# Wildland Fire Mitigation Plan Power County, Idaho

#### **Prepared for:**

Power County Commissioners 543 Bannock Ave. American Falls, Idaho 83211

#### **Prepared By:**

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Power County Commissioners
Power County, Idaho

Prepared by:



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#### ADOPTION BY THE POWER COUNTY COMMISSIONERS

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#### **Executive Summary**

The Power County Wildland Fire Mitigation Plan objective is to provide Power County residents, public and private organizations with assistance and recommendations to mitigate wildfire risk and hazard vulnerability presented by wildfires within Power County. This objective is reached by public and official participation identifying and documenting areas of high and medium risk to wildfire hazards. Actions identified to decrease wildfire risk and hazards within Power County are focused on public safety, emergency services, county infrastructure, natural resources, and property protection.

The Power County Wildland Fire Mitigation Plan will tier to the Idaho State Implementation Strategy for the National Fire Plan. The FEMA Local Hazard Mitigation Plan Worksheet was used for plan formulation, and Target Dates. Development and review of the plan was accomplished by the Power County Wildland Fire Mitigation Planning Group with participation from Federal, State, County agencies and private citizens.

Organizational structure of the Power County Wildland Fire Mitigation Group was managed under a modified Incident Command System (ICS). The use of ICS provided optimal information exchange, hazard identification and mitigation recommendation development. Public participation was accomplished by public workshops, distribution of questionnaires regarding wildfire concerns and suggestions, participation by homeowners, and utilization of contractor-collected public input.

The priorities of the plan were developed by the Power County Wildland Fire Mitigation Planning Group and are standard priorities for most risk assessments, hazard reduction activities and wildfire incidents:

- 1. Protection of Life: Identify and provide mitigation recommendations for areas of high wildfire risks that are in or adjacent to homes and communities, and improve critical county infrastructure facilities.
- 2. Protection of Property: Identify and provide mitigation recommendations for properties of moderate and high wildfire risk. Increase public awareness though education, training and information sharing addressing wildfire risks and mitigation measures.
- 3. Protection of Resources: Identify resources that are at risk to wildfires and implement natural resource planning to protect these resources. To include protection and mitigation of at risk watersheds, vegetation, fish, wildlife and maintain soil stability.
- 4. Values: Scenic, historical, cultural.

Implicit in these priorities are the need to:

Improve Wildfire Emergency Services: Improve county infrastructure and wildfire emergency service planning, training, communications, and equipment.

Increase Public Awareness of Wildfire Prevention: Increase public awareness of firewise practices and wildfire prevention though education training and information sharing.

Improve Partnerships for Implementation: Utilize partnerships currently established and develop additional participation with State, Federal, and private organizations.

The following summary table (Table 1) presents the hazards, in priority order based on the impact on the plan objectives, and the mitigation goal to alleviate the hazard. Each mitigation goal also presents the target dates for completion of the goal and an estimated cost for all the implementation ideas for achieving the goal.

The page numbers in the goal column point to the implementation ideas implementing that goal. The implementation ideas provide sources and resources for the implementation of the goal. These may include various potential grant or funding sources and organizations that could provide expertise or assistance for goal implementation.

As the administrators of the Power County Wildland Fire Mitigation Plan, the Power County Board of Commissioners are the authority and have the responsibility to adopt the plan.

The plan maintenance section includes recommendations for annual plan review and monitoring. A bi-annual re-evaluation of priorities for action items and progress is also recommended. A total plan revision should be conducted every five years. This plan maintenance will be directed by the Power County Commissioners, and coordinated with the Power County Disaster Services Specialist and the Power County Volunteer Fire Fighters. In addition, participation will be needed by various positions represented in the Power County Wildland Fire Mitigation Group, coupled with public input.

An economic analysis template/direction examining potential loss as a result of wildfires in Power County is provided in Appendix D. Though total potential loss to catastrophic wildfires is variable by year, the cost/effectiveness of fuel treatments, county infrastructure improvements, and emergency wildfire services improvements will provide benefits to the primary objectives: protection of life and property.

Table 1. Hazard/Mitigation Summary

			HAZARD	MITIGATION		
Life	Rating Prop	Res	Description	Target Date	Cost	
High	High	High	Power County has a limited communication network with some portions of the county without any communication coverage at all.	Provide additional communication capability for Power County dispatchers, Fire departments and residents. (see page 20)	Fall, 2004- Spring 2005	\$90,000
High	High	High	Power County has limited sources of water for fighting wildland fires and many of those sources are vulnerable to disruption of service in the event of a wildland fire.	Provide additional sources of water at strategic locations throughout Power County and means of supplementing or replacing service in the event of disruption. (see page 21)	Annually	\$16,300+
High	High	Med	Power County has limited fire station locations and equipment that result in poor response times to fires in outlying portions of the county.	Provide Power County VFDs with facility improvements and equipment as identified in the Three Rivers RC&D Survey of Volunteer Fire Departments. (see page 22)	Spring 2004- Spring 2005	\$56,250
Med	High	Med	Power County is not fully covered by fire protection districts and the districts that are present in the county are not fully coordinated together.	Provide complete and/or coordinated fire protection coverage for all residents of Power County. (see page 24)	Winter 2004	Unknown
Med	High	Med	Power County has numerous county roads, infrastructure, communication sites, developments and communities that require hazardous fuels reduction.	Reduce identified hazardous fuels buildup in high-risk areas on a countywide scale. (see page 25)	Annually	Unknown
High	High	Low	Power County lacks defensible space and fire resistant building materials in some developments and at private homes.	Create and implement defensible space standards by homeowners and developments and utilize standard Fire Protection Guidelines for Residential Development In the Wildland/Urban Interface for subdivisions as	Winter 2004- Spring 2006	\$4,000

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<sup>&</sup>lt;sup>1</sup> Hazards were rated as High, Medium, or Low impact on the plan objectives for protection of Life, Property, and Resources.

			HAZARD	MITIGATION					
Life	Rating Prop	Description		Description Goal					
Life	гюр	NG3		identified in NFPA 1144, Standard for Protection of Life and Property from Wildfire, 2002 edition. (see page 28)	Date				
Med	Med	Med	Power County volunteer fire departments are have specific needs to meet standards or requirements pertaining to: Training, PPE, Communications, Equipment, Apparatus and Facilities.	Provide Power County VFDs with required training, communications, PPE, Apparatus, Facility improvements and equipment as identified in the Three Rivers RC&D Survey of Volunteer Fire Departments. (see page 28)	Spring 2005- Spring 2006	\$157,900			
Med	Med	Med	Power County citizens have had limited firewise education, information and awareness with regards to wildland fire.	Gain community or development participation in firewise activities including education and information distribution. (see page 30)	Annually	\$5,750			
Med	Med	Low	Power County Developments/subdivisions/homeowners are without emergency wildfire plans or other emergency plans in place.	Develop County Fire-Emergency Mobilization Plan, and County/Interagency Communications Plan with Landowners and Cooperators in Power County and develop subdivision/homeowners wildfire and other emergency operations plan(s) as requested. (see page 32)	Winter 2005- Summer 2006	\$2,000			
Low	Med	Low	Power County has a large amount of land in the CRP increasing fuel loads beyond what would normally occur on tilled farmland.	Apply fuels treatment – hand, mechanical, prescribed fire or combination of treatments to reduce fuels loads on CRP land. (see page 33)	Spring 2005	Unknown			
Low	Med	Low	Power County has no comprehensive inventory of homes and values at risk in the event of a wildland fire.	Develop a comprehensive inventory of homes and provide the inventory to dispatchers and VFDs in times of emergency response. (see page 34)	Annually	\$300			

#### Introduction

The Power County Wildland Fire Mitigation Plan was initiated by the Power County Commissioners, Power County, Idaho in June 2003. The Commissioners required that the plan:

- Coordinate with the Idaho State Strategic Plan for the implementation of the National Fire Plan, and
- Utilize the format developed for all hazard mitigation plans provided by the Federal Emergency Management Agency (FEMA).

The Power County plan is based on information, research, and data from numerous county, state, federal and private sources. Power County contracted Dynamac Corporation as the coordinator of the Power County Wildland Fire Mitigation Group and plan developer.

The Power County Wildland Fire Mitigation Group conducted periodic meetings from June to December 2003. Development of the Power County Wildfire Mitigation Plan was achieved through input to and from the Power County Wildland Fire Mitigation Group (see Appendix C). *The Power County Press*, published progress reports and informative articles after some planning team meetings, including phone numbers and email addresses for public input, or participation. Information and draft plan sections were posted on the Power County web site (http://www.co.power.id.us/firemitigation/default.htm) for easy access by the general public.

Research data and wildfire hazard models provided by Idaho State University have also been used in the plan formulation. The information and data gathered by Dynamac Corporation included three public meetings in different areas of Power County. A wildfire hazard questionnaire was used to collect information from residents and was made available to residents during public meetings and at the County Court House and Power County Public Library. The questionnaire was also available for download and printing from the Power County web site. An example of the questionnaire is located in Appendix C. Numerous stakeholder interviews were conducted as part of the public meetings. A list of Power County stakeholders attending public meetings is also in Appendix C. Evaluation of wildfire hazards on Federal and State lands utilized WUI at risk in Power County relating to their fuels type, condition and density, combined with slope, aspect and fire suppression response time. This rating system identified high-risk areas and was develop by the Idaho State University and Bureau of Land Management fuels specialists.

Priorities for the Power County Wildland Fire Mitigation plan are:

- 1. Protection of Life: Identify and provide mitigation recommendations for areas of high wildfire risks that are in or adjacent to homes and communities, and improve critical county infrastructure facilities.
- 2. Protection of Property: Identify and provide mitigation recommendations for properties of moderate and high wildfire risk. Increase public awareness though

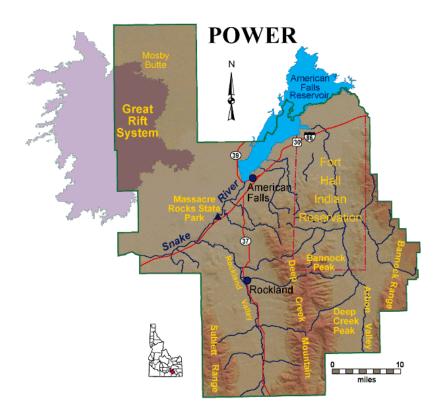
- education, training and information sharing addressing wildfire risks and mitigation measures.
- 3. Protection of Resources: Identify resources that are at risk to wildfires and implement natural resource planning to protect these resources. To include protection and mitigation of at risk watersheds, vegetation, fish, wildlife and maintain soil stability.
- 4. Values: Scenic, historical, cultural.

Implicit in these priorities are the need to:

- Improve Wildfire Emergency Services: Improve county infrastructure and wildfire emergency service planning, training, communications, and equipment.
- Increase Public Awareness of Wildfire Prevention: Increase public awareness of firewise practices and wildfire prevention though education training and information sharing.
- Improve Partnerships for Implementation: Utilize partnerships currently established and develop additional participation with State, Federal, and private organizations.

#### **Power County Profile**

Power County encompasses a diverse landscape within its 1,450 square miles. The southern portion of the county includes the classic Great Basin landscape of the Arbon and Rockland Valleys. The Arbon Valley lies between the Bannock Range (and the Bannock County border), to the east and the Deep Creek Mountains. At 8,670 feet above mean sea level, Deep Creek Peak is the county's highest point. West of the Deep Creeks are the Rockland Valley and the Sublett Range, through which runs the Power-Cassia County line. North of the Arbon and Rockland Valleys rolling hills descend to the relatively level farmlands of the Snake River Plain, the Snake River, and American Falls Reservoir. This 61,000-acre reservoir is part of the Minidoka Irrigation Project and an important recreational resource for southeastern Idaho. The Union Pacific Railroad and I-86 follow the Snake River and the route of the old Oregon Trail through the county. providing excellent accessibility for a rural area. North of the Snake River Plain, Power - County stretches into the lava fields of the Great Rift Desert.



The total land area of Power County is approximately 929,000 acres. Private lands comprise about 47% of that acreage (~440,345 acres). Roughly 17% of the county is included within the Fort Hall Indian Reservation (~158.000 acres) and the remaining 36% (~330,655 acres) is in State or Federal ownership. Reservation lands are found in the northeastern portion of the county. Pubic lands, most of which are managed by the Federal Bureau of Land Management, are concentrated in the lava fields northwest of American Falls and the mountain ranges of the southern portion of the county. The county's Public Lands are generally leased for grazing, while virtually all private lands are used for crop production or grazing (Appendix A, Map 1 County Land Ownership.).

#### **Current Population and Population Trends**

Power County's population has experienced some change in recent decades.

Population, 2001 estimate <sup>2</sup>	7,468
Population percent change, April 1, 2000-July 1, 2001	-0.9%
Population, 2000	7,538
Population, percent change, 1990 to 2000	6.4%

The largest community in Power County is the county seat, American Falls. This small city has about 4,111<sup>3</sup> residents and is located immediately south of the falls on the Snake River from which it takes its name. The main part of the city was established in its

<sup>&</sup>lt;sup>2</sup> US Census Bureau, Quick Facts for Power County, Idaho (http://quickfacts.census.gov/qfd/states/16/16077.html)

<sup>&</sup>lt;sup>3</sup> Power County Commissioners February, 2004

present location in 1925, when construction of American Falls Reservoir, which eventually covered the original town site, began. The only other incorporated city in Power County is Rockland, a former farm service center for the lower Rockland Valley that now has a population of about 300.

The population of American Falls has consistently made up just over half of the county total (it was 53.0% in both 1980 and 1990). There has been some decline in the population share of the Rockland Valley, which included 6.3% of the county's people in 1960, but only 3.7% in 1990. Several eastern Idaho counties (including Bingham, Butte, and Oneida) experienced overall population growth, but a decline in their urban population share during the 1980s. That trend toward exurban residential development was not evident in Power County, where American Falls captured 54.1% of all growth during the 1980s.

#### Shoshone-Bannock Tribe/Ft. Hall Reservation

Roughly 17% of the county is included within the Fort Hall Indian Reservation (~158.000 acres). Power County is fully within the Tribes' aboriginal homeland. In fact, archaeological evidence indicates that American Indians occupied it for at least 12,000 years. The Fort Bridger Treaty of 1868 secured the Fort Hall Reservation as the permanent homeland of the Shoshone-Bannock Tribes. But the aboriginal rights reserved by the treaty extend to unoccupied lands of the United States, reserving hunting, fishing, and gathering rights for tribal members.

#### Climate

The area's semi-arid climate is the result of the Cascade and Sierra mountains to the west and the Bitterroot and Rocky Mountains to the north that effectively block Pacific moisture. The success of local agriculture is dependent on spring runoff from the snow pack, summer thunderstorms, and irrigation, both from deep wells and a system of canals supplied by storage reservoirs on the Snake River.

Summer may begin suddenly with a rapid change to warm and dry weather, but chilly nights can persist into early July. Showers and/or thunderstorms are common from late spring through summer. These storms often produce very localized precipitation. Brief heavy rain, lightning, small hail, and gusty winds may cause very localized damage at times. Long periods of excessively hot weather in July and August are uncommon. Afternoon temperatures often rise into the 90s, however low humidity usually results in overnight temperatures in the 50s or even cooler.

During winter, brisk southwesterly winds often persist for days or weeks. These winds may moderate cold winter conditions, producing unusually mild temperatures compared to surrounding areas. There are usually a number of days each winter when temperatures remain below freezing. Sub-zero temperatures usually occur only a few days each winter. During especially cold outbreaks, snowfall may accumulate to a depth of a foot or more. Cloudy and unsettled weather is common during the winter with measurable precipitation occurring on about one-third of the days.

Spring months are normally wet and windy. Winds of 20 to 30 mph may persist for days at a time. Weather conditions fluctuate quickly during the spring. Thunderstorms are not uncommon, and are usually accompanied by rain showers and occasional snow. Autumn ushers in cooler weather with daytime highs generally in the 70s in early fall dipping into the mid 40s by mid November with generally dry conditions. Autumn storms are usually very fast moving, and seldom persist for more than a few days.<sup>4</sup>

#### American Falls Monthly Climate Summary<sup>5</sup> Period of Record: 8/ 1/1948 to 3/31/2003

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (°F)	33.0	38.7	48.0	59.1	68.5	78.0	87.2	86.2	76.2	62.7	45.8	34.9	59.9
Average Min. Temperature (°F)	16.6	20.7	27.0	33.8	41.4	48.1	54.2	52.9	44.5	35.1	26.9	19.2	35.0
Average Total Precipitation (in.)	1.05	0.83	1.05	1.09	1.49	0.97	0.52	0.59	0.72	0.81	1.05	0.97	11.13
Average Total SnowFall (in.)	9.1	4.7	3.1	1.3	0.4	0.0	0.0	0.0	0.0	1.3	2.7	7.0	29.7
Average Snow Depth (in.)	3	2	0	0	0	0	0	0	0	0	0	1	1

#### Vegetation<sup>6</sup>

The natural vegetation of the area typically consists of a shrub overstory with an understory of perennial grasses and forbs. The most common shrub is Wyoming big sagebrush (<u>Artemisia tridentata</u> subspecies <u>wyomingensis</u>). Basin big sagebrush (<u>Artemisia tridentata</u> subspecies <u>tridentata</u>) may be dominant or co-dominant with Wyoming big sagebrush on sites having deep soils or accumulations of sand on the surface (Shumar and Anderson 1986). Communities dominated by big sagebrush occupy most of the northern portions of the County. Green Rabbitbrush (<u>Chrysothamnus viscidiflorus</u>) is the next most abundant shrub in many of these communities. Other common shrubs include gray rabbitbrush (<u>Chrysothamnus nauseosus</u>), winterfat <u>Krascheninnikovia lanata</u>), spiny hopsage (<u>Grayia spinosa</u>), prickly phlox (<u>Leptodactylon pungens</u>), broom snakeweed (<u>Gutier-rezia sarothrae</u>), and horse-brush (<u>Tetradymia canescens</u>).

Utah juniper (<u>Juniperus osteosperma</u>), threetip sagebrush (<u>Artemisia tripartita</u>), and/or black sagebrush (<u>Artemisia nova</u>) often dominate communities on the periphery on slopes of the buttes, alluvial fans, and the foothills of adjacent mountains.

