. The southern two thirds of the county consist of ranchland areas with hay meadows, high desert sagebrush areas, and timbered foothills. Most of the population is located in the towns of LaBarge, Opal, Kemmerer, Diamondville, and Cokeville. Some existing rural subdivisions continue to develop in the foothill areas. The northern third of the county consists of the Star Valley area on the Salt River drainage and the Greys River areas that are primarily in the Bridger-Teton National Forest. The population of Star Valley is predominantly rural with rather high growth rates in areas that interface wildlands. Only 37% of the Star Valley population is located within the towns of Afton, Thayne, Star Valley Ranch, and Alpine.

## **Introduction**

Reducing wildfire risk to communities, municipal water supplies, and other at-risk federal land as well as enhancing efforts to protect watersheds and address threats to forest and rangeland health, including catastrophic wildfire, across the landscape are a couple of "purposes" of the "Healthy Forest Restoration Act of 2003 (HFRA)".

The Healthy Forest Restoration Act of 2003 allows local government, local fire departments, and the state agency responsible for forest management, in consultation with interested parties and the federal land management agencies, to develop a Community Wildfire Protection Plan that identifies and prioritizes areas for hazardous fuel reduction treatments.

The Wildland-Urban Interface, Municipal Water Supply Systems, and epidemics of disease or insects are components of the Community Wildfire Protection Plan.

In 2006 the County Commissioners requested the County Fire Warden and the Office of Planning and Engineering to work with the fire districts and Wyoming State Forestry to develop a Community Wildfire Protection Plan for the county as described in the "Healthy Forests Restoration Act of 2003". In 2014 work to revise and update the plan began. A group consisting of Lincoln County Emergency Management Employees, Wyoming State Forestry, United States Forest Service, Bureau of Land Management, Lincoln County Planning and Engineering, and Lincoln County Fire (including representatives from each fire department in the county and Lincoln County Fire Warden) set a goal to complete the revision in 2015.

The Community Wildfire Protection Plan shall be a dynamic document subject to regular review and update as necessary. The plan will be presented to the Lincoln County Planning and Engineering Commission for inclusion into the Comprehensive Plan. The plan will guide design and regulation of future development in the county. Of particular interest are the increasing demands for rural residential subdivisions as well as the increasing impacts of recreation uses on or near the public lands.

The document includes maps depicting seventeen (17) areas within Lincoln County that have been identified and prioritized through the collaborative efforts of the working group named above. The areas of concern have been prioritized based upon fuel hazards, risk from wildfire, infrastructure, and other values such as view-sheds and watersheds. The drought experienced in recent years adds real credence that management of our forest resources is imperative for much needed irrigation water as well. Epidemic insect and disease infestations and /or catastrophic wildfires serve no useful purpose for the communities of Lincoln County, Wyoming.

### **Background**

Prior to the "Healthy Forests Restoration Act of 2003", Lincoln County Fire, Wyoming State Forestry, and federal wildland cooperating agencies within the county have taken an active role in beginning the needed work in the wildland-urban interface.

- The county has a County Wildfire Mitigation Coordinator.
- Lincoln County and private landowners (with technical assistance from the Wyoming State Forestry Division) have completed mitigation work around homes in the Alpine area, Pomeroy Basin, and within the Town of Star Valley Ranch.
- The Bureau of Land Management has completed an assessment and mitigation plan for the Kemmerer Field Office and has initiated mitigation based upon the plan.
- Wyoming State Forestry Division has written an assessment and mitigation plan for the Alpine, Star Valley Ranch, and Pomeroy Basin
- Fossil Butte National Monument has developed and implemented a fire management plan that includes prescribed fire to reduce fuel loads within the National Monument. (Fossil Butte Plan approved 12/17/04)
- The Town of Star Valley Ranch has received recognition as a Firewise Community, USA in the fall of 2014.
- The Bridger-Teton National Forest and Caribou-Targhee National Forest are completing fuel mitigation projects along forest boundaries adjacent to the Towns of Alpine and Star Valley Ranch.

**Management Considerations** - where applicable to the respective jurisdictions:

All jurisdictional entities should seek opportunities to develop water sources, where feasible, that would be applicable to wildfire suppression, structure protection, and structural firefighting.

These water sources may include spring development, dry hydrants, pond restoration, and storage facilities.

- **USFS:**

1. Continue implementing the prescribe burn program in place.
2. Where applicable, use harvesting and thinning to maintain diversity in both age-class structure and stand densities to curtail epidemic insect and disease outbreaks and to reduce the potential for large scale stand replacing wildfires.
3. Continue working with special use leases to perform mitigation work and seek additional opportunities to provide incentives to lessees for completed work.

- **BLM:**

1. Where applicable, use harvesting and thinning to maintain diversity in both age - class structure and stand densities to curtail epidemic insect & disease outbreaks and to reduce the potential for large scale stand replacing wildfires.
2. Continue to implement prescribe burning to facilitate fuels reduction.