The most common native grasses include thick-spiked wheatgrass (<u>Elymus lanceolatus</u>), bottlebrush squirreltail (<u>Elymus elymoides</u>), Indian ricegrass (<u>Oryzopsis hymenoides</u>), needle-and-thread grass (<u>Stipa comata</u>), and Nevada bluegrass (<u>Poa secunda</u>). Patches of creeping wildrye (<u>Leymus triticoides</u>) and western wheatgrass (<u>Pascopyrum smithii</u>) are

<sup>&</sup>lt;sup>4</sup> From National Weather Service, Pocatello Station web site. http://www.wrh.noaa.gov/Pocatello/climate/descrip.html)

<sup>&</sup>lt;sup>5</sup> http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?idamer

<sup>&</sup>lt;sup>6</sup> http://www.stoller-eser.com/Flora/vegetation.htm

locally abundant. Bluebunch wheatgrass (<u>Pseudoroegneria</u> spicata) is rare at the lowest elevations but is common at slightly higher elevations to the southwest and along the eastern side it is often the dominant grass on alluvial fans and slopes of the buttes and foothills.

Power County, like most counties in southeast Idaho, is also facing a growing problem with noxious and invasive plant species. This problem is a result of past wild fires in the county and is a major contributor to the continued fire cycle on fire-disturbed land within the county.

The county also has extensive areas in the Natural Resources Conservation Services' Conservation Reserve Program (CRP). The program encourages farmers to convert highly erodible cropland or other environmentally sensitive acreage to vegetative cover, such as tame or native grasses, wildlife plantings, trees, filterstrips, or riparian buffers. Farmers receive an annual rental payment for the term of the multi-year contract. Cost sharing is provided to establish the vegetative cover practices. Approximately 37% of Power County cropland has been place in the CRP for protection of sharp-tailed grouse habitat. Generally CRP land is limited to no more than 25% of cropland within a county unless special exception to the limit is granted.

#### Geology

The eastern Snake River Plain is underlain by volcanic rock (primarily basalt with lesser amounts of rhyolite) and relatively thin layers or lenses of sedimentary material that thin towards the center of the basin. The origin of the Snake River Plain is attributed to several geologic processes. Migration of the North American continent over a region of high heat flow (plume or hot spot) in the earth's upper mantle resulting in large volumes of volcanic material being erupted. The age of the volcanic events generally progresses from oldest, about 13 million years ago, to the youngest episodes currently ongoing, traversing from west to east across southern Idaho.

Basins filled with unconsolidated deposits were formed by faulting or erosion or both. Thick sequences of unconsolidated deposits that have variable permeability are common in these basins. In some basins, these deposits might be as much as 5,500 feet thick. Basins in areas where the bedrock consists of volcanic, igneous, and metamorphic rocks typically contain extremely permeable aquifers that consist of coarse sand, gravel, and cobbles that were eroded from the parent rocks. The deposits typically are coarser grained near the margins of the basins and finer grained near the center of the basins.<sup>8</sup>

#### Soils

Soils in the County are predominately silt loams (42% by acreage), followed by soil complexes (35%) and rock outcrop or lava flows (8%)<sup>9</sup>. Soil erosion is the major

February 2004

<sup>&</sup>lt;sup>7</sup> http://imnh.isu.edu/digitalatlas/hydr/snakervr/osrp.htm

<sup>8</sup> http://capp.water.usgs.gov/gwa/ch\_h/H-text2.html

<sup>&</sup>lt;sup>9</sup> SOIL SURVEY OF POWER COUNTY AREA, IDAHO, 1982.

problem on most of the land in the survey area. If the soil is irrigated, and the slope is more than 2 percent, erosion is a hazard.

#### Wildlife

Power County has over 80 different species of mammals occupying the County's wide variety of habitats. The Idaho Department of Fish and Game manages wildlife populations and the USDA - Forest Service, Bureau of Land Management, U.S. Army Corps of Engineers, and Idaho Department of Lands are responsible for wildlife habitats on lands they manage. Large mammals that are found in Power County include: mule deer (*Odocoileus hemionus*), whitetail deer (*Odocoileus virginianus*), elk (*Cervus elaphus*), black bear (*Ursus americanus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), wolverine (*Gulo gulo*). Other mammals within the county are snowshoe hare (*Lepus americanus*), cottontail rabbit (*Lepus sylvaticus*), red fox (*Yulpes vulpes*), badger (*Taxidea taxus*), beaver (*Castor canadensis*), pine marten (*Martes americana*), North American porcupine (*Erethizon dorsatum*), striped skunk (*Mephitis mephitis*), and several species of bats.

Upland birds present in Power County include: blue grouse (<u>Dendragapus obscurus</u>), spruce grouse (<u>Falcipennis canadensis</u>), sharp-tailed grouse (<u>Tympanuchus phasianellus columbianus</u>), chukar partridge (<u>Alectoris chukar</u>), gray partridge (<u>Perdix perdix</u>), California quail (<u>Callipepla californica</u>), mountain quail (<u>Oreortyx pictus</u>), ring-necked pheasant (<u>Phasianus colchicus</u>). Raptor species found are: golden eagle (<u>Aquila chrysaetos</u>), osprey (<u>Pandion haliaetus</u>), prairie falcon (<u>Falco mexicanus</u>), red-tailed hawk (<u>Buteo jamaicensis</u>), wintering bald eagles (<u>Haliaeetus leucocephalus</u>).

Over 70 species of birds associated with water are found in meadows, rivers, streams, lakes, reservoirs, and small ponds within the County. Waterfowl present include: Canada goose (*Branta canadensis*), wood duck (*Aix sponsa*), mallard (*Anas platyrhynchos*), gadwall duck (*Anas strepera*), common merganser (*Mergus merganser*), common goldeneye duck (*Bucephala clangula*), bufflehead duck (*Bucephala albeola*), Shore birds include: rails (Rallidae), killdeer (*Charadrius vociferus*), curlews (*Numenius* sp.), plovers (Charadriidae), sandpipers (Scolopacidae), yellowlegs (*Tringa* sp.), and phalaropes (*Phalaropus* sp.) common loon (*Gavia immer*) grebes (Podicipedidae), herons (Ardeidae) shearwaters (Procellariidae) cormorants (*Phalacrocorax* sp.), and American white pelican (*Pelecanus erythrorhynchos*) can also be found in the County.

Over 140 song birds are common to Power County with more being identified each year. Common song birds seen in Power County include: woodpeckers (Picidae), American robin (*Turdus migratorius*), crows and jays (Corvidae), dippers (*Cinclus* sp.) blue birds (*Sialia* sp.) hummingbirds (Trochilidae) sparrows (Hirundinidae and Emberizidae) finches (Fringillidae), grosbeaks (Cardinalidae), common raven (*Corvus corax*), waxwings (*Bombycilla* sp.), wrens (Troglodytidae), nuthatches (*Sitta* sp.), and warblers (Parulidae). Power County also serves as a major migration route to songbird wintering areas.

Just North of Power County is the Idaho National Engineering and Environmental Laboratory (INEEL). The INEEL is a Natural Environmental Research Park and may serve as a comparison site for Power County. Based on comparison with the INEEL the Federal-listed threatened or endangered animal species potentially occurring in Power County include the peregrine falcon (*Falco peregrinus*) and bald eagle (*Haliaeetus leucocephalus*). The bald eagle and the American peregrine falcon have been observed on the INEEL.

#### Archeological and Historic Sites

There are several sites of archeological and historical interest in Power County. Four are on the National Register of Historic Places: the county courthouse in American Falls; the East Shore Power Plants below American Falls Dam; portions of the Oregon Trail in the western part of the county; and Register Rock, an Oregon Trail site. Other structures and sites may be eligible for the register, including prehistoric sites along the Snake River.

#### Recreation

Power County is included in Region 4 of the *STATEWIDE COMPREHENSIVE OUTDOOR RECREATION AND TOURISM PLANNING* document<sup>10</sup> (SCORTP). Region 4, which has traditionally been a travel corridor from Yellowstone to Boise is beginning to diversify its economic base. Major infrastructure investments by federal, state and local governments and the private sector in traveler services are also underway.

As a direct product of the Region 4 Rural Tourism Development Plan, the region has established the South Central Idaho Tourism & Recreation Development Association (SCITRDA). This is a regional network of individuals and organizations (Region 4 Recreation Forum, Region 4 Travel Committee and the Region 4 Development Association) with representation from state and federal agencies. SCITRDA is dedicated to enhancing the leadership and decision-making capabilities of the region.

Region 4's population is growing, incomes are rising and communities in the region are developing new and innovative traveler attractions, including visitor centers, historic sites and convention facilities. As the population in counties adjacent to Power County have increased, the recreational use of Power County's Federal and State lands has also increased. Summer and winter recreational activities available in Power County are also enjoyed by outdoor enthusiasts on a national, as well as international basis.

American Falls reservoir is a major recreational attraction in the county and region. Water based recreational activities in Power County include: boating, water skiing, fishing, rafting, kayaking, swimming, and hot springs visitation. Land based activities include, but are not limited to: camping, hiking, mountain biking, birding, hunting, snowmobiling.

Power County Wildland Fire Mitigation Plan Power County, Idaho Plan Developer: Dynamac Corporation February 2004

<sup>&</sup>lt;sup>10</sup> Idaho Statewide Comprehensive Outdoor Recreation And Tourism Planning: Assessment And Policy Plan, July, 1998

#### Hydrology

The Snake River and American Falls Reservoir are the major hydrologic features within the county. The Snake River traverses the northern portion of the county from the Northeast to the Southwest. Rock Creek flows through Rockland valley from the south eventually emptying into the Snake River. Numerous tributaries originate in the southwest portion of the County on the Sawtooth National Forest to feed Rock Creek. Bannock Creek flows North through Arbon valley and eventually feeds the American Falls reservoir.

The American Falls reservoir was formed in 1927 as part of the Minidoka Irrigation district and is an important recreational resource for southeastern Idaho. The reservoir is approximately 61,000 acres in size and is shared by Power, Bingham and Bannock Counties.

#### **Transportation and Commuting**

For an area of over 1,450 square miles, Power County has a very limited network of improved highways. Timing, location, and expansion of transportation networks are important issues affecting future access.

Major routes in the County are:

- Interstate 86/US Highway 30 running diagonally across the northern portion of the county and connecting Twin Falls, American Falls, Chubbuck/Pocatello.
- State Highway 37 running north and south through Rockland valley and connecting American Falls with Rockland and Holbrook.
- State Highway 39 running north and south connecting American Falls with Aberdeen.
- Arbon Highway running north and south through Arbon valley and connecting I-86 with Arbon and Malad City.

The Power County Highway District is responsible for maintenance, and construction of 688 miles of rural road (567 miles of which are improved). Road funds come largely from state and federal sources. There is extensive use of the road system in Power County by out-of-county traffic. The existence of Federal forests and Public Lands draws some numbers of recreational users participating in various spring, summer, fall and winter activities.

The Union Pacific railroad has a rail line traversing the northern portion of the County in a general east-west direction.

The Forest Service and BLM have built and maintained numerous two-lane gravel roads throughout the county for recreation, logging, ranching and mining. Some of these have been closed and some are currently gated with access allowed for seasonal use or during a wildfire. Additionally, there are numerous miles of dirt roads and trails that are not maintained by Federal, State, private or county entities. These roads provide access to many of the remote areas of the county but are generally only known to local residents and recreationist

#### **Aviation Facilities**

There are two airports in Power County: American Falls and Pocatello Municipal. The Pocatello Municipal airport supports regularly scheduled commercial air service to Salt Lake City. The American Falls airport provides support for agricultural and private air operations.

#### **Emergency Services**

Law enforcement is provided by the Power County Sheriff throughout the county. Law enforcement is also provided within and by the municipalities of American Falls and Rockland. Ambulance services are located in American Falls and Rockland. Volunteer and Rural Fire Departments are located at and provide service to American Falls and Rockland. The U.S. Forest Service, IDL and BLM provide wildfire protection in much of Power County.

#### Hazard Identification, Location, Risk

Power County has been the site of numerous large wildfires over the past thirty years. The fuels, weather and topography in Power County combine to make wildfire an annual hazard with associated risks. The most recent large fires to impact Power County and its residents occurred in 2000. During the summer of 2000, a severe dry lightening storm passed through the county igniting several fires in the county and particularly within the Shoshone-Bannock reservation. The result was four major fires that eventually combined into a single Eastern Idaho Complex fire. Fires occurring in 2000 were:

- Moonshine Fire (greater than 30,000 acres)
- Rattle Snake Fire (2.318 acres)
- Fisher Creek Fire (greater than 37,000 acres)
- Green Canyon Fire (1,745 acres)
- Flat Top Fire (57,477 acres)

Also in 2000, but not part of the complex fire described above, was the Flat Top fire. This fire eventually burned over 55,000 acres of which 15,000 were in Power County. In 1996, the Cox Wells fire ignited in the northern portion of the county on Public land and eventually burned over 219,000 acres. Both fires were lightening caused.

Traditionally lightening causes 51% of the fires within Eastern Idaho and 49% are human caused<sup>11</sup>. Additionally, there were numerous small fires started by farm equipment working in the fields. These fires were numerous in number, but small in size due to the inability of the farmed fields to carry a fire and because the farmers would extinguish the fires as quickly as they would start.

With the inclusion of previously farmed fields into the CRP program there has been fewer fires started by farm equipment. However, there is a growing concern with Power County residents that while the number of fires has gone down, the potential for larger,

<sup>&</sup>lt;sup>11</sup> http://www.fs.fed.us/r4/caribou-targhee/EIIFC/Data/Data/Statistics.htm

more catastrophic fires has increased. This is due to the increased fuel load on CRP lands and the absence of farmers in the field to stop fires before they become large.

Map 2 in Appendix A depicts those areas that have burned over the past three decades. From the map it is clear that several areas have burned repeatedly during that time. Landscape scars from past intense large wildfires are obvious in much of the County. The vegetative recovery from many of these wildfires is ongoing and many of the burned areas have been converted to Cheatgrass and other invasive plant species.

Fires in the northern portion of the County traditionally burn in a southwest to northeast pattern in accordance with the prevailing wind patterns. In the Arbon and Rockland portions of the County there is no prevailing burn pattern as the valleys cause unpredictable wind vortex.

#### Wildfire Fuels in Power County

Fuels that contribute to wildfires in Power County range from sagebrush/grass to Pinion-Juniper, lodgepole pine evident at higher elevations or on north aspects. Sagebrush with a grass under story (including lands in CRP) is the major wildfire fuel near communities, homes or developments.

Fire exclusion and lack of mechanical treatment (thinning) have resulted in dense stands of sagebrush. Where fire has been present, the native grass and shrub species have been replaced with Cheatgrass or other invasive non-native species. These sagebrush, grass and weed areas provide available fuel for wildfire spread and increased intensity. Drought, combined with these vegetation types, provides additional dead vegetation to fuel future wildfires.

Farmland that has been placed in the Conservation Reserve Program (CRP) has shown significant increases in wildfire fuel loads. Because of restrictions on vegetation manipulation activities on CRP land fuel material has been allowed to accumulate for several years on these sites. The limitation of vegetation manipulation has also resulted in an invasion of non-native species on some CRP land.

#### Power County Weather

The wildfire season in Power County is June through September. The highest fire danger usually occurs in July and August. It is common to have numerous consecutive days of "Very High" to "Extreme" fire danger from July though September. Thunderstorms ignite most of the wildfires during the high fire danger periods, and can often start over 20 wildfires from one storm.

#### **Drought**

Recent concerns about the effects of climate change, particularly drought, are contributing to concerns about wildfire vulnerability. The term drought is applied to a period in which an unusual scarcity of rain causes a serious hydrological imbalance. Unusually dry winters, or significantly less rainfall than normal, can lead to relatively drier conditions, and leave reservoirs and water tables lower. Drought leads to problems

with irrigation, and may contribute to additional fires, or additional difficulties in fighting fires. However, most fuel types (not including grasses) require two or three years of drought before the fuel becomes dangerously dry.

#### **Power County Topography**

The varied topography of Power County, mountainous terrain, U shaped valleys, river drainages, level dry croplands will contribute to wildfire hazards (see Map 5 in Appendix A). The mountain ranges within the county run generally north-south. The vegetation types on these mountain ranges have historically been the source of numerous lightning caused wildfire. The topographical influence to the mountainous terrain and steep river drainages will increase wildfire rates of spread and intensity. Fire suppression in the mountainous areas or river drainages is difficult, long response times and access to the wildfires yields increased hazard to fire fighters and allows wildfires to grow in size.

Transportation corridors- roads, interstate highways, and railroads yield human caused wildfires that are often in the more rugged terrain of Power County. Human caused wildfires within Power County have historically occurred during times of High to Extreme fire danger, with the combination of high fire danger and rugged terrain with long travel distance and limited road access, the topographic influence on these fires will be the catalyst for larger and more hazardous wildfires.

#### Power County Wildland/Urban Interface (WUI)

Power County contains numerous developments that are in two of the three defined WUI categories. These categories are:

Classic Interface: An area where well-defined urban and suburban development press up against open expanses of wildland areas.

**Mixed Interface**: Isolated homes, subdivisions, and small communities situated predominantly in wildland settings

**Occluded Interface**: Characterized by islands of wildland vegetation occurring inside largely urbanized areas.

Most of Power County is in the mixed interface category, with the cities of American Falls and Rockland fitting the classic interface definition.

Map 6 in Appendix A depicts those areas that have known past urban-interface problems. They are areas where structures and values can and have been threatened by wildland fires and are of special concern to fire personnel and homeowners. Members of the wildland fire and VFD branches of the Power County Wildland Fire group jointly developed the map.

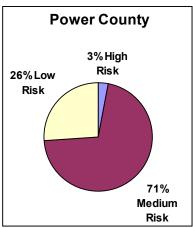
#### Hazard Location

The Bureau of Land Management's (BLM) Upper Snake River District (USRD) Geographic Information Systems (GIS) team and the GIS Training and Research Center (GISTReC) at Idaho State University (ISU), have created a model to predict potential wildfire risk areas for Power County, Idaho. During this project models were created of

specific individual risks associated with wildfires: topography, vegetation moisture, fuel load, and the number of structures at risk<sup>12</sup>. The Bureau of Land Management funded this modeling effort. Based on that model the majority of the area within Power County is classified as a medium risk for wildland fires.

A copy of the ISU report accompanies this plan and is incorporated by reference. The areas within Power County that are at highest hazard from wildfire as identified by the ISU modeling effort can be found in Map 7 in Appendix A.

Combined with the ISU hazard model was a digitized representation of areas in the Natural Resources Conservation Services' Conservation Reserve Program (CRP). Responding to comments received from the public, areas under CRP contract were considered as high hazard areas.