- **County & Municipal Governments:**

1. Seek to establish fire restriction criteria.
2. Develop fire protection guidelines/rules that enhance life safety & structure survivability as well as suppression effectiveness.
3. Coordinate future developments with adjacent jurisdictions or property owners in regards to the wildland-urban interface and wildfire hazards.

- **Fossil Butte National Monument:**

1. Continue to implement the Monument's fire management plan to reduce the potential for large-scale, stand replacing wildfires and wildfires that spread beyond the Monument's boundary.

- **County Fire:**

1. Continue work with private ownerships:
  - Emphasize landowner responsibilities to create fire resistant structures/communities and landscapes.
  - Information & Education regards to "Fire Wise" opportunities. Seek hazard fuel reduction incentives/funding if appropriate. Develop evacuation plans if appropriate/needed.
  - Evaluate infrastructure needs such as access, water sources, and turnarounds - especially those relevant to firefighter safety.
2. Seek funding opportunities for infrastructure needs if needed.
3. Continue to collaborate with neighboring agencies in wildland fire prevention and suppression strategies.

- **WSFD**

1. Continue assistance to County Firewise Coordinator with assessments and mitigation needs as necessary.
2. As warranted, continue coordination and assistance to the county and municipal governments, the planning commission, fire districts, fire boards, and fire warden in regard to funding opportunities, fuels mitigation coordination and other facets of fire protection for the health and safety of the county citizenry.
3. Continue assistance to Lincoln County with hazardous fuels reduction through cost-share programs and technical assistance as needed and practical.



## **Enabling Authority**

### **18-5-208. Coordination of planning efforts with federal agencies.**

The board of county commissioners of a county which has officially adopted a comprehensive plan pursuant to W.S. 18-5-202(b) may participate in efforts to coordinate the plan with federal regional forest or other resource management plans as provided in the Federal Land Policy and Management Act of 1976 and federal regulations adopted pursuant to that act, including, but not limited to, Title 36, of the Code of Federal Regulations, part 219.7 and Title 43, of the Code of Federal Regulations, part 1610.3.

## **GOALS**

*Help align federal, state, and local fuels reduction efforts with that of Lincoln County.*

### **Background:**

Lincoln County contains approximately 1.8 million acres of publicly managed lands. The economy of Lincoln County and its respective communities is dependent upon the multiple uses of these lands. Due to these facts it becomes imperative that Lincoln County actively participates in planning for the wise use and management of these lands. Provisions in the Federal Land Policy and Management Act (FLPMA), Council on Environmental Quality and other management and planning regulations provide for Lincoln County to engage in and have a strong voice in the planning and decision making process associated with managing its public lands.

### **Objectives as related to wildfire:**

1. Develop a working relationship with public land managers and coordinate efforts on fuels mitigation, wildlife, grazing, access, economic, social, and cultural issues.
2. Promote and support public land uses consistent with orderly development and efficient use of renewable and non-renewable resources.

*Restore ecosystems and watersheds to maintain ecosystem health.*

**Background:**

Lincoln County has always been dependent upon the resources located within the county for its economic base and sustainability of the communities located within its borders. The wise use and conservation of these resources is essential to the continuance of economies, customs, and cultures that have existed for several generations.

There are many reasons why people have chosen to live in Lincoln County. One of these reasons is the abundance of unspoiled environmental resources. For the past several years Lincoln County has experienced a large amount of growth which in turn has put pressure on the environmental resources. The citizens of Lincoln County feel a strong need to protect these resources and still allow for growth.

As of 2014, over 5,100 subdivision lots existed in Lincoln County with approximately 47% of those lots having a structure located on the lot. Each of these lots have or will have a septic system to deal with the liquid waste, an increased demand for water, roads for access, and solid waste. All of these impacts create an additional consumption of land and resources.

**Objectives:**

1. Prevent on-site erosion and impacts to streams.
2. Promote safe and adequate water quality and quantities.
3. Protect the riparian, wetland and 100 year flood plain areas of Lincoln County from encroachment and impacts by development.
5. Guard against air pollution and maintain the air quality of the county.
6. Restore fire to the ecosystem.

## *Reduction of Hazardous Fuels on Lands within Lincoln County*

### **Background:**

Approximately a quarter of the acreage in Lincoln County is managed by private landowners. The Lincoln County Firewise Program helps promote fuels mitigation on private lands by administrating the Cost-Share Program consisting of federal grant dollars passed through the Wyoming State Forestry Division, while offering education to landowners concerning proper fuels reduction. This program has been in effect in Lincoln County since 2005 and has recently been awarded further funding through the State Fire Assistance program (2014).