#### Other Hazard Issues

The interface areas within Power County are characterized by a diverse mixture of varying housing structures, development patterns, ornamental and natural vegetation and natural fuels. In the event of a wildfire, vegetation, structures and other flammables can merge with unpredictable results. Reviewing past WUI fires shows that most property is destroyed or damaged for one or more of the following reasons:

- Combustible roofing material;
- Wood construction;
- Structures with no defensible space;
- Fire departments with poor or limited road access to structures;
- Developments located in heavy natural fuel types;
- Structure/properties located on steep slopes covered with flammable vegetation;
- Limited water supply.

Power County exhibits all of these characteristics either throughout the county, or in some instances, within a very concentrated area. During every public meeting about this planning effort several of the issues identified above were echoed by the public.

**Limited Road Access** is a major issue for all emergency service providers within the County. As population trends and demands for housing increase, some developments exhibit less than adequate turn-around space for emergency vehicles. Some County communities and developments are challenged by steep narrow roadways, while others are served by bridges that have weight restrictions imposed, thereby eliminating various types of fire suppression resources as an option in protecting lives and properties.

Power County Wildland Fire Mitigation Plan Power County, Idaho

<sup>&</sup>lt;sup>12</sup> Gentry, Chad and Jeff Frank. 2003. Wildland/Urban Interface and Communities at Risk: Joint Fire Modeling Project for Power County, Idaho Bureau of Land Management, Upper Snake River District GIS And Idaho State University GIS Training and Research Center. pp 30.

Limited Water Supply in remote developments and communities within the County continue to hamper suppression operations in the interface. Wildland areas continue to rely on the natural water sources within the county, but those areas that are co-mingled with private ownership face characteristically inadequate water systems and lack of hydrants. Additionally, concern was expressed about emergency power supply to critical water sources as power supply tends to be easily disrupted when wildland fires occur.

**Communications** in the Arbon and Rockland valleys is poor to non-existent. Past radio coverage has become too expensive to operate or does not reach the right people or a sufficient number of people to be effective.

**Home location and condition** within the County was raised at each of the public meetings. There is no good inventory regarding the location of homes within the County and the conditions and resources available at each home to assist in wildland fire suppression or help in planning fire suppression priorities.

**Time to respond** for volunteer fire departments is poor in the outlying areas. This is due in part to the location of firefighting equipment and also in part to the multiple, but limited, coverage in the County of the fire protection districts. Currently, much of the County is not covered by any fire protection districts. The diversity, location and amount of fire fighting equipment, as well as the number of personnel within each of the VFDs are substantially different between the major communities and developments.

During 2003, the Three Rivers Resources Conservation and Development (RC&D) organization surveyed the fire departments in eastern Idaho for fire department needs and weaknesses. These include American Falls Fire District and the Rockland Fire District. A copy of the RC&D report<sup>13</sup> accompanies this plan and is incorporated by reference. The results of that survey indicate the following needs within the fire suppression organizations within Power County:

#### FIREFIGHTER PROGRAM

- Fire Stations
  - $\circ$  New Station = 1
  - Classroom/Training Space = 1
  - $\circ$  Office Space = 1
- Personnel = 1
- Testing Equipment
  - Current NFPA Testing Manuals & Workbooks = 1
- Small, More Maneuverable Apparatus = 1
- Grant Related Needs
  - $\circ$  Grant Funding = 1
  - $\circ$  Grant Writer = 1
  - Assistant with Grant Process = 1

Power County Wildland Fire Mitigation Plan Power County, Idaho

<sup>&</sup>lt;sup>13</sup> Three Rivers Resource, Conservation & Development Area. June 2003. Composite Report, Power County Fire Departments & Districts. pp. 4

- Grant Resource Library Specific to EMS/Fire = 1
- Grant Writing Course = 1
- Improved Records Management System = 2
- Computerization
  - Desk Top Computer = 2
  - Computer/Software Training = 2
  - $\circ$  Software = 2
- Road Maintenance/Improvement/Access/Code Issues = 2

#### TRAINING AND CERTIFICATIONS

- Training Aids: Videos, Slides, Table Top Simulators = 2
- Low-cost Training Opportunities = 1
- Computer-based Training/CD's = 2
- Power Point Software = 1
- IFSTA Training Program = 1

#### **COMMUNICATIONS**

- Hand-held Radios = 1
- Portable Radios = 1
- Vehicle Radios = 1
- Upgrade Multi-frequency Capabilities = 2
- GPS Units = 1

#### PREVENTION AND INSPECTION

- Fire Cause and Origin Investigations Training= 1
- Investigations Administrative Support = 1

#### **PUBLIC EDUCATION**

- Pre-packaged Presentation/Instructional Materials = 1
- Handout Materials = 1
- Personnel = 1

#### Values at Risk

Values at risk to wildfire in Power County includes privately owned homes and property, County assets (buildings, communication sites, road/highway stabilization or repair), soil stability concerns, critical wildlife winter ranges, recreational activities and tourism, and

the safety of residents, visitors, and fire fighters in the fuel types, conditions and rugged terrain of Power County. The county currently has over 2,513 homes and other property valued at more than \$127 million.

In addition to the homes at risk to wildland fire, there are 2,863 parcels of farmland in Power County valued at more than \$91 million. These figures do not include the millions of dollars in livestock and other personal assets that are at risk to wildland fire. Light industry assets in the northern portion of the county are also at risk and include the Simplot potato processing facility in the northeast corner of the county. These assets are valued in the multi-millions of dollars and are significant to the tax base of Power County.

Three highway transportation corridors, Interstate Highway 86 and State Highways 37 and 39 are vulnerable to wildfire and have been closed to traffic because of wildfires. Bureau of Land Management and U.S. Forest Service roads have been closed on numerous occasions because of wildfires. Wood power poles and power lines are at risk in a wild land fire situation. Not only does a fire have the potential to ignite wood poles, there is the possibility of Carbon pathing and power interruption. Power outages on transmission lines can have a catastrophic effect on people in the whole Western United States. In 1997, wildland fires in Eastern Idaho knocked out power to multiple states and millions of customers. Finally, the Pocatello airport is vulnerable to disruption of services either from direct threats from wildland fires or from indirect threats such as poor visibility due to smoke from wildland fires.

Federal, State and tribal agencies are the major landowners and provide wildfire protection for most of Power County. The major landowner wildfire protection is combined with protection areas provided by two Volunteer Fire Departments. Wildfire response-protection districts in Power County are provided on Map 8 of the Appendix A.

#### Hazard Prioritization

Based on the hazards discussion, the planning team constructed eleven different hazard statements that they believed fully encompassed the hazard discussions. The planning team then prioritized the hazard issues by rating each issue as having a High, Medium or Low impact on each of the three plan goals for 1) Protection of life, 2) Protection of property, and 3) Protection of resources. The following table shows the results of the rating process, with the issues sorted in priority order from most important to least important.

Issues	Life	Property	Resources	Total
Power County has a limited communication	$H(5.00^{14})$	H(5.00)	H(5.00)	15.00
network with some portions of the county				
without any communication coverage at all.				

 $<sup>^{14}</sup>$  The number next to the letter is the numeric value assigned to the letter (H=5, M=3, L=1) for calculating the priority.

Issues	Life	Property	Resources	Total
Power County has limited sources of water for fighting wildland fires and many of those sources are vulnerable to disruption of service in the event of a wildland fire.	H(5.00)	H(5.00)	H(5.00)	15.00
Power County has limited fire station locations and equipment that result in poor response times to fires in outlying portions of the county	H(5.00)	H(5.00)	M(3.00)	13.00
Power County is not fully covered by fire protection districts and the districts that are present in the county are not fully coordinated together.	M(3.00)	H(5.00)	M(3.00)	11.00
Power County has numerous county roads, infrastructure, communication sites, developments and communities that require hazardous fuels reduction.	M(3.00)	H(5.00)	M <sup>15</sup> (3.00)	11.00
Power County lacks defensible space and fire resistant building materials in some developments and at private homes.	H(5.00)	H(5.00)	L(1.00)	11.00
Power County volunteer fire departments are having difficulty meeting standards or requirements pertaining to: Training, PPE, Communications, Equipment, Apparatus and Facilities.	M <sup>16</sup> (3.00)	M(3.00)	M(3.00)	9.00
Power County citizens have had limited firewise education, information and awareness with regards to wildland fire.	M(3.00)	M(3.00)	M(3.00)	9.00
Power County Developments/subdivisions/homeowners are without emergency wildfire plans or other emergency plans in place.	M <sup>17</sup> (3.00)	M(3.00)	L(1.00)	7.00
Power County has a large amount of land in the CRP increasing fuel loads beyond what would normally occur on tilled farmland.	L(1.00)	M(3.00)	L(1.00)	5.00
Power County has no comprehensive inventory of homes and values at risk in the event of a wildland fire.	L <sup>18</sup> (1.00)	M(3.00)	L(1.00)	5.00

#### Mitigation Goals, Strategy and Implementation

Hazard prioritization and mitigation goals are in accordance with the stated objectives and priorities, specifically: Protection of Life, Property and Values at Risk. The mitigation goals were developed in response to the issues identified by the Power County Wildland Fire Mitigation Group and input from the public meetings. The list of mitigation goals responds directly to the hazards faced and the issues raised by the residents of Power County.

 $<sup>^{15}</sup>$  Fuel reduction activities may have a high impact on cultural values especially to the tribes. The team believed that this issue could be rated either M or H.

<sup>&</sup>lt;sup>17</sup> There are a few locations that do have an emergency plan, but there is no countywide plan.

<sup>&</sup>lt;sup>18</sup> Inventories may make it easier for dispatch to manage multiple fire outbreaks.

1. *HAZARD*: Power County has a limited communication network with some portions of the county without any communication coverage at all.

*Mitigation Goal*: Provide additional communication capability for Power County dispatchers, Fire departments and residents.

2. *HAZARD*: Power County has limited sources of water for fighting wildland fires and many of those sources are vulnerable to disruption of service in the event of a wildland fire.

*Mitigation Goal*: Provide additional sources of water at strategic locations throughout Power County and means of supplementing or replacing service in the event of disruption.

3. *HAZARD*: Power County has limited fire station locations and equipment that result in poor response times to fires in outlying portions of the county.

Mitigation Goal: Provide Power County VFDs with facility improvements and equipment as identified in the Three Rivers RC&D Survey of Volunteer Fire Departments.

4. *HAZARD*: Power County is not fully covered by fire protection districts and the districts that are present in the county are not fully coordinated together.

*Mitigation Goal*: Provide complete and/or coordinated fire protection coverage for all residents of Power County.

5. *HAZARD*: Power County has numerous county roads, infrastructure, communication sites, developments and communities that require hazardous fuels reduction.

*Mitigation Goal*: Reduce identified hazardous fuels buildup in high-risk areas on a countywide scale.

6. *HAZARD*: Power County lacks defensible space and fire resistant building materials in some developments and at private homes.

Mitigation Goal: Create and implement defensible space standards by homeowners and developments and utilize standard Fire Protection Guidelines for Residential Development In the Wildland/Urban Interface for subdivisions as identified in NFPA 1144, Standard for Protection of Life and Property from Wildfire, 2002 edition.

7. *HAZARD*: Power County volunteer fire departments are have specific needs to meet standards or requirements pertaining to: Training, Personal Protective Equipment (PPE), Communications, Equipment, Apparatus and Facilities.

*Mitigation Goal*: Provide Power County VFDs with required training, communications, Personal Protective Equipment (PPE), Apparatus, Facility improvements and equipment as identified in the Three Rivers RC&D Survey of Volunteer Fire Departments.

8. *HAZARD*: Power County citizens have had limited firewise education, information and awareness with regards to wildland fire.

*Mitigation Goal*: Gain community or development participation in firewise activities including education and information distribution.

9. *HAZARD*: Power County Developments/subdivisions/homeowners are without emergency wildfire plans or other emergency plans in place.

Mitigation Goal: Develop County Fire-Emergency Mobilization Plan, and County/Interagency Communications Plan with landowners and

Cooperators in Power County and develop subdivision/homeowners wildfire and other emergency operations plan(s) as requested.

10. *HAZARD*: Power County has a large amount of land in the Conservation Reserve Program (CRP) increasing fuel loads beyond what would normally occur on tilled farmland.

*Mitigation Goal*: Apply fuels treatment – hand, mechanical, prescribed fire or combination of treatments to reduce fuels loads on CRP land.

11. *HAZARD*: Power County has no comprehensive inventory of homes and values at risk in the event of a wildland fire.

*Mitigation Goal*: Develop a comprehensive inventory of homes and provide the inventory to dispatchers and VFDs in times of emergency response.

#### Mitigation Strategy

The wildfire mitigation action items provide direction on specific activities that organizations and residents in Power County can undertake to reduce risk and prevent loss from wildfire events. Each action item is followed by ideas for implementation that can be used by local entities to pursue strategies for implementation. The recommended lead organization(s) is in bold font.

## Goal 1: Provide additional communication capability for Power County dispatchers, Fire departments and residents.

• Improve the communication network in the southern area of Rockland and Arbon Valleys by installing additional radio repeater sites (a minimum of 2 sites required to provide the coverage needed) in those areas for emergency communications. The Shoshone-Bannock Tribe has indicated an interest in a co-operative radio repeater site location within the reservation boundary.

Coordinating Organizations: **Power County Emergency Services** 

The Shoshone-Bannock Tribe

USDA-Forest Service Idaho Department of Lands Bureau of Land Management

Power County Volunteer Fire Departments

Fort Hall Fire Department

Target Date: Fall 2004

Cost Estimate: Minimum of 2 sites: \$70,000 (@ \$25,000.00 to

\$35,000.00 per each site).

• Encourage cellular company(s) to place a cellular telephone tower in the area south of Arbon Valley to provide communication in emergency situations. This would be accomplished by contacting the cellular providers and determining what needs to take place to provide service to those areas.

Coordinating Organizations: Arbon Valley Residents/Home Owners

Associations

**Power County Emergency Services**Power County Volunteer Fire Departments

Fort Hall Fire Department The Shoshone-Bannock Tribe

Target Date: Spring 2005

Cost Estimate: Costs involved cannot be determined at this time.

• Acquire new, or upgrade existing, equipment to programmable, narrow band radios for all VFDs in the county.

Coordinating Organizations: Power County Emergency Services

The Shoshone-Bannock Tribe

USDA-Forest Service Idaho Department of Lands

Bureau of Land Management

Power County Volunteer Fire Departments

Fort Hall Fire Department

Target Date: Fall 2004

Cost Estimate: Eight programmable narrow band hand held

radios: \$20,000 (@\$2,500 ea)

## Goal 2: Provide additional sources of water at strategic locations throughout Power County and means of supplementing or replacing service in the event of disruption.

• Locate (using GPS) and document (type of source and reliability) potential water sources available at farms and homes in the County. Including potential water drafting sites (see Map 9 in Appendix A for a partial location within the Arbon Valley area). Annually update the information and provide to organizations and agencies conducting fire suppression operations in the County.

Coordinating Organizations: Home Owners Associations

**Power County Emergency Services** 

USDA-Forest Service Idaho Department of Lands Bureau of Land Management

Power County Volunteer Fire Departments

Fort Hall Fire Department
Local Volunteer Organizations
Approach by May or June

Target Date: Annually by May or June

Cost Estimate: Two GPS units with moving map (purchased

separately) and computer cable for upload/download (garmin etrex legend

type): \$800 (@\$400 ea)

Volunteer time: No hard dollar costs

• Purchase and strategically locate three (3) mobile emergency power generators to power local water sources in the event of power loss. Position units at Arbon, Rockland and American Falls.

Coordinating Organizations: Home Owners Associations

**Power County Emergency Services** 

USDA-Forest Service Idaho Department of Lands Bureau of Land Management

**Power County Volunteer Fire Departments** 

Fort Hall Fire Department Local Volunteer Organizations

Target Date: Summer 2004

Cost Estimate: (3) 15,000 Watt generators: \$7,500 (@)

\$2,500.00 ea.):

• Acquire pump/drafting capability for the Rockland VFD. Coordinating Organizations: Power County Commissioners

Rockland Volunteer Fire Department Power County Emergency Services

Target Date: Fall 2004

Cost Estimate: A volume drafting pump: ≈\$8,000 (depending on

GPM needs)

• Locate and place "Dry Hydrants" along strategic creeks in the Arbon and Rockland valleys where domestic water sources are not available (see Map 9 in Appendix A for a partial location within the Arbon Valley area).

Coordinating Organizations: Home Owners Associations

**Power County Emergency Services** 

USDA-Forest Service Idaho Department of Lands Bureau of Land Management

**Power County Volunteer Fire Departments** 

Fort Hall Fire Department Local Volunteer Organizations

Target Date: Fall 2004 and ongoing

Cost Estimate: Approximately \$100 per unit, number of units to

be determined

# Goal 3: Provide Power County VFDs with facility improvements and equipment as identified in the Three Rivers RC&D Survey of Volunteer Fire Departments and improve coverage in areas (i.e. Arbon Valley) were facilities and equipment are currently lacking.

Convene a meeting with the East Power County Fire District directors to discuss a
joint effort with the Fort Hall Fire District, Shoshone-Bannock Tribes to have a
lor 2 brush units stationed in the Bannock Creek/Arbon area of the reservation in
the 2004 fire season at the Brett Haskett property near Eagle Rock. Volunteers
will be needed to staff this unit. Develop a list of Power county/Pauline residents
that would be interested in helping set up a volunteer program in Arbon Valley
Corridor.

Coordinating Organizations: Power County Emergency Services

Arbon Valley Residents/Home Owners

Associations USDA-Forest Service Idaho Department of Lands Bureau of Land Management

Rockland Volunteer Fire Department

Fort Hall Fire Department

Target Date: Spring 2004

Cost Estimate: No hard dollar costs

• Coordinate with the BLM for a cooperative agreement for the placement of a station in American Falls.

- Power County Commissioners, Emergency Management and Fire
   Officials meet with BLM officials to determine feasibility and cost/benefit
   to placing BLM assets in the American Falls area during fire season.
- Depending upon outcome of needs-vs-benefits discussions, develop a strategic plan to pursue this as a future project.

Coordinating Organizations: Power County Emergency Services

**Power County Commissioners** 

**USDA-Forest Service** 

Idaho Department of Lands Bureau of Land Management

Power County Volunteer Fire Departments

Fort Hall Fire Department

Target Date: Summer 2004 Cost Estimate: Unknown

- Provide a Fire Station with office and training space for the Rockland VFD (Station is 4000 sq.ft., office and classroom are 500 sq. ft.).
  - Assemble a task group through the County LEPC to study and plan a project.
  - Task group to conduct a needs assessment to identify building size requirements, possible site placement, cost estimates and locally available resources to construct a new fire station at Rockland.
  - Task Group works with local District and county officials, State and federal agencies, and possible private sector sources to identify potential partners and funding sources.
  - Develop a project proposal that will serve as a basis for pursuing grants and other sources of funding to complete the project.

Coordinating Organizations: **Power County Volunteer Fire Departments** 

**Power County Emergency Services** 

Target Date: Spring 2005

Cost Estimate: New Station (Office and class room included):

4500 Sq.Ft. @ \$125/sq.ft.= \$56,250

- Locate scattered satellite buildings, with equipment caches, in the Rockland Valley to provide quicker response.
  - With Rockland Fire District as lead, conduct a needs analysis to determine need for remote placement of equipment and firefighting resources through the Rockland Valley.
  - o Identify any currently available sites for such placement.
  - Develop a working list of equipment to be placed, on-hand equipment to place, equipment needs for future placement and potential placement sites to pursue.

Coordinating Organizations: Power County Emergency Services

Home Owners Associations USDA-Forest Service Idaho Department of Lands Bureau of Land Management

**Rockland Volunteer Fire Department** 

Fort Hall Fire Department

Target Date: Winter 2004/2005

Cost Estimate: Unknown

## Goal 4: Provide complete and/or coordinated fire protection coverage for all residents of Power County.

- Investigate establishment of a fire protection district and a substation in Arbon Valley.
  - Conduct public meetings to determine interest in development of a fire district in the Arbon Valley area.
  - With Power County commissioners as lead agency, conduct discussions among current fire officials to determine possible solutions, such as expansion of existing districts, or support to formulation of a new district.
  - o Investigate the requirements and level of community support for a tax district to support a fire protection district in the Arbon Valley.
  - Appoint a task group, led by a representative of the Arbon Valley area to work with County Commissioners and County emergency Management, and including representatives of Fort Hall Fire District, Rockland Fire District, American Falls and Chubbuck Fire Departments. The task group will pursue development of a new district or expansion of existing districts.

Coordinating Organizations: **Power County Commissioners** 

Power County Emergency Services Arbon Valley Residents/Home Owners

Associations
USDA-Forest Service
Idaho Department of Lands
Bureau of Land Management

Power County Volunteer Fire Departments

Fort Hall Fire Department

Target Date: Winter 2004/2005

Cost Estimate: No hard dollar costs to conduct the preliminary

investigation work.

- Review fire protection districts in Power County and make a recommendation to the County Commissioners regarding one or more of the following ideas.
  - Expand existing districts by informing the public through education on the importance of being included within a fire protection district and holding an election for fire district expansion.
  - Combine the existing fire districts into a single Countywide protection district with multiple stations throughout the county. The Power County Commissioners will contact the commissioners of Franklin and Teton counties to solicit information on what steps were taken and costs

involved in combining individual fire protection districts into a "county-wide" fire protection district.

Coordinating Organizations: **Power County Commissioners** 

Power County Emergency Services

Power County Volunteer Fire Departments

Fort Hall Fire Department

Target Date: Winter 2004/2005

Cost Estimate: Known costs involved would include the

construction of a fire station in the Rockland and

Arbon Valley areas with the purchase of

suppression apparatus for the Arbon station and

the training of volunteers in proper fire

suppression tactics.

## Goal 5: Reduce identified hazardous fuels buildup in high-risk areas on a countywide scale.

- A specific hazardous fuels assessment, with specific recommendations for mitigation measures, must be conducted in the Power County areas described below. Each area identified will have to be assessed by someone, or a group of individuals, who are familiar with the area, who can prioritize the risks, and suggest the correct mitigation required. The type of fuels manipulation that can be incorporated into the areas described might include prescribed fire, thinning and liming, slash piling and burning, chipping, mowing, disking, spraying on the type of fuel.
- Seek Federal and State grants to fund the fuels assessment.
- Seek grants, or work cooperatively with the US Forest Service, Bureau of Land Management, and utility companies to conduct the necessary fuels reduction activities.
- The following is a list of areas within Power County that have been identified as being at risk from a wildfire:
  - Rattlesnake Butte Area: Approximately 14 miles west of American Falls adjacent to the Great Rift. A hazardous fuels assessment should be conducted in this area of scattered residences.
  - Bonanza Bar/Lake Channel Area: Small communities at risk southwest of American Falls near the Snake River. Identify specific homes at moderate or high risk and promote defensible space through public education.
  - Union Pacific RR Lines: In the Quigley area, work with the railroad to promote wildfire hazardous fuels reduction program along the railroad tracks. Assess other railroad property areas of concern regarding hazardous fuels.
  - O Power Lines throughout Power County: Throughout the county, there is a potential for a wildfire ignition related to power lines. An assessment of specific hazardous fuels within the power line corridors must be completed, identifying the areas of greatest risk. Work with the power company to address the appropriate type of fuels reduction required for the specific area.

- Fairview and Fenstermaker Point Area: Scattered residences must be assessed for moderate and high risk to wildfire. Appropriate fuels reduction measures must be identified.
- O Southwest tip of American Falls Reservoir north of American Falls: Housing communities in the area are at risk from wildfire. A fuels reduction assessment must be done to identify moderate and high risks. A public education program should be directed at residents in this area emphasizing defensible space and non-combustible construction.
- o Massacre Rocks State Park: Assess hazardous fuels risks around park facilities, campground and residential occupancies.
- Neeley Area: Assess hazardous fuels reduction needs around homes in the
- o BLM Pipeline Campground & Recreation Site: Assess hazardous fuels reduction needs in the area.
- Snake River Vista Area (up river to American Falls Dam): Scattered homes throughout the area must be assessed for hazardous fuels reduction needs.
- o Fall Creek/Snake River Corridor: Assess hazardous fuels reduction needs around homes.
- Pipeline Campground (up stream to AF Dam): Residential area consists of steep draws and canyons up to homes. Assess the need for hazardous fuels reduction.
- From American Falls City along Reservoir to Seagull Bay: The area consists of primarily private residences. Promote hazardous fuels reduction and defensible space through public education.
- Sunbeam Creek Area: The area is comprised of small subdivisions and scattered individual residences. Promote hazardous fuels reduction and defensible space.
- Indian Springs/Cold Creek Canyon: Scattered residences throughout the area are at risk. Promote a hazardous fuels reduction program and defensible space.
- Cedar Ridge Area: Scattered residences of private property in close proximity to BLM, State lands are at risk. A hazardous fuels reduction defensible space program should be promoted within the area.
- Rock Creek Area (North of Rockland): Scattered private residences are at risk from a wildfire. Identify the moderate and high-risk areas and promote a public education program directed at defensible space and noncombustible construction.
- Slash Disposal in Portage and Big Canyons: There are several piles of slash from old timber harvesting in this area. The slash piles should be burned.
- Sage Hen Springs/Hill House Canyon: Mixed ownership area of primarily private property, State land, and BLM. Assess the hazardous fuels reduction needs.

- Bull Canyon Area: This is an area of mixed structures consisting of private property, BLM and possible State land. Conduct a hazardous fuels reduction assessment.
- Knox Canyon/Big Canyon: High consideration should be given to a fuels reduction project for protection of valuable timber and improved wildlife habitat.
- Pauline Community & Surrounding Area: Implement hazardous fuels reduction around residences of moderate and high risk. Promote defensible space through public education.
- Rattlesnake Creek/Mink Creek Road Area: Residences in Midnight and Crystal Creek area should be assessed for hazardous fuels reduction work. Promote defensible space through public education.
- Officer Springs Area: Assess hazardous fuels reduction needs around homes of moderate and high risk in the area.
- Eagletail Rock Area: Assess hazardous fuels reduction needs around moderate and high-risk homes.
- Arbon Valley/ northern portion above Eagletail Rock: Assess hazardous fuels reduction needs around homes at risk in the area.
- o Compression Station Area: This is a natural gas compression facility with adjacent homes. Fuels reduction needs should be assessed.
- Michaud Creek Area: Scattered homes on this Indian reservation land should be assessed for hazardous fuels reduction needs. Promote public education campaign directed at defensible space.
- Michaud Flats Area (west of the Pocatello Airport): Trailer court and scattered residences in the area are at risk. Assess the hazardous fuels reduction needs.
- o I-86 Corridor throughout Power County: Assess the hazardous fuels reduction needs along the interstate highway corridor.

Coordinating Organizations: Power County Emergency Services

Home Owners Associations

**USDA-Forest Service** 

Idaho Department of Lands Bureau of Land Management

Power County Volunteer Fire Departments

Fort Hall Fire Department

Idaho Power Utah Power

Williams Gas Company Chevron Pipeline Co. Union Pacific Railroad

Target Date: Annually by July or August

Cost Estimate: No hard dollar costs for the assessments.

Hazard reduction costs are unknown pending the

assessment.

# Goal 6: Create and implement defensible space standards for homeowners and developments and utilize standard Fire Protection Guidelines for Residential Development In the Wildland/Urban Interface for subdivisions as identified in NFPA 1144, Standard for Protection of Life and Property from Wildfire, 2002 edition.

- Implement building codes to address fire hazards (e.g., specifying building materials for roofs, siding, access requirements for fire fighting equipment, water supply needs, etc.)
  - With Power County Building Department as lead, and working through Power County LEPC, conduct an assessment of current county-adopted building and fire codes, and/or development regulations.
  - Present findings to the Power County LEPC, and develop a strategy for code development and implementation.
  - o In cooperation with the Power County Commissioners, develop a plan for adoption and implementation of a countywide building code or codes.
  - As a model, study the 2000 version, International Building Code, and the recommended Wildland Urban Interface Code.
  - Conduct public meetings to determine level of interest and support from Power County citizens relative to code development and adoption.

Coordinating Organizations: Power County Emergency Services

Home Owners Associations

**Power County Building Department** 

USDA-Forest Service Idaho Department of Lands Bureau of Land Management

Rockland Volunteer Fire Department

Fort Hall Fire Department

Target Date: Winter 2004/2005 Cost Estimate: Incidental costs: \$2,000

• Provide assistance to residents to convert or cover roofs that are highly susceptible (e.g., shake roofs and old wood siding) to wildland fires.

Coordinating Organizations: Power County Emergency Services

Home Owners Associations USDA-Forest Service

Idaho Department of Lands Bureau of Land Management

**Power County Volunteer Fire Departments** 

Fort Hall Fire Department

Target Date: Annually beginning spring 2006

Cost Estimate: Incidental costs: \$2,000

## Goal 7: Provide Power County VFDs with required training, communications, PPE, apparatus, facility improvements and

## equipment as identified in the Three Rivers RC&D Survey of Volunteer Fire Departments.

• Acquire current NFPA Testing Manuals & Workbooks.

Coordinating Organizations: Power County Volunteer Fire Departments

**Power County Emergency Services** 

Target Date: Spring 2005

Cost Estimate: Comprehensive Consensus Codes<sub>®</sub> Set CD-

ROM: \$500

• Acquire a small, more maneuverable apparatus (e.g. BLM type engine with minimum crew of 3 people) for placement with the Rockland VFD.

Coordinating Organizations: Power County Commissioners

Rockland Volunteer Fire Department Power County Emergency Services

Target Date: Spring 2005

Cost Estimate: One new BLM type engine (crew of 3 min.):

\$150,000

• Improve County grant writing success by training an individual to serve as a County Grant Writer and develop a Grant Resource Library Specific to EMS/Fire.

Coordinating Organizations: Power County Commissioners

Power County Volunteer Fire Departments

**Power County Emergency Services** 

Target Date: Spring 2006

Cost Estimate: Grant Training and Resource Library: Minimal

cost as most resources are available free of charge from the Federal Government (see

http://www.nal.usda.gov/ric/ruralres/funding.htm

#GWR).

• Computerize the Records Management System of both the Rockland and the American Falls VFDs. System should use the standard Idaho Fire Incident Reporting System and submit required reports to the State Fire Marshall's Office.

Coordinating Organizations: Power County Commissioners

Power County Volunteer Fire Departments

**Power County Emergency Services** 

Target Date: Spring 2006

Cost Estimate: Two desktop computer systems with MS Office

and RedZone compatible software: \$4,200

• Provide wildland fire training opportunities (including use of computer-based training) to VFD's and interested citizens. Coordinate with USFS/BLM for wildfire training and utilize the BLM Rural Fire Assistance program.

Coordinating Organizations: Power County Commissioners

Power County Volunteer Fire Departments

Bureau of Land Management

**US Forest Service** 

**Power County Emergency Services** 

Target Date: Spring 2006

Cost Estimate: Wildfire Training CDs (for use on computers

> purchase above): \$500 Computer projector: \$2,200 Power Point Software: \$500

#### Goal 8: Gain community or development participation in firewise activities including education and information distribution.

- Enlist community/development participation in firewise workshops and programs. Continue to host fire agency booths or events (e.g., American Falls Days, Power County Fair) and implement events specific to fire prevention (i.e., Power Fire Prevention Day) to encourage education and cooperation. Schedule educational events at schools and communities prior to and during fire season. Use Countywide coordinated cooperative effort with homeowners, County Fire Fighters, Federal and State agencies for adoption and participation in firewise community activities.
  - o Through public meetings, mailers and public information campaign, promote implementation of the FIREWISE Community program in selected areas of the County. Solicit input from citizens as to interest in mitigation projects on private properties.
  - o Identify interested individuals in remote communities or subdivisions that would be willing to lead a grassroots FIREWISE campaign in their community or neighborhood.
  - o Pursue funding assistance through sources such as FIREWISE or National Fire Plan Communities At Risk program, and others to provide prevention and mitigation upgrades to properties at risk.
  - Solicit input from insurance industry to partner in such projects. Invite insurance company representatives to speak at the LEPC and public meetings to promote prevention and mitigation efforts.

Coordinating Organizations: Power County Emergency Services

> Home Owners Associations **USDA-Forest Service**

Idaho Department of Lands Bureau of Land Management

**Power County Volunteer Fire Departments** 

Fort Hall Fire Department Annually by July or August

Target Date: Cost Estimate: Incidental costs: \$2,000

Provide training to Arbon and Rockland Valley residents on basic wildland firefighting techniques and procedures and basic communication protocols and language to improve interaction and coordination with BLM/FS fire crews.

Coordinating Organizations: **Power County Emergency Services** 

**USDA-Forest Service** 

Idaho Department of Lands **Bureau of Land Management** 

Power County Volunteer Fire Departments

Target Date: Fort Hall Fire Department
Annually by July or August
Incidental costs: \$500

• Have the Garden Grove homeowners association participate in the firewise community program (http://www.firewise.org/communities/).

Coordinating Organizations: Power County Emergency Services

**Home Owners Associations** 

Power County Volunteer Fire Departments

Fort Hall Fire Department

Target Date: Start in 2004 and continuing in following years

Cost Estimate: Coordinator training<sup>19</sup>: \$250.00

Coordinator Travel: \$500.00 Local Workshop Costs: \$500.00

 Conduct door-to-door homeowner education programs on wildland fire hazards and mitigation focused primarily on homeowners in hazard zones identified on Map 6 of this plan. Could involve the local civic, service, youth organizations and County or Federal fire crews.

Coordinating Organizations: Home Owners Associations

**Power County Emergency Services** 

**USDA-Forest Service** 

Idaho Department of Lands
Rureau of Land Managemen

Bureau of Land Management

Power County Volunteer Fire Departments

Fort Hall Fire Department Local Volunteer Organizations Annually by July or August

Target Date: Annually by July or Augu Cost Estimate: Material Costs: \$500.00

Volunteer time: No hard dollar costs

• Involve local civic, service, youth organizations and homeowners to clear a defensible space around selected demonstration homes.

Coordinating Organizations: Home Owners Associations

**Power County Emergency Services** 

USDA-Forest Service Idaho Department of Lands Bureau of Land Management

Power County Volunteer Fire Departments

Fort Hall Fire Department Local Volunteer Organizations

<sup>&</sup>lt;sup>19</sup> Training cost includes lodging costs for two nights.

Target Date: Annually by July or August Cost Estimate: Material Costs: \$500.00

Volunteer time: No hard dollar costs

• Increase fire related signage and develop more fire pits for recreational use in the Pipeline and Mary's Mine recreation areas. Utilize local civic, service and youth organizations to post the signs and construct the pits.

Coordinating Organizations: Home Owners Associations

**Power County Emergency Services** 

USDA-Forest Service Idaho Department of Lands Bureau of Land Management

Power County Volunteer Fire Departments

Fort Hall Fire Department Local Volunteer Organizations Annually by July or August Pit Material Costs: \$500 per pit

Sign Costs: \$500 Annually

Volunteer time: No hard dollar costs

## Goal 9: Develop County Fire-Emergency Mobilization Plan, and County/Interagency Communications Plan with Landowners and Cooperators in Power County and develop subdivision/homeowners wildfire and other emergency operations plan(s) as requested.

• Develop escape routes for the Garden Grove area.

Target Date: Cost Estimate:

- Conduct public meetings with homeowner associations, groups and private homeowners to develop community-based evacuation plans and procedures for selected, isolated neighborhoods, communities or developments, specifically starting with the Garden Grove Development Area.
- Establish a system of identifying designated escape routes from subdivisions and neighborhoods through use of signs or route markers.
- Initiate public information campaign, through use of mailers, public service announcements, and public meetings to educate residents about escape routes and evacuation planning.

Coordinating Organizations: Power County Emergency Services

Home Owners Associations USDA-Forest Service Idaho Department of Lands Bureau of Land Management

Rockland Volunteer Fire Department

Fort Hall Fire Department

Target Date: Winter 2005/2006

Cost Estimate: No hard dollar costs for public meetings.

Estimate approximately \$2,000 for public education activities and signs.

Plan Developer: Dynamac Corporation

February 2004

- Develop an evacuation plan for the entire county.
  - Expand "Evacuation" section of the County Emergency Operations Plan to better define methods of evacuation warning, decision authority, and coordination.
  - In cooperation with Idaho Transportation Department, Power County Highway Department, and the Power County Sheriff's Department, develop a pre-plan for evacuation management, to include pre-designation of evacuation routes, emergency road closures or restrictions, and traffic flow control.
  - o Integrate community or development-specific evacuation plans into the County Emergency Operations Plan Evacuation section.