### **Objectives:**

1. Reduce risk and loss from wildfire including structures.
2. Improve safety for first responders and property owners.
3. Help landowners understand fuels mitigation as it relates to their property, while working with Homeowners Associations to educate homeowners on appropriate fuels mitigation.

## *Protect Communities*

### **Background:**

Through the education of community members and county officials, the enactment of CWPP recommendations and the further involvement of fire departments, communities are more aware of and prepared for the hazards of wildfire events. The county, government agencies, and county fire departments coming together to discuss and work on wildfire issues has created unity and consistency.

**Objectives:**

1. Educate communities about wildfire hazards.
2. Reduce losses from wildfire.
3. Improve safety for first responders and property owners.
4. Combine the efforts of federal, county, and state agencies to work agency efforts on mitigation of wildfire issues within the county.
5. Collaborate to improve access for fire response.

**Areas of Concern -by priority - (1 being highest priority and 17 being lowest priority)**

- |                  |                      |
|------------------|----------------------|
| 1. Pomeroy Basin | 10. Carter Creek     |
| 2. Alpine        | 11. LaBarge          |
| 3. Cokeville     | 12. Blackfork        |
| 4. Lower Valley  | 13. Hamsfork         |
| 5. Upper Valley  | 14. Kemmerer         |
| 6. Bear River    | 15. Sage Junction    |
| 7. Canyon Club   | 16. Fontenelle Creek |
| 8. Smith's Fork  | 17. Raymond          |
| 9. Fossil        |                      |

**Area Descriptions**

**1. Pomeroy Basin**

The area consists of two housing developments, scattered ranch summer homes, and scattered cabins. The area also has a major power line crossing and it is part of the sage grouse core habitat. The area has a history of wildfire incidents from lightning strikes; in 2000 the area had the Fontenelle Fire. In 2002 the Commissary Ridge fire burnt 3500 acres, causing subdivision evacuations and destroying two homes in the area. The area was hit hard by the pine beetle, and has a substantial amount of dead standing Lodgepole Pine. The remainder of the living trees

consists of mostly subalpine fir with some mixed conifers. There are also large areas of sage and aspen forests within Pomeroy. The subdivisions are built on the side of Commissary Ridge; the topography would play a crucial role in wildfire behavior in the area.

### **Commissary Ranches and Spring Canyon Ranches**

Commissary Ranch is located 20 miles from Kemmerer off County Road 306. Spring Canyon Ranch is located 25 miles from Kemmerer off of County Road 306. The Hazard Level for this area is high.

The land ownership surrounding the area is BLM, State, and private. The properties range in size from one acre to several acres. Dwellings are generally cabins. At this time very few residents live there year round. The firewise program is active within the subdivision, and continues to help private property owners do fuels mitigation work.

The roads within both subdivisions are narrow and dirt. They are minimally maintained and there is no winter maintenance (most of the dwellings are second homes). The roads inside the subdivision are steep in places and narrow. Road signage is a minimum and many properties do not have addresses on them. The subdivisions have a large problem with weeds and invasive species, including cheat grass. Due to the distance from an organized fire department, the non-existence of hydrants, and lack of access properties in these areas would be at great risk in the event that fire approaches the area.

## **2. Alpine**

The Alpine area is based on the boundaries of the Alpine Fire District. Alpine sits at the far northern part of Lincoln County. Due to its proximity to Teton County and the associated job/labor market, Alpine has experienced rapid growth in population and development of private lands throughout the area. The growth is mostly single family dwellings and some denser developments of apartments and hangars around the airpark, with businesses scattered throughout.

### **Lakeview Estates, Alpine Pines Subdivision, Grand Lake Addition, Bridger Homes, and Grandview Subdivisions**

These subdivision areas are located in Alpine and have homes built into the forested steep hillside. The lots range in size from a quarter of an acre to one acre. Most of the homes built in the wooded areas face the problem of steep narrow roads, many of which have only one way in and out. Some of the roads have sharp turns that make maneuvering larger fire apparatus very difficult. In the winter months some of the roads are not accessible under adverse conditions. The wooded areas have heavy fuel loads of dead and green standing trees and a lot of down and dead material with heavy deciduous underbrush.

The Town of Alpine was a recipient of a CAFA grant that was utilized to accomplish fuels mitigation work in the Grandview and Lakeview subdivisions. This work consisted of two phases and resulted in accomplishing fuels reduction work on 71 lots. A total of 670+ trees of varying sizes were removed along with copious amounts of under-story vegetation in the form of mountain maple, chokecherry, and serviceberry. Residual trees on participating lots were also treated by removing ladder fuel branches to create vertical spacing between ground and aerial fuels. The project was complete in the fall of 2014.

The Town of Alpine does have a water system and most areas where hydrants are located have adequate water flows. Many of the hydrants are spaced more than 1000 feet apart which starts to cause some trouble in moving water for firefighting.