Coordinating Organizations: Power County Emergency Services

Idaho Transportation Department Power County Highway Department Power County Sheriff's Department

Home Owners Associations USDA-Forest Service Idaho Department of Lands Bureau of Land Management

Rockland Volunteer Fire Department

Fort Hall Fire Department

Target Date: Summer 2006
Cost Estimate: No hard dollar costs

## Goal 10: Apply fuels treatment – hand, mechanical, prescribed fire or combination of treatments to reduce fuels loads on CRP land.

- Develop a hazardous fuels reduction plan for perimeters of CRP fields or around buildings to create firebreaks that will reduce the potential threat from a wildfire. Elements of this plan should include:
  - O Work with State and Federal government agencies to develop site-specific guidelines for grazing, mechanical treatment or burning of CRP lands that are keyed to elevation, climatic, or grass disturbance indicators (to replace broad, countywide dates and rules) and that provide for fuel load reductions or fire barrier construction on CRP land while still meeting the intent or objective of the CRP set aside.
  - Work with State and Federal government agencies to accept and encourage the use grass species that are more fire resistant or produce less dry fuel than common crested wheat grass (e.g. Alfalfa and Greenar wheat grass).
  - Work with State and Federal government agencies to permit placement of wildland fire barriers in very large tracts of CRP to limit total fire size.

Coordinating Organizations: Natural Resources Conservation Services (NRCS)

**Power County Volunteer Fire Departments** 

Power County Emergency Services

Arbon/Rockland Home Owners Idaho Department of Lands

Idaho Department of Fish & Game Bureau of Land Management

USDA-Forest Service Fort Hall Fire Department Farm Service Agency (FSA)

Target Date: Spring 2005 for site-specific guidelines

Annually as per guidelines for fuels reduction

Cost Estimate: No hard dollar costs

• Develop defensible space fire barriers around single and multiple house sites, and farm/business sites surrounded by CRP lands (see Goal 6).

• Coordinated management of CRP land with noxious weed and noxious insect control measures.

#### Goal 11: Develop a comprehensive inventory of homes and provide the inventory to dispatchers and VFDs in times of emergency response.

• Locate (using GPS) and document (type of source and reliability) all structures in the County (see Map 9 in Appendix A for a partial location within the Arbon Valley area). Annually update the information and provide to organizations and agencies conducting fire suppression operations in the County.

Coordinating Organizations: Home Owners Associations

Power County Assessors Office
Power County Emergency Services
Power County Volunteer Fire Departments

Fort Hall Fire Department Local Volunteer Organizations Annually by May or June

Target Date: Annually by May or June
Cost Estimate: GPS units purchased as part of

Estimate: GPS units purchased as part of Goal 2 Volunteer time: No hard dollar costs

 Request a grant from the Bureau of Land Management, Upper Snake River District, to purchase and implement the RedZone software in the county.
 Annually update the information and provide to organizations and agencies conducting fire suppression operations in the County.

Coordinating Organizations: Home Owners Associations

Power County Assessors Office
Power County Emergency Services
Power County Volunteer Fire Departments

Fort Hall Fire Department

Power County Sheriff's Department Local Volunteer Organizations

Target Date: Annually by May or June

Cost Estimate: RedZone Software: BLM grant

Palm Pilot unit: \$300.00

Volunteer time: No hard dollar costs

#### **Existing Mitigation Programs and Resources**

Existing mitigation activities include current mitigation programs and activities that are being implemented by county, state and federal agencies within Power County.

#### **Local Programs**

Power County residents are served by a variety of local fire districts and departments as well as by IDL, U.S. Forest Service and BLM. A countywide needs assessment of the various Volunteer and Rural Departments has been coordinated by the Three Rivers RC&D for Power County departments are: Training, Communications, Personnel Protective Equipment, and Apparatus (water tenders distributed at different areas of the county, engines).

Fire personnel throughout the county have taken the lead in providing many useful and educational services to Power County residents, such as:

- Presenting fire safety education to school, church and civic groups;
- Coordinating educational programs with other agencies;
- Participating in or sponsoring local community events that focus on fire information and prevention.

#### **County Codes**

Power County Planning and Zoning Ordinance No. 98-01 established road standards, conditions of design and construction. This ordinance contains guidance for design requirements for construction of various road service classes in Power County.

#### State (IDL) Programs

- Provides education to property owners about fire hazards in forestland-urban interface areas.
- Manages the Hazardous Fuels Reduction Program to assist landowners or counties with grant funds for reduction of hazardous fuels.
- Manages the Forest Stewardship program, which assists landowners in forest and fire planning.
- Provides suppression training and resources as requested.
- Declares fire closures when wildfire danger ratings and conditions require.

#### Federal Programs

The role of the federal land managing agencies in Power County is focused on reducing fuel hazards on the lands they administer. They also provide prevention and education programs, provide technical and financial assistance and develop agreements and partnerships with other agencies and private stakeholders in an effort to provide for safer communities within the wildlands. Some of the programs provide grants to rural fire districts within the county, which has enhanced the current operations, and will continue to do so within the foreseeable future.

Fire Suppression Assistance Grants may be provided to a state with an approved hazard mitigation plan. These grants are provided to protect life and improved property. The grant may include funds for training, equipment, supplies, and personnel.

#### National Wildland/Urban Interface Fire Protection Program

Federal agencies can use the National Wildland/Urban Interface Fire Protection Program to focus on wildland/urban interface fire protection issues and actions. The Western Governors' Association (WGA) uses this program to involve state agencies, as well as local and private stakeholders.

#### Prescribed Burning/Mechanical/Biological Treatment

Within Power County, the inclusion of cropland in the Conservation Reserve Program (CRP), coupled with historical fire exclusion has resulted in a backlog of fuel accumulation. As a result, new ignitions can move more quickly and intensely. Prescribed burning and/or mechanical treatment are the most efficient methods to mitigate these fuels. Biological treatment (ungulate grazing) of some fuels has also been utilized with success in other areas of Idaho.

#### **Firewise**

Firewise is a program developed within the National Wildland/Urban Interface Fire Protection Program. It is administered through the National Wildfire Coordinating Group (NWCG), with the intention of educating planners and decision makers at the local level. Firewise offers online wildfire protection information and checklists, as well as listings of other publications, videos, and conferences. Future developments in Power County that would be is planned and coordinated as a "firewise" community would likely be well received by potential home buyers.

#### Wildfire Mitigation Plan Maintenance

Proposed plan maintenance will be biennial, with a total review proposed every four years.

Biennial review of the plan and mitigation recommendations will be necessary as various projects or tasks are accomplished and areas at-risk decline. Biennial review will also be needed as County infrastructure needs change or are met. (Power County Fire Fighters, Power County Emergency Services, Power County Sheriff). A biennial review with the Wildfire Branch will allow State and Federal Land managers to initiate required planning procedures for identified mitigation projects and to update or modify mitigation recommendations.

A total review every four years (2008) is recommended as Power County infrastructure needs change, specifically: population increases, fuels reduction projects are completed, emergency services communication needs are met or increase, and priority risk from wildfire is mitigated.

#### Continued Public Involvement

The continued involvement of the public for the Power County Wildland Fire Mitigation plan is needed to accomplish many of the mitigation recommendations. Publication of mitigation actions as they are addressed will occur in the American Falls *The Power County Press*, which is viewed by most residents and visitors and by publication of mitigation actions on the Power County web site.

Establishment of Emergency Action Plans for developments and communities will require continued involvement for the next two years. Incorporated areas of Power County will require plan review prior to implementation. Official representation of incorporated towns was very good at meetings providing input to the plan and the attending representative fire chiefs, in turn, kept the incorporated areas informed of the group's activities.

Copies of the plan will be available at libraries within Power County for public access and review. Biennial review, and mitigation priority assessment by Power County Fire Fighters, Emergency Services and the County Sheriff will provide information to and create involvement of numerous residents of Power County. The biennial review by federal and state agencies will provide updates and progression of plan priorities to the general public within Power County, and should be published in the American Falls *The Power County Press* and on the Power County web site.

#### **List of Authors**

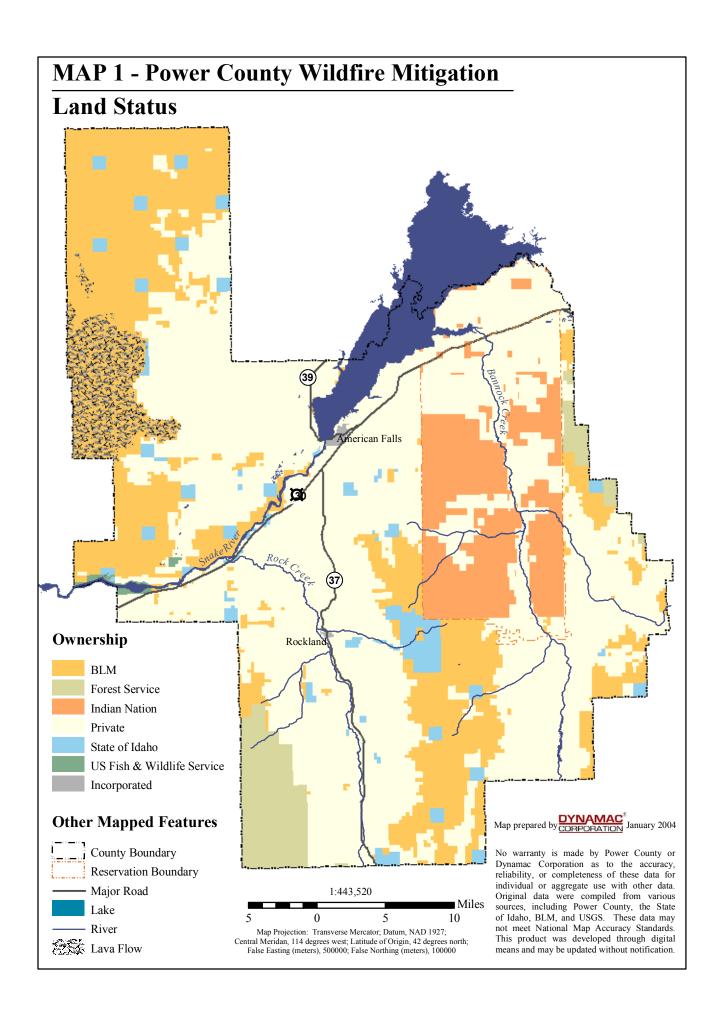
Jeff Bass Fire and Resources Specialist 350 Middlefork Road Garden Valley, Idaho 83622 208-462-3131

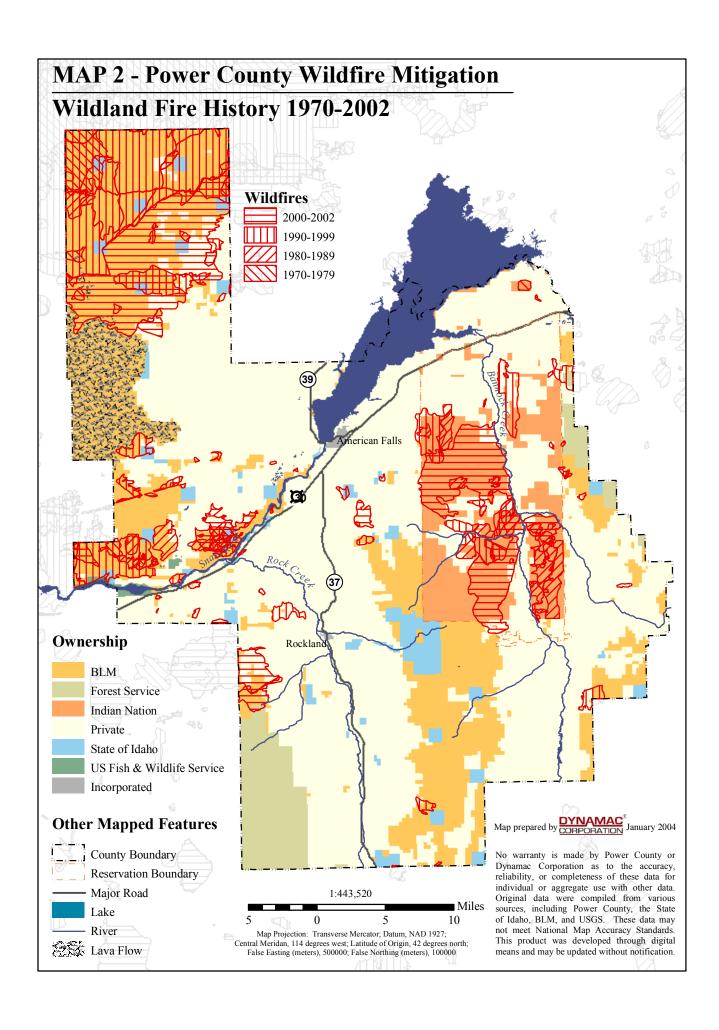
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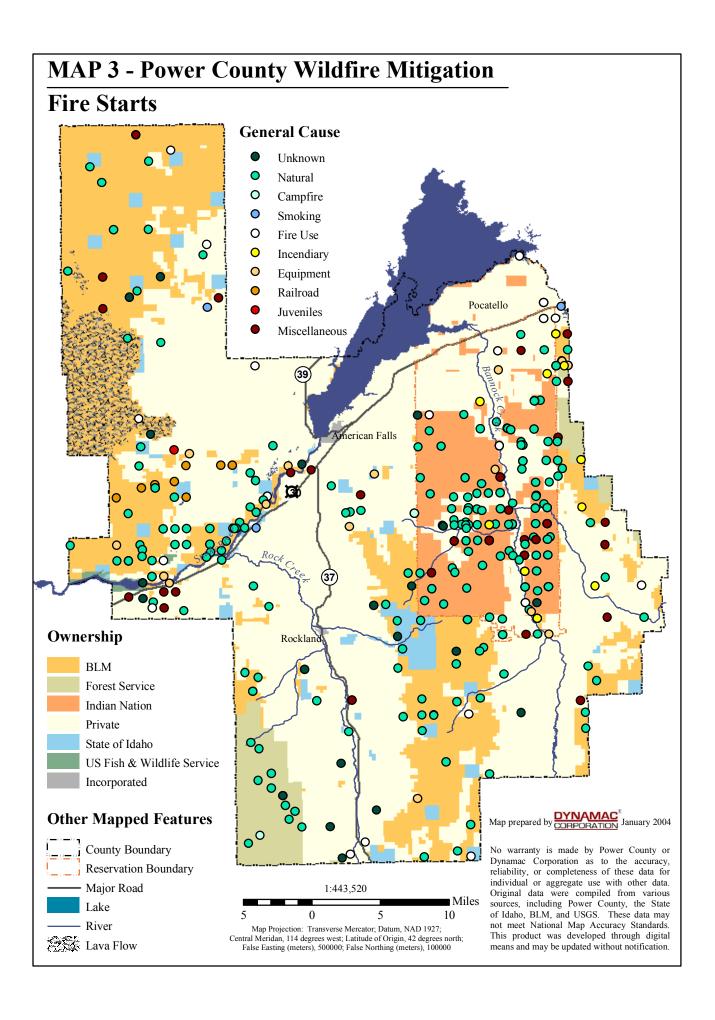
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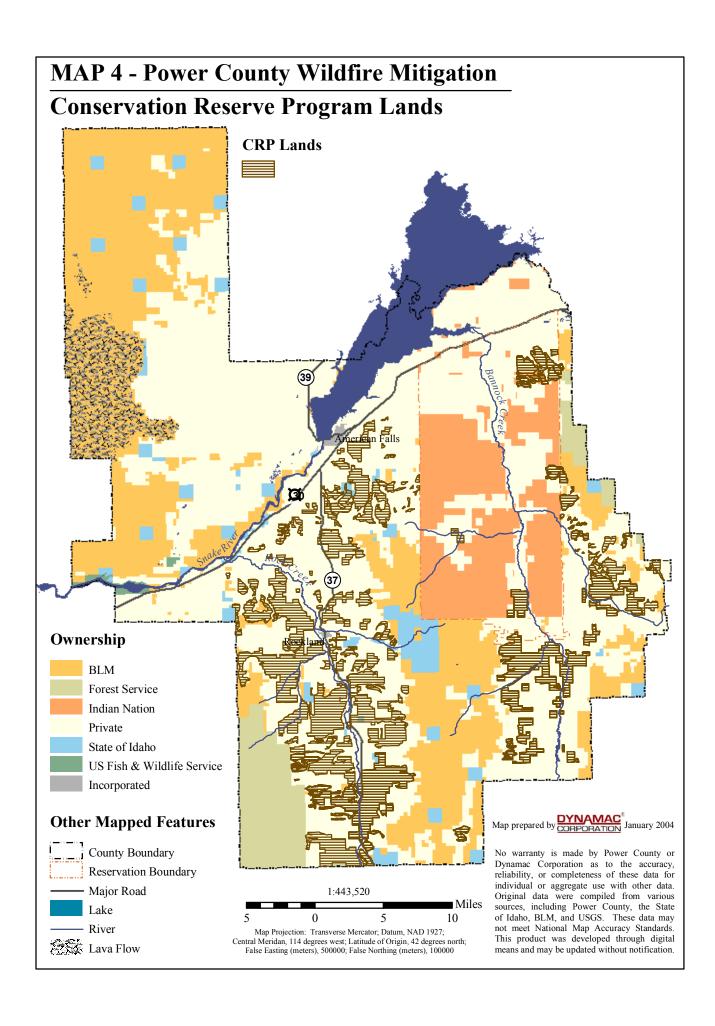
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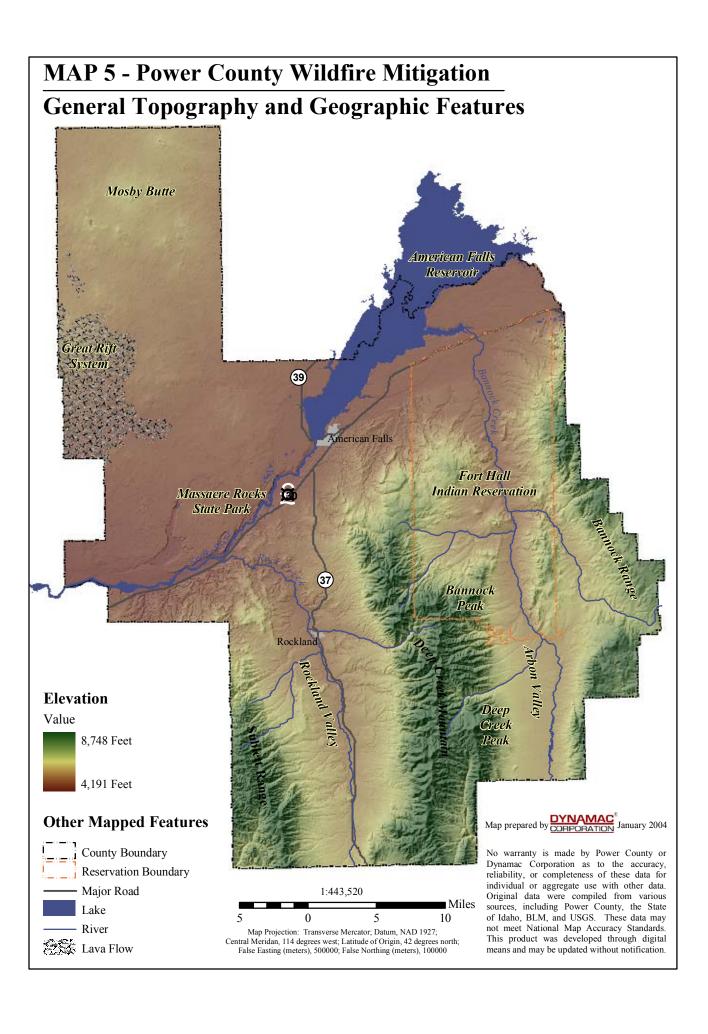
### Appendix A Maps