### **Rees Subdivision, Aspen Ridge Estates, Targhee Landing, Palisades Pines, Alpine Retreat, Indian Creek and Alpine Village Plat 3, Amended Filings 2, 5 and 7**

These subdivisions are located north of the Snake River and east of Highway 26, and are located in a wooded area that abuts National Forest. All of the parcels located there have a heavy fuel load with many dead and green standing trees, down and dead materials, and heavy underbrush. Roads are narrow with driveways that are long with no turning radius. Some homes are built on steep down slopes. In the case of fire, most water has to be shuttled in.

A water system was put in the Rees subdivision in 2005 and now has water hydrants located 600 feet apart. The main road is a one way road and under normal conditions is the only way in and out. Aspen Ridge Estates has put in a road that connects the subdivisions; this connection is for emergency services only and is gated. The road accessing Aspen Ridge and Targhee Landing is a narrow two-way road with steep grades that make it dangerous for fire apparatus in the winter months. The subdivisions have a water system with good water flows. The lots range in size from a quarter acre to three quarter acres. Some homeowners in these areas are participating in the Lincoln County Firewise Program, but the subdivision has a large number of absentee lot owners that are not interested in participating in fuels mitigation at this time.

The area north of the Snake River and west of the Highway 26 is mostly flat grassland that is bordered on the west by Palisades Reservoir. Homes built in this area have little or no threat from wildfire.

### **Deadman Ranch and the Box Y Ranch**

There are several inholdings within the Forest boundary that are within the Alpine Fire District. Deadman Ranch and the Box Y Ranch are approximately 35 miles up the Greys River Road from the Town of Alpine and have been approved for a housing development, in addition to the current structures at the location. The cabins are accessible by vehicle in the summer and by snowmobile in the winter. There is also a USFS Guard Station located in the area.

### **McCoy Creek and Alpine Retreat 1 & 2 Subdivisions**

South of the Town of Alpine near the Idaho border is a mixture of subdivisions and private parcels of land with a number of homes built in forested land. McCoy Creek and Alpine Retreat 1 & 2 Subdivisions abut up to the Idaho border. The roads into these subdivisions are narrow, one way roads with steep grades and sharp bends with little annual maintenance. There is no water system and at this time no electrical power to Alpine Retreat.

### **Broken Wheel Subdivision**

Continuing south on Highway 89 from Alpine to Etna there is old and new development on both the east and west sides of the valley. Many homes on the east side of HWY 89, including the Broken Wheel Subdivision are in forested areas and abut national forest. Most of these homes are at danger from wildland fires. The older developments have narrow roads with steep grades and sharp bends. Most have no water system. The fuels loads rate from light to heavy with a lot of standing dead trees and heavy underbrush. The newer developments have better roads and water systems, but many still face the threat of wildfire because of heavy fuel loads. Continuing education of homeowners along with participation of local government has and will continue to help reduce this threat.

### **Snake River Sporting Club**

The Snake River Sporting Club is northeast of the community of Alpine along eastbound Highway 26. The subdivision is in both Lincoln and Teton County. Although most homes are on a golf course, some are located within heavy timber. The area has demonstrated a high potential for extreme fire behavior, as observed in the East Table Fire in 2003. The homes are multi-million dollar homes and present a substantial financial loss. The area has a high risk for human caused fire because of high recreational use of the canyon. The response time is long from both Alpine and Bondurant. There is stationed equipment at Hoback Junction in Teton County.

### **3. Cokeville**

The community of Cokeville lies along U.S. Highway 30, 45 miles north and west of Kemmerer and 54 miles south of Afton. Land ownership within the fire management area is private and BLM with State ground intermixed. The community of Cokeville itself has a good water supply and a fire department to respond to fire interface needs. The perimeter of community has grass meadows and sage brush communities surrounding it. Structures within the community are of mixed construction and type, from brick to log to ordinary frame construction with mostly asphalt shingles or steel roofing. The area has large growth sagebrush that has demonstrated a pattern of extreme fire behavior. Most of the fires in the area are started by lightning strikes and/or railroad work. Although the department has a quick response time, they have limited



resources available for large fires. The BLM resources are stationed several hours away in Rock Springs. The area has ranked high for fire hazard levels.

### **Taylor Subdivision or Longview Estates**

Two miles south and west of Cokeville is the Taylor Subdivision, or Longview Estates, a community of 30 to 40 year round structures that has a sage brush interface on three sides of it. This area is located along County Road 207 and has limited access, with two main roads, that both intersect County Road 207. Water supply for this area is residential wells, leaving fire protection to the shuttling of water from nearby Cokeville. There have been several fires in and around this subdivision in the recent past, some due to natural causes, such as lightning, but also human caused ignitions. The sage brush community is directly west and south of the subdivision, which is also directly in line with the prevailing winds in the area.