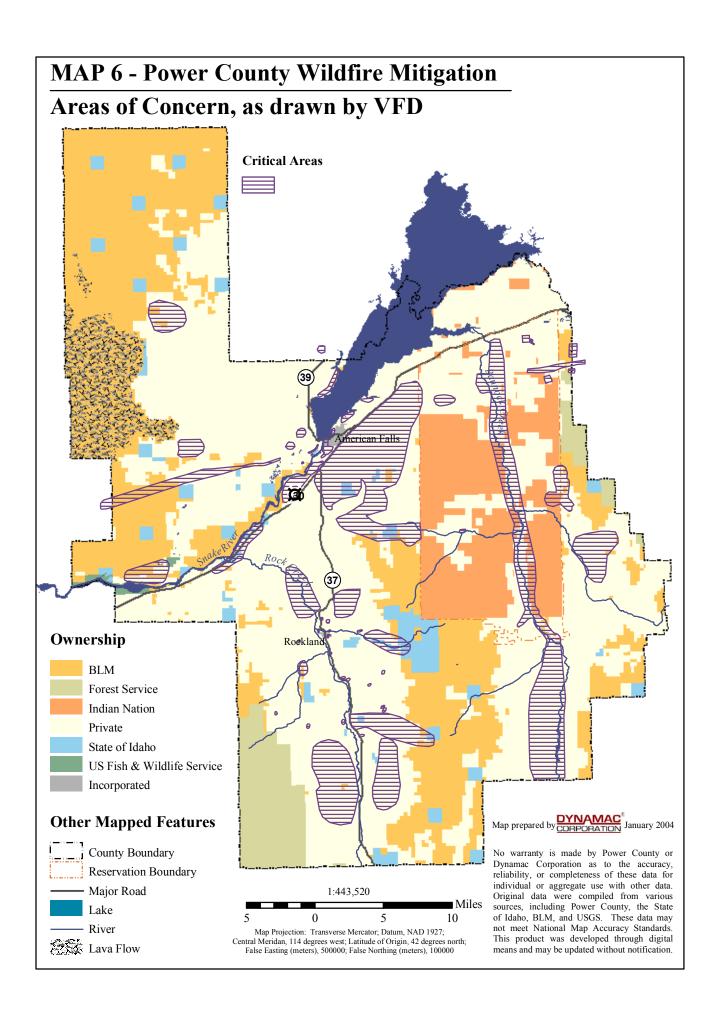


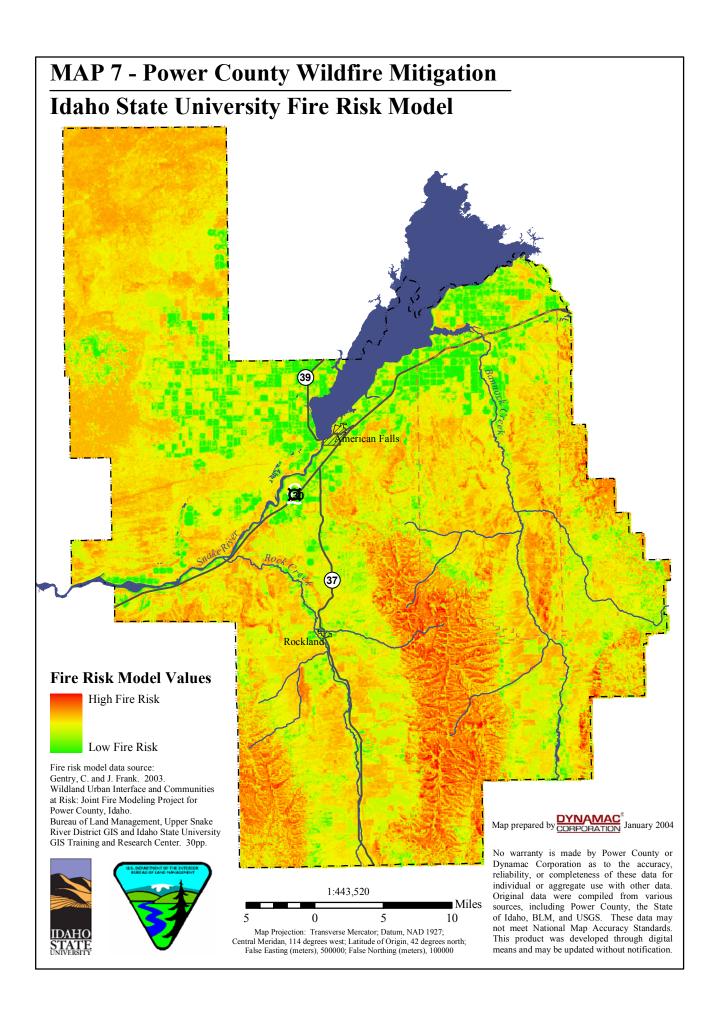


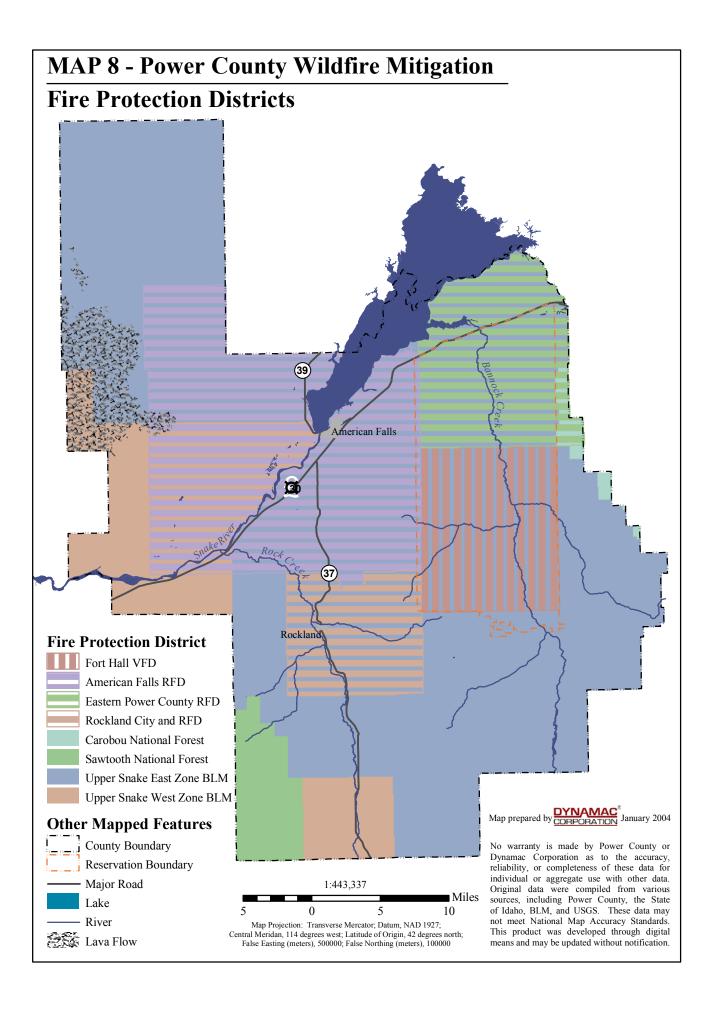


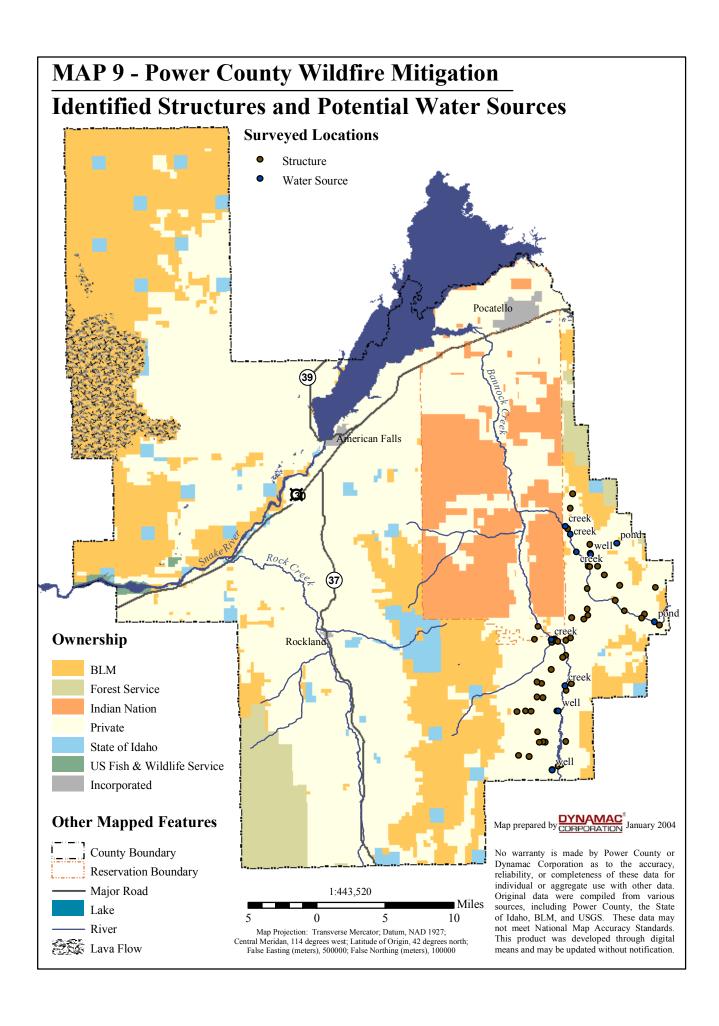












#### **Appendix B**

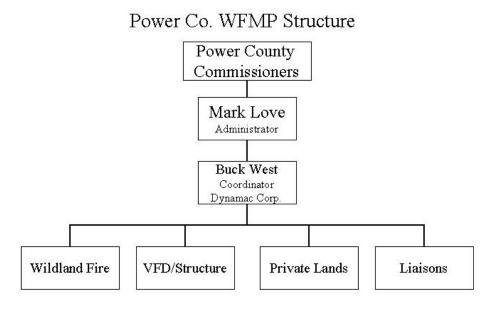
### **Public Participation/Planning Process Documentation**

Public participation was a key component of the strategic planning process for the Power County Mitigation Wildfire Plan (The Plan). The Plan integrates a cross-section of citizen and agency input that was gathered throughout the planning process.

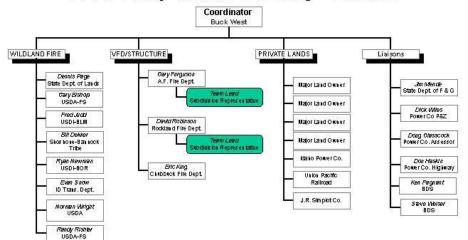
Structured under the Incident Command System, the Power County Wildland Fire Mitigation Group was formed to steer this process. The Group was comprised of knowledgeable individuals representing the major land stakeholders in the county, including:

- Power County Commissioners
- Power County Planning and Zoning
- Power County Emergancy Services
- Power County Volunteer Fire Department Chiefs
- Idaho Bureau of Disaster Services
- Idaho Department of Lands
- Idaho Fish and Game
- County Residents and Land owners
- USDI, Bureau of Land Management, Upper Snake River District
- USDA-Forest Service, Sawtooth and Caribou National Forests

The use of ICS provided optimal information exchange, hazard identification and mitigation recommendation development. Public participation was accomplished by distribution of questionnaires that address wildfire concerns and suggestions, participation by homeowners associations at the team leader level.



#### Power County Wildland Fire Group -- Branches



## Appendix C Meetings and Public Outreach

#### Sample Wildland Fire Questionnaire used for public input.

	C	TI
To reduce the risk of wildfires, Power	County is initiating a County Wide Wildfire Mitigation Pl lland fire through risk assessment and hazard identification	an. The
olan seeks to reduce the threat of wild	re not limited to wildfire prevention and reduction of fuels,	•
normaling fire protection capabilities	of communities, and public education. The goal of the pro	gram is to
learness the changes of wildfire sprea	ding from public lands onto private or community lands an	nd vice-
versa. Vou can help in this County-w	ride effort by providing information and suggestions on pot	ential
ssessment and mitigation efforts. Th	his questionnaire is being conducted on behalf of the Power	County
Commissioners by Dynamac Corporat	tion (1551 Delmar Circle, Idaho Falls, ID 83404).	
Secretaria de Salvada de Companyo		
You may either mail this questionnair	re to the address provided; or you may drop it off at the Pov in Train, American falls), or at your local fire department.	ver
County EMS building (500 N. Oregor	i Hain, American lans), of at your local the department.	
Fold on lines, staple and apply stamp.		
	Total on times, super and apply samp.	
Dynamac Corp.		Place
551 Delmar Circle		Stam
daho Falls, ID 83404		Here
		Marie Co.
	Power County Wildland Fire Mitigation Plan	
	Dynamac Corp.	
	1551 Delmar Circle	
	Idaho Falls, ID 83404	
1. What town or community do yo	ou live in or closest to?	
2. How great a risk do you think w	vildfires pose to your residence?	
i i i i i i i i i i i i i i i i i i i		
	unity do you think are an extreme fire hazard and pose	a
wildfire risk to homes or prope	rty?	

4.	What do you think might be the best way to mitigate, or reduce this hazard?
5.	Do you know of any recent actions taken by the community, the county, etc., to reduce the rist of wildland fires or to protect residents from wildfires spreading from public land to private?
6.	Have there been recent fire reduction education programs in your community? If so, what we the nature of the projects?
_	Who sponsored them and when?
may	des residences and community buildings, are there other locations or properties (may or not be a structure) that have a high environmental, cultural, or economic value and should priority for fire risk reduction?
Do yo	ou think your community is prepared to combat wildland-urban interface fires?
	t, what do you think could be done to improve your town's/ subdivision's wildland-urban face firefighting capabilities?
	ve questions or would like more information, can we contact you?
ame:	:
hone:	
	Thank you for your time and your ideas!

#### Team Meeting #1

On June 30, 2003 the Wildland Fire and VFD/Structure branches of the Power County Wildland Fire Mitigation Plan (WFMP) project team met from 3:00-5:15 PM in the EMS building (560 N Oregon Trail) at American Falls. The objectives of the meeting were to:

- Identify positions in Power County Wildland Fire Mitigation Group Organization-Group Supervisors
- Liaisons, administrators, team leads, coordinators
- Develop Wildland Fire Mitigation Plan Priorities
- Identify Resources needed for the Power County Wildfire Plan

#### Attending the meeting were:

Robinson, David Rockland Fire Dept. Page, Dennis Idaho Department of Lands Judd, Fred Bureau of Land Management Bishop, Gary U.S. Forest Service Ferguson, Gary A.F. Fire Dept. Love, Mark Power Co. Disaster Services Estep, Ken Commission chairman Zimmerman, Ray Commissioner West, Buck Dynamac Corp. Bass, Jeff Dynamac Corp.

Buck West opened the meeting with a brief review of the objectives. Jeff Bass then reviewed why we were here and brief discussion of the purpose of a Wildland Fire Mitigation Plan. A question was raised about why the plan was being written at the County level and not the individual community level? Jeff pointed out that the Idaho implementation of the National Fire Plan identified the county as the unit of management. Further discussion also indicated that there had been some attempt to use smaller management units and that it quickly became overwhelming and unmanageable.

Jeff then asked the participants for some of their objective for participation in the planning effort. Those objectives included:

- Identify the need for Memorandum of Understanding (MOU) between fire organizations for the coordination and back fill of resources when needed. This is especially needed in areas not covered by existing fire control jurisdiction.
- Identify provisions for reimbursing fire departments for fighting fires in another jurisdiction. (Fred Judd noted that there is such an agreement covering Federal and State grounds in American falls and Chubbuck. It does not cover any other areas.)
- Identify the need for public education on insurance ramifications.
- Identify the need for additional emergency plans in the County. (Jeff Bass noted that this plan can identify the need for such efforts, but will not actually write individual community emergency plans.)

• Ensure that the whole County is covered by some basic fire protection.

Buck West reviewed the following proposed outline for the plan:

- Adoption by the Power County Commissioners,
  - o As recommended by the Power County Wildland Fire Mitigation Group
- Executive Summary
- Introduction
- Profile of Power County
- Hazard Identification, Vulnerability, Risk
- Hazard Location and Description
- Hazard Potential and Trends
- Hazard Prioritization, Mitigation Goals
- Wildfire Mitigation Strategy and Implementation
- Wildfire Mitigation Plan Maintenance
- Continued Public Involvement
- Appendix
  - o A-Maps
  - o B-Charts
  - o C-Public Participation/Planning Process Documentation
  - o D-Benefit Cost Analysis
  - o E-List of Acronyms
  - o F-Financial/Technical Resources

The plan is basically in two parts. The first part is hazard identification and the second part is mitigation measures. Jeff stressed that the plan is designed to not only meet the current wildfire mitigation needs, but is also intended to easily plug into future planning efforts coming up in the next few years (e.g. FEMA disaster planning). While intended to be a simple plan it is probable that the document may run 40 to 60 pages in length in order to adequately address current and future planning needs.

The project schedule was then discussed. July and August will be spent in hazard identification and vulnerability assessments. In September and October the team will focus on mitigation goals and measures. The November and December time will be spent on prioritizing the mitigation measures and finalizing the plan. The County Commissioners expect a final document, ready for their signatures, by December 22, 2003.