## **4. Lower Valley**

The Thayne Fire Department Service Area has several areas of concern. Many of the subdivisions within the response area have narrow roads that do not have the adequate turning radius for an engine. Several roadways are also narrow with steep grades, which would make it hard to evacuate residents.

### **Salt River Heights**

This area is located off of U.S. Highway 89, mile post 96 in the Narrows and is located on the east side of the highway. Access to this subdivision is a steep grade and has tight turns making it hard for a response in the summer and almost impossible in the winter. There is a heavy fuel load problem consisting of a mosaic of brush and ladder fuels mixed with conifers. There is only one way in and out of this area, and no water supply.

### **Narrows Vista Subdivision**

This area is off County Road 128 and behind Salt River Heights. It has the same issues as Salt River Heights.

## **Star Valley Ranch**

SVR has access-problems along with water supply issues. The south end homes are mostly located along the golf courses and in the foothills among the aspen trees with some brush and dead and down ground fuels among a heavy grass component. North Star Valley Ranch has more road ~~problems~~ issues and the homes are built in conifer forests. Most of the trees are aspen mixed with conifers and there is a lot fairly large amount of dead and down trees and brush, making it a high risk for fire.

The Town of Star Valley Ranch has made the Firewise program a priority by offering incentives for residents to participate. The Town has the largest percentage of residents completing the Firewise program in the county. In 2014 they were recognized as a Firewise Community, USA. At this time a fire assessment was completed on the entire town and can be viewed at:

[http://starvalleyranchwy.org/uploads/ckfiles/files/8A\\_2%20-%20SVR%20Firewise%20Assessment%20and%20Plan%20final%208%202014%20\(3\).pdf](http://starvalleyranchwy.org/uploads/ckfiles/files/8A_2%20-%20SVR%20Firewise%20Assessment%20and%20Plan%20final%208%202014%20(3).pdf) .

The subdivision abuts to USFS land, the land that has undergone fuel treatments along sections of the perimeter of the subdivision.

## **Bedford Turnerville**

This area has some of the same issues as Star Valley Ranch, mainly along the foothills. Areas of concern are consist of Strawberry Subdivision, Fertile Acers, Pine View Estates, and Green Valley Subdivision. They all have access, water, and fuel load problems. The town is surrounded mostly by USFS Land.

## **Freedom Area**

The area faces logistical problems caused from being adjacent to the Caribou-Targhee Forest and issues related to being under an agreement to be served by the Freedom, Idaho Fire Department.

## **5. Upper Valley**

Afton is the only incorporated community within the upper valley, as well as the main business center. The Fire Management Area includes North Sprague Creek, Forest Dell, private cabins

around Cottonwood Lake, and a private in-holding up Dry Canyon. The response times for fire crews within the area are short and more wildland resources are available from the Afton Volunteer Fire Department than most departments within the county. A large majority of wildland fires are started by agricultural burning and contained quickly.

The area does have some issues along the foothills on the east side of the valley. There are ground fuels with no water supply. The west hills have an access problem that can be an issue when shuttling water as the big trucks. The larger fire apparatus need room to turn around and pass each other and the current road system causes a challenge to this. This has become a bigger issue with homes going in around the North Sprague Creek and Crow Creek area. There is a large amount of construction growth on the west hills abutting the Caribou-Targhee National Forest and the Idaho Stateline.

### **Cottonwood**

The Greys River District Office of the Bridger Teton National Forest leases five cabin sites above Cottonwood Lake. These cabins are located in a wooded area surrounded by heavy fuel loads consisting of dead and green standing trees, and down and dead materials with heavy underbrush. The roads to Cottonwood Lake are narrow and long with no turning radius big enough for larger fire vehicles.

### **Forest Dell**

This is the largest area of concern within the Upper Valley Fire Area. It is the only area in which there is a high probability of multiple ignitions of homes in a wildfire event.

### **Tygee-Sage Valley, ID**

Although the Afton Volunteer Fire Department is the first responder to the area it is not located within Lincoln County, Wyoming. It is a threatening area to Lincoln County because of the possibility of a fire spreading from these valleys into the Upper Valley Area, and risking homes along the Wyoming -Idaho State Line.

## **6. Bear River**

The Bear River Area is located on Hwy 30 between Sage Junction and the community of Cokeville. There is a history of wildfires in the area. It is not uncommon for wildfire ignitions to begin through lightning strikes in the area or along the railroad, which runs the length of the area. The area has scattered ranches and homes. It has two power substations and a major power line crossing it. There are also two large natural gas lines that have above ground access vales that could pose a threat if exposed to fire. Wildfire habitat losses would also be significant due to the importance of the wildlife refuge and associated habitat located within the area.

Other than private land the area has a large area of wildlife refuge lands and Bureau of Land Management property. The area has large growth sagebrush that has demonstrated a pattern of extreme fire behavior. The area is known for strong winds, which have been a contributing factor in fire behavior. Both Kemmerer and Cokeville Volunteer Fire Departments respond to the area, but both have a twenty to thirty minute response time. The BLM resources are stationed several hours away in Rock Springs.

## **7. Canyon Club**

Located along U.S. Highway 89 just inside the Wyoming border near Geneva, Idaho, 25 miles north of Cokeville and 30 miles south of Afton, this area consists of conifer tree stands and sage brush communities. The Canyon Inn is a dinner club and hotel with common frame construction that lies between the highway and Thomas Fork Creek. Thick underbrush, willows, conifers, and sage brush all surround this structure. The only access is on and off of the highway directly north of the buildings. The fire department response for this area is from Cokeville, 25 miles to the south. The only water supply is the well for use by the facility and Thomas Fork Creek, which is frozen in winter months.

Other areas of concern are 2 to 3 miles east on US Highway 89 where a small subdivision of part time and full time residents have homes in a loose community. The main road, Homestead Road, forks from the main BLM road shortly after leaving the highway. This is the main road in and

out of the area; fire protection efforts are again from Cokeville and have to access the area from US Highway 89, approximately 28 miles away. This area is more immediately surrounded on all sides with a sage brush community with conifers on the surrounding ridges and hills. Water supply for this area would be shuttled water and drafting operations from a small creek and Thomas Fork Creek near the highway.

### **Hobble Creek**

The Hobble Creek area is located in a remote area within the Bridger-Teton Forest near Cokeville. There is a small private inholding of land 2 miles north of the Hobble Creek campground near Lake Alice. This area is surrounded by dense conifer stands on steep slopes; the area was hit hard by the pine beetle epidemic and has large amounts of dead standing and downed slash from Lodgepole Pine. The area also includes the USFS Hobble Creek Campground. The main campground area completed a fuels mitigation project in 2008, in which all dead and unhealthy timber was removed to create defensible space. The few private cabins and the campground area are at considerable risk of wildfire. There is only one road in and out of this area, and it has a high potential to endanger/entrap fire personnel responding to the fire. The road condition also limits the ability for larger engines and equipment to respond. Water could only be drafted from Hobble Creek to supply fire suppression efforts.

### **8. Smiths Fork**

The **Pine Creek Ski Area** is located on County Road 204, approximately 7 miles east and north of Cokeville. This area is significant because of the economic impact it has on the Cokeville area and the investment that Lincoln County has in the facilities there. As a ski area, the surrounding topography is steep slopes that are covered in conifer and sage brush. The ski lodge and the ski lift are the main areas of concern, due to their cost. There is only one road in and water supply is limited to the water in Pine Creek. Fire suppression efforts come from Cokeville and would be shuttling and drafting operations.

This area is prone to natural fire hazards, such as lightning; with a few strikes and fires nearly every year. The lodge is constructed of a cement basement with log covering the vast majority of

the building. The area also has scattered ranches and homes and is in the sage grouse core habitat area. The area has a fair response time from the Cokeville Volunteer Fire Department.

The area also includes the Kelly Guard Station of the USFS. The cabin underwent a defensible space project in 2006, but has substantial beetle kill surrounding it. It also has a long response time from the Cokeville Volunteer Fire Department or the USFS engine stationed in Kemmerer.

## **9. Fossil**

The Fossil Area is dominated by sagebrush communities and high buttes. The area is located 10 - 20 miles west of Kemmerer and consists of Fossil Butte National Monument, Williams Gas Compression Station, and several large ranches with few roads. The area is part of the BLM Sage Grouse Core Habitat Area. If there was to be a fire in this area, it could be detrimental to local tourism, gas supplies to the Northwest, and the livelihood of the ranches. This area also includes the Twin Creek Subdivision.

## **Twin Creek**

Located 10 miles to the west of Kemmerer, off of US Highway 30, the land ownership is primarily BLM and private. The properties vary in size. The dwellings are mostly mobile and modular homes on permanent foundations with out-buildings for horses, equipment, etc. There is only one adequate main dirt road in. Residents are year round and roads are maintained throughout the year. There is no water supply or hydrants in the subdivision.

## **10. Carter Creek**

The Carter Creek area is located southwest of Kemmerer. The area includes the Carter Creek Gas Plant. The plant is an H2S Plant, which poses significant risk to firefighters during the event occurrence of a wildfire or other response event. It also has lots of scattered oil and gas resources and pipelines. It is part of the sage grouse core habitat area and contains historical trails. There is low accessibility to the area, and a very long response time from the Kemmerer Volunteer Fire Department.

## **11. LaBarge**

This area consists of the Town of LaBarge and surrounding homes. The area has a vast number of oil and gas resources. It is surrounded by sage and grasses. It includes the outlying subdivision of Viola (which is on LaBarge Creek), this subdivision is increasingly an area of concern as more homes are being built. LaBarge Volunteer Fire Department is very limited on man power; the continued growth of the area could cause significant problems in firefighting.