The organization of the WFMP team was discussed. A modified Incident Command Structure (ICS) was used to organize this team. The structure will help organize the flow of information up and down the structure tree. Members of each branch are responsible for collecting information and data and transferring it up the structure for combination with the other branches information. The branch members are also responsible for disseminating information out to the people and organizations they represent.

Jeff then discussed the need for liaisons between this planning effort and

- 1. Idaho Department of Fish and Game
- 2. County Planning and Zoning (for coordination with planning ordnances and county comprehensive plan)
- 3. County Assessor (for assessing values at risk)

Jeff presented a slide with suggested priorities for the planning effort. These priorities would help form the basis for prioritizing the hazards and the mitigation actions. The team agreed that the priority order should be:

- 1. Life
- 2. Property (homes, cropland, infrastructure, etc.)
- 3. Resources (timber, watershed, rangeland, and other natural resources)
- Values (scenic, historical, cultural, etc.)
   Public Awareness
   Emergency Services
   Partnerships

The group discussed some of the data needs for the plan. Everyone was encouraged to begin assessing hazards in their area of responsibility. A copy of a questionnaire was handed out as a possible way to collect information and input from interested stakeholders. Buck West stressed that we want to keep our focus on the hazard assessment at this time. People will want to jump to the mitigation recommendations, however, we need a sound hazard assessment in order to support and prioritize any recommendations. Specifics of the discussion include:

- A historic fire occurrence map will depict the location and area of Type-3 fires or larger for a specified time period. (Note: Fred Judd that he would have the fire history maps, at least for State and Federal lands in time for the next meeting.)
- A historic ignition map will depict the location of all fires for a specified time period (similar to a lightening strike map).
- Infrastructure items will be located on a map for GIS entry (GPS location coordinates of infrastructure elements are optional).
- Need an Arbon homeowner representative to address their lack of fire coverage by any jurisdiction.

There was some discussion on the work being done for the State of Idaho by the Jeff Jones Consulting group. They have been contracted to map the fire hazards for the entire state. There was concern that their preliminary results may indicate there is a low hazard potential in Power Co. Jeff Bass will look into what they are doing, how it may affect the Power Co. plan, and identify actions to address any potential conflicts.

#### Team Meeting #2

On July 17, 2003 the Wildland Fire, VFD/Structure, Liaisons, and Private Land branches of the Power County Wildland Fire Mitigation Plan (WFMP) project team met from 3:00-4:30 PM in the EMS building (560 N Oregon Trail) at American Falls. The objectives of the meeting were to:

- Purpose of the Power County Wildland Fire Mitigation Plan (PWFMP)
- Present the (PWFMP) Organization and Roles
- Present and discuss the planning schedule
- Discuss the Wildfire Mitigation Plan Priorities
- Discuss current needs/actions for the PWFMP
- Discuss public involvement
- Set date for next meeting

#### Attending the meeting were:

Barclay, J. Idaho Power Company
Beitia, Tony Sawtooth National Forest
LLS Forest Sawing

Bishop, Gary U.S. Forest Service

Burgemeister, Arnold American Falls Rural Fire Dept.

Dekker, Bill Fort Hall Fire Dept.

Fagnant, Kenneth Bureau of Disater Services

Fincher, Paul Williams Gas Co.

Hayden, Hans

Judd, Fred Bureau of Land Management

Love, Mark

Meadows, Vicki Power Co. Commissioner

Mende, Jim Idaho Department of Fish & Game

Miller, Merlin Chubbick Fire Dept.
Orgill, Barry Williams Gas Co.
Reinke, Tim Utah Power

Ward, Vance

West, William Dynamac Corp.

Vicki Meadows, Power County Commissioner, opened the meeting with a brief history of why the County is developing a Wildland Fire Mitigation Plan (WFMP) and the selection of Dynamac Corp. as a contractor to develop the plan. Buck West then ran through a slide presentation outlining the planning purpose, organization and schedule. Those slides can be found at the end of this report.

The plan is basically in two parts. The first part is hazard identification and the second part is mitigation measures. Buck stressed that the plan is designed to not only meet the current wildfire mitigation needs, but is also intended to easily plug into future planning efforts coming up in the next few years (e.g. FEMA disaster planning). While intended to be a simple plan it is probable that the document may run 40 to 60 pages in length in order to adequately address current and future planning needs.

During discussion of the project schedule a question was raised about the ability to meet the schedule with all the time requirements necessary under the National Environmental Policy Act (NEPA). Fred Judd responded that even though the plan was being done with Federal grant money there was no requirement to conduct NEPA analysis on the development of the plan. Once the plan is completed and accepted by the county commissioners, any work done on Federal land or using Federal money will fully comply with all environmental requirements. Specifically, the BLM will complete any NEPA analysis required.

Buck West stressed that we want to keep our focus on the hazard assessment at this time. People will want to jump to the mitigation recommendations, however, we need a sound hazard assessment in order to support and prioritize any recommendations.

Fred Judd presented a map with all fire occurrences in Power County from 1956 through 2001. The occurrences were broken down into human and natural caused on Federal of State lands only. Discussion of the map pointed out that the rural and volunteer fire departments will need to develop such a map for fires within their jurisdiction. Fred was asked if he could generate a fire area map for the same time period for class 3 fires or larger, and also a vegetation map. Fred said he would check into the request.

Discussion turned to public participation in the planning effort. The following suggestions were made for involving the public in the planning effort:

- Use fire incidents to explain the Power County Wildland Fire Mitigation Plan (WFMP) and to suggest local meetings with the publics. It was stressed that County officials need to be in front of the press at fire incidents to discuss the importance of the mitigation planning and to solicit public input.
- Convene a small group of people (approximately 10 participants) at different parts of the County (probably based on fire districts) to discuss wildland fire hazards and brainstorm mitigation measures.
- Have the County commissioners sponsor a booth at the county fair (August 7 and 8) to present the WFMP, gather public input (use the questionnaire handed out at the June 30 meeting), and distribute fire safety and protection materials.
- Conduct general County-wide public participation activities after there is a draft WFMP the public can respond to and comment on.

#### Other items discussed during the meeting:

- ISU is preparing a GIS fuels mapping study of Power Co. funded by the BLM. The University has just completed a similar study for Bannock Co. Keith Webber is the contact at ISU for this information.
- The team requested that URL for the Idaho Department of Lands web site for fire mitigation planning be sent to all team members.
- The Shoshone-Bannock Tribes are currently doing some vegetation treatment activities on the reservation and want to make sure their activities and the WFMP don't contradict each other. Because the reservation covers several counties the Tribes will have to make a decision about participation in each individual County plan or to do a single reservation plan encompassing portions of several counties and integrating with the individual county plans.

- Communication in the Arbon valley area is a concern. There are several private radio networks in the valley but no single valley-wide network (transmitter station rental fees on Federal lands are now prohibitively expensive). Development of a valley-wide communications network, one that can be accessed by private citizens in the valley, would greatly improve fire response in the valley.
- A question was raised about BLM rules regarding private initial suppression activities of fires on Public Lands that threaten private land. These rules and guidelines need to be addressed in the WFMP so there is clear guidance to all involved in such actions.
- Concerns were expressed about the condition of vegetation on land in the CRP program.

Fred Judd suggested that the major federal (BLM and FS), state agencies (IDL), and Shoshone/Bannock Tribes managing lands within the county and for the rural and volunteer fire departments meet to locate on a map(s) the fire hazard areas within the county and other items of interest. All agreed that this meeting will be an excellent opportunity to gather, in a very short time, some of the information needed for the hazard assessment section of the plan. The meeting was scheduled for next Thursday, July 24, 2003, from 0900 to 1100 hours in the EMS building, second floor conference room. Others are welcome to attend if they have time and interest.

#### Public Meeting #1

On August 14, 2003, the Power County Wildland Fire Mitigation Plan (WFMP) project team met from 3:00-5:00 PM in the Arbon School basement at Arbon, ID. The objectives of the meeting were to:

- Briefly discuss any information resulting from the wildland fire booth at the county fair.
- Proof the GIS map drawn from the topographic maps prepared on July 24(from Fred Judd).
- Compare the 7/24 map with the fire risk zones map from the ISU web site for rangeland fire.
- Review the fire area for class 3 or greater fire (from Fred Judd).
- Review some of the map information from the Jeff Jones study.
- Draw the fire protection districts on a map for digitizing into GIS.
- Draw communication tower locations and area coverage on a map for digitizing into GIS.
- Identify areas to conduct NFPA 1144 wildfire checklist reviews.
- Discuss actions for identifying values at risk in the county.

Attending the meeting were:

Adams, Stu Anderson, Lynn Bass, Jeff Dynamac, Inc. Bradley, Willard Curry, Bill Curry, Rexdaze
Dekker, Bill
Fort Hall Fire Dept.
Edwards, Lowell
Fagnant, Kenneth
Bureau of Disater Services
Haskin, Don
Power County Highway Dist.
Hayden, Hans
Judd, Fred
Bureau of Land Management
Lewis, Linda
Love, Mark
Lusk, David
Lusk, Steve

Meadows, Vicki
Power Co. Commissioner
Melton, Jim
Dynamac Corp.
Miller, Merlin
Chubbick Fire Dept.
Rerce, Ron
Sheppard, Scott
Tinno, Harvey
Ward, Vance
West, William
Dynamac Corp.
Wright, Gregory
Zwiesler, Steve

The meeting opened with introductions. From 1500 to 1600 hours the meeting focused on the activities of the Wildland Fire Mitigation Plan group.

One question discussed at the last meeting was what the Shoshone-Bannock Tribe intended to do since the reservation lands encompassed parts of five counties. Bill Dekker said the Tribe intends to do their own WFMP involving all the Counties impacted by the reservation. The tribe will actively participate on this plan including making mitigation recommendations for areas on the reservation. Buck West noted that the Tribes participation on the Power County plan is welcomed and appreciated, but it is clearly understood that this plan will have no authority for recommendations on the reservation.

Fred Judd was asked to report on the wildfire prevention booth at the County fair. The booth was set up for August 8 and 9, from mid morning to mid afternoon. The turnout was disappointing, however, several people pointed out that the majority of people attended the fair in the late afternoon and early evening. Plans are to set up another booth for American Falls days on August 16. The main attraction at American Falls days will be the Bar-B-Q about noon and the booth should be manned during this time to draw the most people. Fred will coordinate the booth and make sure they cover the Bar-B-Q.

The group then reviewed the hazard map developed on July 24 by Fred Judd and the VFD leads. Fred explained how the map was developed. The July 24 map was compared to a fire hazard map developed at ISU and posted on their GIS web site. Those present pointed out several omissions on the July 24 map, and the omissions were noted on the map. Participants were encouraged to mark any information they believe is important to the plan, including communication sites and networks, on the maps.

From 1600 to 1700 hours approximately fifteen residents from Arbon valley showed up to discuss the mitigation plan. The purpose and benefits of the plan, the structure of the planning team, and the progress to date was briefly reviewed with the new attendees. It

was stressed that the current focus of the planning team was to identify the wildland fire hazard in the county. The next step will be to identify the values at risk from wildland fire and finally to identify and prioritize mitigation measures to reduce the hazards on those values at risk. The earlier discussion of the July 24 fire hazard map was briefly reviewed and the participants were asked for comments on the map. Participants were invited to share any information or concerns regarding wildland fires or to ask any questions about the mitigation plan or process.

Much of the conversation dealt with mitigation measures and things the residents believed were needed to help protect the valley from wildland fire. General points if interest from that discussion include:

- There were questions about the cost of fire insurance verses the cost of a taxing district for fire protection.
- It was suggested that Power Company employees driving along the transmission lines have started some fires in the county.
- Arbon valley is a in a lightening belt that draws a lot of lightening. There is a pattern where the thunderstorms build on the desert and then dump their lightening along the foothills and in Arbon valley.
- CRP lands are a high hazard area because of the type and volume of fuels. It was estimated that 37% of the County is in CRP.
- A suggestion was made to start the next meeting with a firewise presentation before starting into the WFMP agenda.
- The houses along Mink Creek are in a high hazard Wildland/Urban Interface (WUI) because the interface involves larger fuel types such as trees.

Possible mitigation measures identified for when the planning effort reaches that point include:

- Consider joining forces of fire protection districts and forming a County-wide protection district.
- Establish a sub station in Arbon valley. This will require the establishment of a fire protection district and a tax to support the district.
  - The establishment of a fire protection district in Arbon valley should reduce fire insurance rates. Will need to do a comparison between the cost of the fire protection tax verses the reduction in insurance costs. How much will a substation cost?
- There is a one-mile gap between the American Falls and the Rockland fire protection districts. This gap needs to be corrected and the lines adjusted to provide full coverage.
- Provide firefighting training to the Arbon valley residents.
- Identify fuel reduction work in the county as part of this mitigation plan.
- Provide for emergency power for water sources. When the power goes out in a fire there is no way to pump well water to fight the fire.
- Identify mitigation measures for protecting power poles during wildland fire events.

• Establish a central water tank, pumper truck or pumper trailer that can be used by anyone on Arbon valley to fight wildfires.

A major topic of discussion was the lack of communication in the valley. Private communication networks have been dropped because of the high cost of Rights-of-Way for repeater stations on Federal lands. This means there is no way to provide communication coverage for the valley. Communication is an issue not just for fire mitigation, but is also important for all other disaster needs (snow, accident, etc.). Hans Hayden presented a map of locations (GPS coordinates included) in the Valley that would be potential locations for cell phone towers that would provide good coverage for the valley. Hans also noted that Clark and Teton communications companies have been in discussion with local governments about placing a cell tower to serve Arbon valley. Harvey said the Shoshone-Bannock Tribe may be interested in providing a possible site on the reservation if the all the details can be worked out. Mark Love suggested we establish a sub-committee with Harvey Tinno, Mark Love, Hans Hayden, Don Haskin and Bill Dekker to look into the communications issue (it is assumed that Mark would head this sub-committee).

The residents were encouraged to stay involved in the planning process. There was a request for access to the drafts of the WFMP as they become available. Suggestions were made for posting information and drafts on the Power County web site and providing paper copies at strategic locations within the county. The meeting adjourned about 5:00 PM, however several residents stayed until almost 6:00 PM to individually discuss any issues and ideas.

## Public Meeting #2

On October 8 the Power County Wildland Fire Mitigation Plan (WFMP) project held a public "Open House" from 6:00-8:00 PM in the Rockland Public building in Rockland, ID. The objectives of the "Open House" were to:

- Present the purpose of the Power County Wildland Fire Mitigation Plan (PWFMP)
- Present the (PWFMP) Organization and Roles
- Present and discuss the planning schedule
- Discuss the Wildfire Mitigation Plan Priorities
- Discuss issues associated with wildland fires in Power County
- Identify and discuss potential mitigation measures

#### Attending the meeting were:

Barker, Rowan

Barnard, Charles

Brady, Jerry

Crofts, Mark

Fagnant, Kenneth

Bureau of Disater Services

Fillmore, Liz

Fillmore, Liz

Hansen, Eddy

Hurd, Gary

Hurd, Judith

Judd, Fred

Bureau of Land Management Nelson, Gene Kariger, James Nelson, Richard Love, Mark Nelson, Ron Mathews, Mike Payne, John Mathews, Rosann Permann, Alan Robinson, James May, Breanna May, Leonard Sjelin, Paul May, Robert Smith, Jeremy Steed, Bruce McHargue, Dan McLean, Cindy Trugh, Ray Wagner, Robin McLean, James Meadows, Vicki Wagner, Steve Power Co. Commissioner Wegner, Robin Wilson, Kip Moss, Anita

The meeting opened with a video on wildland fires and defensible space followed by a brief slide presentation by Buck West on the status of the Power County Wildland Fire Mitigation Plan. After the slide presentation the rest of the meeting was spent in open discussion, questions and answers.

- An issue with CRP land is that any burning to remove vegetation has to be completed by March 30 of each year. This is too early to get a good burn.
  - A suggested mitigation measure would be to extend that date to later in the year.
- The VFD should know where and what kind of equipment is available from private citizens.
  - o Where are tractors and discs are available.
  - o Have standing rental agreements for the use of the equipment.
- The VFD needs a new water truck.
- BLM land is overloaded with vegetation that provides a big fuel source for wildland fire.
  - A suggested mitigation would be to do some vegetation treatment on Public land.
- The area around Highway 37 is s concern from the number of fires that occur along that route.
- Concern about fires starting along power lines.
- Access to water sources is a concern in Rockland valley.

Suggested mitigation actions:

- o Have full water tanker scattered throughout the county.
- o Identify and document water sources available at farms and homes in the valley.
- o Need emergency power sources for critical water sources.
- o Place Dry Hydrants along some of the creeks.
- There is a concern about timber slash piles remaining in areas after timber harvest activities. We need to clean up those piles.

- Rockland VFD needs a new building to house its fire equipment (current building is rented from the city of Rockland.
  - o To be rated as fire district the equipment has to be sheltered in a building and can not be left out in the open.
  - o Possible mitigation may be to rent shelter from farmers in some of the outlying areas.
- Need satellite building with equipment scattered in the valley to provide quicker response to some of the outlying areas.
- There were questions about how the county wants to structure its fire protection coverage.
  - o Expand existing districts.
  - o Combine existing districts.
  - o Provide a single countywide district. A suggestion was made to investigate the recent fire district changes conducted in Franklin and Teton counties to see how they did it and learn from their experiences.
- Need to make sure there is a good link between the development of a larger fire protection district and the need for additional equipment and training.
- Need more volunteers, training and equipment to fight fires.
- Communication in the southern portion of Rockland valley is a concern.
- Need training on wildland firefighting and also how to communicate and interact with BLM/FS fire crews.
- There is a concern about the propane tank at the Rockland school being vulnerable to wildland fires.

## Public Meeting #3

On October 16, 2003an "Open House" was held for the public in American Falls. The "Open House" was held from 6:30-8:30 PM in the Hillcrest Grade School. The objectives of the "Open House" were the same as for the Rockland meeting. Attending the meeting were:

Barnard, Virgil Bass, Jeff

Dynamac, Inc.

Fagnant, Kenneth

Bureau of Disater Services

Judd, Fred

Bureau of Land Management

Landvik, Jilynn

Love, Mark

McMaster, Sigrid Meadows, Vicki

Power Co. Commissioner

Melton, Jim

Dynamac Corp.

Williams, T. J. Zimmerman, Ray

Power Co. Commissioner

February 2004

The meeting opened with a brief slide presentation by Buck West on the status of the Power County Wildland Fire Mitigation Plan (see below for a copy of the slides). After the slide presentation the rest of the meeting was spent in open discussion, questions and answers.