## **12. Blackfork**

The Blackfork Area consists of all of the Blackfork Oil and Gas Field, as identified by the Bureau of Land Management. The area consists of mostly BLM lands, with some scattered state and private parcels. There are also scattered ranches along the Hamsfork River, Enterprise Gas Plant, William Gas Plant, and CIG Gas Plant. It is surrounded by various pipelines and oil and gas resources. It is part of the sage grouse core habitat area. There have been frequent fires in the area due to industry and the railroad. Industry includes the various plants, pipelines, tanks, and well pads. The vegetation is mostly low growth sage and grasses. The response time is long in some places in the area, as engines come from Kemmerer and LaBarge with at least a 30 minute response time in some cases.

## **Opal**

The area includes the Town of Opal. The Town of Opal has been evacuated on several occasions, as well as Highway 30 being closed due to railroad and industry caused fire/response events. The response time is short and fires seem to be contained quickly.

## **Slate Creek**

There is significant infrastructure in the area. There is oil and gas, power lines, gas lines, Fontenelle Dam, and power plant. The area has cultural resources and is part of the sage grouse core habitat area. There are two Bureau of Reclamation Campgrounds as well as summer and year-round residents and ranches along the Green River.

### **13. Hamsfork**

The Hamsfork Area is located along Highway 233 north of Kemmerer. The area is along the Hamsfork River and a majority of the private land is river bottom and irrigated hay fields. The mountains are sage and grass, and are grazed annually. The property is a mix of private, BLM, and State sections. The area has scattered ranch homes, along with some new home developments closer to the town of Kemmerer. The area has several historical graves, cabins, trails, and springs. It has some summer homes, oil and gas wells along Dempsey Ridge, as well as a major power line crossing. The area has a short response time from the Kemmerer Volunteer Fire Department.

### **14. Kemmerer**

The Kemmerer area is the general area including the towns of Kemmerer/Diamondville, and Oakley. The Town of Kemmerer/Diamondville is surrounded mostly by sage and grass mountains. Kemmerer is an industrial town, and this area also includes a power plant, coal mine, and various pipelines. The response time is quick to the area. The Oakley subdivision is located in a steep draw southeast of Kemmerer on Highway 30. It is known for strong up canyon winds, and has a history of human caused fires.

### **15. Sage Junction**

The Sage Junction area is half way between Cokeville and Kemmerer. There is critical infrastructure associated with this area. Electric substations, high voltage transmission lines, US HWY 30 and US HWY 89, the Oregon Shortline Railroad, and Williams Northwest Pipelines all traverse this area.

The area is surrounded by a sage brush community. Fire suppression efforts come from both Cokeville and Kemmerer, both of which are approximately 22 to 23 miles away and respond as mutual aide to one another in this area. The water supply is drafting and shuttling when the small creek near this area is running water or not frozen over.



## **16. Fontenelle Creek**

Fontenelle Creek Area is located at the south end of Fontenelle Reservoir. It consists of several ranches that are located on the meadows of Fontenelle Creek as well as a portion of the reservoir and the oil and gas field to the east of the reservoir. The area consists mostly of lake-bottom, meadows, and rock. There have been frequent fires along the ranches on Fontenelle Creek. The fires have been spring time human caused fires that burn mostly willows, but have caused the ranch area to be evacuated.

## **17. Raymond**

Raymond is located north of Cokeville. It is made up of mostly scattered ranches. It is mostly irrigated hay meadows with sagebrush ridges. In the past years there has been an increase of cheat grass along the ridges in the area. The area is all private with small amounts of State lands. There is a quick response time from the Cokeville Volunteer Fire Department.

## **Conclusion**

This revision of the Lincoln County CWPP was conducted to re-evaluate the county's priority areas and areas of concern through multi-agency collaboration.

## APPENDIX A

## LINCOLN COUNTY COMMUNITIES AT RISK

<b>Area Name</b>	<b>Priority Ranking</b>	<b>Associated Resources and Communities</b>	<b>Risk Category</b>
Pomeroy Basin	1	Commissary Ranches, Spring Creek Ranches, Scattered Ranches	High
Alpine	2	Town of Alpine, Alpine Village, Flying Saddle, Rees, Alpine Meadows, Box Y, Lakeview Estates, Alpine Pines, Grand Lake, Bridger Homes, Grandview, Aspen Ridge, Targhee Landing, Alpine Retreat, Indian Creek, Deadman Ranch, McCoy Creek, Broken Wheel, Snake River Sporting Club	High
Cokeville	3	Town of Cokeville, Taylor Subdivision, Scattered Ranches	High
Lower Valley	4	Town of Thayne, Town of Star Valley Ranch, Salt River Heights, Narrows, Vista, Freedom, Bedford, Turnerville	High-Med
Upper Valley	5	Town of Afton, Cottonwood, Forest Dell, north Sprague Creek, Crow Creek	High-Med
Bear River	6	Scattered Ranches, Cokeville Wildlife Refuge, Railway, High Voltage Transmission lines	High-Med
Canyon Club	7	Scattered homes and businesses, Hobble Creek Area	Med
Smiths Fork	8	Pine Creek Ski Area, USFS Kelly Guard Station, Scattered Ranches	Med
Fossil	9	Fossil Butte National Monument, Williams Gas Compression Station, Electrical Substations, High Voltage Transmission lines, Railway, and Pipelines, scattered homes	Low-Med
Carter Creek	10	Carter Creek Gas Plant, historical trails	Low
LaBarge	11	Town of LaBarge, Viola Subdivision, scattered homes, Oil and Gas Resources	Low

Blacksfork	12	Blacksfork Oil and Gas Field, Fontenelle Dam and Power facility, scattered homes, BOR Campground, Town of Opal, Williams Gas Plant, CIG Gas plant, Enterprise Gas Plant	Low
Hamsfork	13	Scattered Ranches and homes	Low
Kemmerer	14	Town of Kemmerer, Oakley Subdivision, Scattered rural homes, PacifiCorp Plant, Coal Mine	Low
Sage Junction	15	Electrical Substations, High Voltage Lines, Pipelines, Railroad	Low
Fontenelle Creek	16	Scattered Ranches	Low
Raymond	17	Scattered Rural Homes	Low

## **APPENDIX B**

### **GENERALIZED FUEL TREATMENT OBJECTIVES AND GUIDELINES**

These options provide example management techniques that can be generally applied to vegetative cover types found in Lincoln 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.
4. Maintain fine fuels to a minimum through sound grazing practices, prescribe fire applications, or mowing/trimming.

Raise canopy base heights to at least 8-15 feet above the ground in mixed species stands (Lodgepole Pine, 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 of a minimum of 25 feet on both sides.

Around all structures use a defensible space prescription. **Note:** Because of the nature of the fire service in Wyoming; 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%.

Maintain fine fuel loadings to a minimum through good grazing practices, prescribe fire application, or mowing/trimming.

### **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 8-15 feet throughout the treatment units. Reduce surface fuels of large down woody material to 5-7 tons per acre and maintain this condition over time. Remove conifers from aspen clumps and increase aspen regeneration in these areas.

### **Shaded Fuelbreak Prescription**

- Minimum spacing of 20 feet between tree canopies, Spacing between understory and over-story fuels of 8-15 feet to prevent laddering.
- All trees pruned to a minimum height of 8-15 feet from the ground but no more than 1/3 of

the total live crown height.

- Density of the understory 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, subalpine fir, Douglas-fir, and Lodgepole 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. 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 8-15ft 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.
- Maintain an area of non-combustible material 3-5 ft away from structures.
- Clear pine needles, leaves, limbs and other combustible debris from roofs and gutters.

#### **Zone 2 (the area between 30 feet and 100 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 200 feet from the structure):**

- Trees should have a minimum of 8' 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, grazing, 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, seedlings, or saplings.

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, subalpine fir and spruce trees would be the preferred species for removal over Douglas-fir and Lodgepole Pine.

In pure Lodgepole 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 40 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 (to a depth no greater than 4 inches and not spread within any Defensible Space), 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 8-15ft from the ground. Do not remove more than 1/3 of the live crown of the tree.

### **Prescribed Burn Aspen Objectives**

**Aspen** – Immediately post burn attain 70-90% of understory 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.)

### **Wildlife Considerations**

The varied habitats that exist within the different communities make it hard to generalize habitat treatments. When specific projects are considered, the Green River office of the Game & Fish Department, both terrestrial and aquatic biologists, will be consulted to determine needed mitigation actions. However, all fuels projects will have limited or no activity between November 15 and April 15 to minimize disturbance in crucial winter ranges of big game. Surface disturbance with ¼ mile of sage grouse leks will be avoided during March 1 to May 15. Projects involving known raptor nests will have very limited activity to no activity during the period between February 1 to July 31 for the critical nesting and brood rearing period.

When locating and improving fill and drafting sites along creeks, rivers, ponds, and reservoirs, care needs to be given to not alter the stream channels. If a need exists for channel modification, the fishery personnel with the Green River office of the State Game & Fish Department should be contacted for direction.

During suppression actions, firefighters should try to use water sources within the same drainage. This will minimize the spread of nuisance species, such as whirling disease parasites, into new drainages.

### **Roads**

There are several roads that provide access to fire suppression apparatus thus allowing the suppression forces to keep wildland fires small. These roads could 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 wildland 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 widened areas. 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 check and upgraded where needed.