- Concern with vegetation in the River Bend area. The sagebrush comes right up to the houses.
  - There are concerns with erosion in the area if the vegetation is improperly removed.
  - The area receives high recreation use that contributes to increased chance of wildland fire ignitions.
  - A suggested mitigation may be increased patrolling by fire crews, increased signage of the area and development of more fire pit for recreationists.
- A suggested mitigation measure may be to implement building codes to address fire hazards (e.g., specifying building materials for roofs and siding, access requirements for fire fighting equipment, water supply needs, etc.).
  - o Is the fire hazard serious enough to justify these types of codes?
  - Considering implementing these suggestions as construction guidelines instead of building codes.
- Concerns with access and emergency evacuation conditions in portions of the county.
- A suggested mitigation measure may be to locate and inventory all the homes in the county.
- A suggested mitigation measure may be to provide assistance (in the from of money or other assistance) to residents (primarily in the Rockland area) to convert of cover roofs and siding that are highly susceptible (e.g., shake roofs and old wood siding) to wildland fires.
  - o Chemical treatment may be an option.
- A suggested mitigation measure may be to conduct door-to-door homeowner education programs.
  - o Could involve the local youth or BLM fire crews.
  - May also consider involvement as a local scout program such as using a scout pack to clear a defensible space around some demonstration homes.
- Concern that the Garden Grove area is short on water for wildland fire fighting.
  - A suggested mitigation measure may to store a water truck or tank in the area for fire fighting purposes.
  - May be able to coordinate something through the local home owners association.
  - A suggested mitigation measure may be to have the Garden Grove homeowners association participate in the 5-step firewise community program.
- A suggested mitigation measure may be to conduce neighborhood cleanup projects.
- Is there a need to prioritize areas in the county for fire suppression (e.g., is there more value in the cropland than in the barn).
  - o This may be best left to the local fire department knowledge of their area.
- It may be appropriate to consider the fire protection district in the county and make changes to that coverage.

- Concern that if there is countywide protection district then all the recourses in the county will go to American Falls because that is were the voting strength is in the county.
- Could consider the use of a fire commission with even representation from all parts of the county.
- A suggested mitigation measure may be to form new protection districts with contracting to existing districts.
- This plan may only be able to suggest the development of a commission to address changes in fire districts.

### Team Meeting #3

On October 30, 2003 the Wildland Fire and VFD/Structure branches of the Power County Wildland Fire Mitigation Plan (WFMP) project team met from 3:00-5:00 PM in the EMS building (560 N Oregon Trail) at American Falls. The objectives of the meeting were to:

- 1. Review and discuss some elements of the hazard section of the plan.
- 2. Review the proposed mitigation measures from the public meetings and begin brainstorming additional measures.

Attending the meeting were:

Fagnant, Kenneth

Bureau of Disater Services

Haskin, Don

Power County Highway Dist.

Hayden, Hans

Judd, Fred

Bureau of Land Management

Love, Mark

Meadows, Vicki

Power Co. Commissioner

Reinke, Tim

Utah Power

Tinno, Harvey

West, William

Dynamac Corp.

The meeting opened with a brief review of the activities of the past month, especially the public meetings in Rockland and American Falls. The group then discussed the fire history for inclusion in the hazard section of the plan. Several recent fires were identified during the discussion.

The most recent large fires to impact Power County and its residents occurred in 2000. During the summer of 2000, a severe dry lightening storm passed through the county igniting several fires in the county and particularly within the Shoshone-Bannock reservation. The result was four major fires that eventually combined into a single Eastern Idaho Complex fire. Fires within the complex were:

- Moonshine Fire (greater than 30,000 acres)
- Rattle Snake Fire (? acres)
- Fisher Creek Fire (greater than 37,000 acres)
- Coldwater Fire (? acres)

Also in 2000, but not part of the complex fire described above, was the Flat Top fire. This fire eventually burned over 55,000 acres of which 15,000 were in Power County. In 1996, the Cox Wells fire ignited in the northern portion of the county on Public land and eventually burned over 219,000 acres. Both fires were lightening caused.

Traditionally lightening causes 51% of the fires within Eastern Idaho and 49% are human caused. Additionally, there were numerous small fires started by farm equipment working in the fields. These fires were numerous in numbers, but small in size due to the inability of the farmed fields to carry a fire and because the farmers would extinguish the fires as quickly as they would start. With the inclusion of previously farmed fields into the CRP program there has been fewer fires started by farm equipment. While the number of fires on fields/CRP land has gone down, the potential for larger, more catastrophic fires has increased. This is due to the increased fuel load on CRP lands and the absence of farmers in the field to stop fires before they become large.

The pattern of wildfire burns was also discussed. Fires in the northern portion of the County traditional burn in a southwest to northeast pattern in accordance with the prevailing wind patterns. In the Arbon and Rockland portions of the County there is no prevailing burn pattern as the valleys cause unpredictable wind vortex.

The team then began a general discussion of some of the potential mitigation measures identified at the public meetings. These mitigations were grouped into larger categories.

#### **General Mitigation**

- 1. Identify and document water sources available at farms and homes in the valley.
- 2. Need emergency power sources for critical water sources.
- 3. Place Dry Hydrants along some of the creeks.
- 4. There is a concern about timber slash piles remaining in areas after timber harvest activities. We need to clean up those piles.
- 5. Need more volunteers, training and equipment to fight fires.
- 6. Need training on wildland firefighting and also how to communicate and interact with BLM/FS fire crews.
- 7. A suggested mitigation may be increased patrolling by fire crews, increased signage of the area and development of more fire pit for recreationists. The pipeline campground is a big concern.
  - May also need to do some vegetation treatment e.g. mowing
  - Mary's mine campground is also a concern for fires.
- 8. A suggested mitigation measure may be to implement building codes to address fire hazards (e.g., specifying building materials for roofs and siding, access requirements for fire fighting equipment, water supply needs, etc.).
- 9. A suggested mitigation measure may be to locate and inventory all the homes in the county.
  - Utilize the red zone program.
- 10. A suggested mitigation measure may be to provide assistance (in the from of money or other assistance) to residents (primarily in the Rockland area) to convert of cover roofs and siding that are highly susceptible (e.g., shake roofs and old wood siding) to wildland fires.

- 11. A suggested mitigation measure may be to conduct door-to-door homeowner education programs. Could involve the local youth or BLM fire crews.
- 12. May also consider involvement as a local scout program such as using a scout pack to clear a defensible space around some demonstration homes.
- 13. A suggested mitigation measure may be to have the Garden Grove homeowners association participate in the 5-step firewise community program.
- 14. Develop escape routes for the Garden Grove area.
- 15. Develop an evacuation plan fro the entire county.
- 16. A suggested mitigation measure may be to conduct neighborhood cleanup projects.
- 17. Is there a need to prioritize areas in the county for fire suppression (e.g., is there more value in the cropland than in the barn).
- 18. Provide firefighting training to the Arbon valley residents.
- 19. Provide for emergency power for water sources. When the power goes out in a fire there is no way to pump well water to fight the fire.
- 20. Identify mitigation measures for protecting power poles during wildland fire events.
  - Access to protect the poles.

Treatment of poles (e.g. alum around the base of poles to prevent burning.)

21. Implement the REDZONE software in the county.

#### **Fire Districts**

- 1. Expand existing districts.
- 2. Combine existing districts.
- 3. Provide a single countywide district. A suggestion was made to investigate the recent fire district changes conducted in Franklin and Teton counties to see how they did it and learn from their experiences.
- 4. Could consider the use of a fire commission with even representation from all parts of the county.
- 5. A suggested mitigation measure may be to form new protection districts with contracting to existing districts.
- 6. Consider joining forces of fire protection districts and forming a County-wide protection district.
- 7. The establishment of a fire protection district in Arbon valley should reduce fire insurance rates. Will need to do a comparison between the cost of the fire protection tax verses the reduction in insurance costs. How much will a substation cost?
- 8. There is a one-mile gap between the American Falls and the Rockland fire protection districts. This gap needs to be corrected and the lines adjusted to provide full coverage.

#### **Fire Fighting Equipment**

- 1. The VFD should know where and what kind of equipment is available from private citizens.
- 2. The VFD needs a new water truck.
- 3. Have full water tanker scattered throughout the county.
- 4. A suggested mitigation measure may to store a water truck or tank in the area for fire fighting purposes.
- 5. Establish a central water tank, pumper truck or pumper trailer that can be used by anyone on Arbon valley to fight wildfires.

#### **Communication Networks**

1. Communication in the southern portion of Rockland valley is a concern.

- 2. Place a cell tower in Arbon valley. If not a cell tower then some form of communication that can cover the area.
  - The cell provides more coverage for more people and is not limited to those who have radios.

#### **Vegetation Treatment**

- 1. A suggested mitigation would be to do some vegetation treatment on Public land where it interfaces with private.
- 2. Identify fuel reduction work in the county as part of this mitigation plan.
- 3. Treatment on CRP land to reduce the fire potential and to help in control once fire starts.
  - CRP won't burn in the spring because it is too green
  - Will need to closely coordinate with the Fish and Game for any actions on CRP land
  - The guidelines are too late for burning
- 4. Treatment (either burning, annual mowing, spraying) of RR RW to reduce the number of fire starts. May also be appropriate around power poles.
  - Lowering the fuel levels around poles to reduce the fire load.
  - Elimination of noxious weeds around the base of poles.

#### **Fire Station Locations**

- 1. Shoshone-Bannock Equipment stationed between Pauline and the Interstate (e.g. rattlesnake).
- 2. BLM may place a station in American Falls
- 3. Need satellite building with equipment scattered in the valley to provide quicker response to some of the outlying areas.
- 4. Establish a sub station in Arbon valley. This will require the establishment of a fire protection district and a tax to support the district.
- 5. Rockland VFD needs a new building to house its fire equipment (current building is rented from the city of Rockland.

During the discussion of the mitigation measures there were questions about why and how the measures would be prioritized. There are currently over 40 suggested mitigation measures in the list (see above) and more will probably be identified in the coming weeks. Prioritization is needed to focus attention in this plan on a "short list" of mitigation measures for detailed development.

## Team Meeting #4

On December 18, 2003 the Wildland Fire and VFD/Structure branches of the Power County Wildland Fire Mitigation Plan (WFMP) project team met from 3:00-5:00 PM in the EMS building (560 N Oregon Trail) at American Falls. The objectives of the meeting were to:

- 1. Discuss prioritization of the eleven identified issues against the plan goals.
- 2. Review the format for presentation of the proposed mitigation measures that address the hazards.
- 3. Make assignments for development of the detailed mitigation measures...

Attending the meeting were:

Love, Mark

Fagnant, Kenneth
Bureau of Disater Services
Grosswiller, Don
Bureau of Land Management
Hayden, Hans
Judd, Fred
Bureau of Land Management

Melton, Jim
Dynamac Corp.
Miller, Merlin
Chubbick Fire Dept.
Tinno, Harvey
West, William
Dynamac Corp.

The meeting opened with a brief review of the activities of the past month. On December 9, 2003, Fred Judd (BLM), Don Gosswiller (BLM) and Buck West (Dynamac) meet with the GIS staff at Idaho State University to discuss their fire modeling work for Power County. The ISU staff provided the final results of their model. The major point of discussion was the impact that CRP lands might have on the fire model. Mark Love received the Three Rivers RC&D fire department report on CD.

Buck West handed out an updated version of the eleven Wildland fire issues for Power County. These issues had been sent out for team review on December 4, 2003, as part of the draft hazard section. There was only one minor comment on the section regarding power poles and lines being values at risk to wildland fire. The section was revised to incorporate the comment.

One of the members noted that the NRCS was scheduled to update their CRP map in 2004 and that some of the areas we had shown on the current map were no longer in the program. Mark Love and Buck West pointed out that the current map had been provided by the NRCS and that it was the best information we had. If the NRCS updates their map in 2004, then the plan should be maintained to reflect the new information. With the acquisition of the two reports from ISU and Three Rivers RC&D, the hazard section of the County plan can now be completed and published to the County web site.

The team then prioritized the issues by rating each issue as having a High, Medium or Low impact on each of the three plan goals for 1) Protection of life, 2) Protection of property, and 3) Protection of resources.

The team suggested a mitigation measure be added to issue 11 to request grants to fund inspectors for fire and building code inspections.

Buck West then presented with the format and an example for the mitigation actions in the plan. Buck pointed out that the actions did not need a lot of detail, but in enough detail so that it would be clear what was proposed and who had the lead responsibility for the action. The bolded organizations in the action indicated those organizations that had the lead for implementing the action and the other organizations were needed to fully implement the action. The members of the team agreed to take specific issues and draft the mitigation actions according to the proposed outline. Buck West requested that the

draft sections be returned to him by December 30, 2003, so that the plan could be ready for Commissioner and public review by mid January 2004. Team members were encouraged to add any additional mitigation actions under their issue of responsibility they might develop as they prepare the mitigation action narratives.

Responsibility for draft sections is as follows:

Lead	Mitigation Issue
Mark Love	1. Power County is not fully covered by fire protection districts and the districts that are present in the county are not fully coordinated together.
Hans Hayden	2. Power County has a large amount of land in the CRP increasing fuel loads beyond what would normally occur on tilled farmland.
Jeff Bass and Buck West	3. Power County volunteer fire departments are having difficulty meeting standards or requirements pertaining to: Training, PPE, Communications, Equipment, Apparatus and Facilities.
Mark Love and Harvey Tinno	4. Power County has a limited communication network with some portions of the county without any communication coverage at all.
Fred Judd and Don Gosswiller	5. Power County has numerous county roads, infrastructure, communication sites, developments and communities that require hazardous fuels reduction.
Ken Fagnant with help from VFDs	6.Power County has limited fire station locations and equipment that result in poor response times to fires in outlying portions of the county
Jeff Bass and Buck West	7. Power County citizens have had limited firewise education, information and awareness with regards to wildland fire.
Mark Love	8. Power County has limited sources of water for fighting wildland fires and many of those sources are vulnerable to disruption of service in the event of a wildland fire.
Mark Love	9. Power County has no comprehensive inventory of homes and values at risk in the event of a wildland fire.
Mark Love and Ken Fagnant	10.Power County Developments/subdivisions/homeowners are without emergency wildfire plans or other emergency plans in place.
Ken Fagnant and Mark Love	11. Power County lacks defensible space and fire resistant building materials in some developments and at private homes.

# Appendix D Cost Comparison

Power County contains numerous developments, subdivisions and communities separated by miles of rough terrain. Countywide there are approximately 2,500 homes and two incorporated communities. Most areas of Power County are at risk to wildfires. Hazardous fuel reduction, increased wildfire emergency services, and improved county emergency services communications can mitigate risk to life and property in Power County.

Appraised value of residential homes in Power County yielded an averaged assessed value of \$50,725 per residence. Fifteen percent of this average was added for personal property in the homes. This provided the total average value of \$58,333 per residence.

Using an average home value of \$58,333 the total estimated value of Power County homes is \$145,834,375. Add to this the value of farmland, county structures, communication sites, and court houses the estimated total value of assets at risk to wildfire is over \$250,000,000.

This total does not include the value of timber resources, or expense in protection of watersheds, and vegetation rehabilitation or soil erosion control efforts after a wildfire.

Estimated costs for wildfire mitigation recommendations for the eleven-wildland fire mitigation goals within Power County are: \$332,500.

Stakeholders evaluating the economic benefits of mitigation should consider numerous "direct" scenarios, including, but not limited to avoiding:

- Building/property damages
- Content damages
- Inventory damages
- Rental income losses
- Relocation and disruption expenses
- Proprietor's income losses

Some of "indirect" effects to consider, (positive or negative) include changes to the following:

- Commodity and resource prices
- Availability of resource supplies
- Building and land values
- Capital availability and interest rates
- Availability of labor
- Economic structure
- Infrastructure
- Local, state, and national regulations and policies
- Insurance availability and rates

Total economic impacts are the sum of direct and indirect economic impacts. Decision makers should understand the total economic impacts of natural disasters in order to calculate the benefits of a mitigation activity.

Additionally, it must be realized that benefit/cost analysis, when used alone, may divert attention from other important issues. It is important to consider the qualitative factors of a project associated with mitigation that cannot be evaluated economically. There are alternatives. Many communities and developments are looking towards developing multi-objective projects, including: integration of natural hazard mitigation with projects related to watersheds, wildfire protection, environmental planning, community economic development and small business development.

# Appendix E

# Financial/Technical Resources

Financial resources that can provide support for various wildland fire mitigation action items include various State and Federal grants administered though Idaho Department of Lands, the Bureau of Land Management, the Natural Resource Conservation Service, and the Federal Emergency Management Agency.

Hazardous fuels reduction grants for Power County can be combined from developments in the county and applied for though Idaho Department of Lands. Grant administration costs should be included into countywide grant requests.

Power County VFDs grant application is though the BLM program for VFD assistance and the FEMA grant program, grant application from county wide priorities should assist the Power County VFD as grant recipients.

Numerous technical resources are available for wildfire mitigation. Internet home pages of Idaho Department of Lands, the U.S. Forest Service, the Bureau of Land Management, and NFPA can be accessed for additional information.

Wildfire Technical Resources:

Idaho Department of Lands, internet address for information about state of Idaho lands is Website: www2.state.id.us/lands

Federal Wildland Fire Policy, Wildland /Urban Interface Protection Federal report describing areas that need improvement nationally

Website: http://www.fs.fed.us/land/wildfire

National Academy of Public Administration, Wildfire Suppression: Strategies For

**Containing Costs** 

Website: www.napawash.org

Bureau of Land Management, National Fire Plan, and links,

Website: www.blm.gov

USFS Fire Sciences Laboratory

www.firelab.org

February 2004

# Appendix F List of Acronyms

AMSL Above Mean Sea Level

BDS Idaho Bureau of Disaster Services
BLM Bureau of Land Management
CRP Conservation Reserve Program

°F Degrees Fahrenheit

FEMA Federal Emergency Management Agency

GPS Global Positioning System
HOAs Home Owners' Associations
ICS Incident Command System
IDL Idaho Department of Lands
MOU Memorandum of Understanding

MSL Mean Sea Level

NEPA National Fire Protection Association NWCG National Wildfire Coordinating Group

PPE Personal Protective Equipment

RFD Rural Fire Department

USFS United States Department of Agriculture, Forest Service

VFD Volunteer Fire Department WGA Western Governors' Association

WUI Wildland/Urban Interface