

Chapter 4: Summaries of Risk and Preparedness

4 Overview

4.1 Wildland Fire Characteristics

An informed discussion of fire mitigation is not complete until basic concepts that govern fire behavior are understood. In the broadest sense, wildland fire behavior describes how fires burn; the manner in which fuels ignite, how flames develop and how fire spreads across the landscape. The three major physical components that determine fire behavior are the fuels supporting the fire, the topography in which the fire is burning, and the weather and atmospheric conditions during a fire event. At the landscape level, both topography and weather are beyond our control. We are powerless to control winds, temperature, relative humidity, atmospheric instability, slope, aspect, elevation, and landforms. It is beyond our control to alter these conditions, and thus impossible to alter fire behavior through their manipulation. When we attempt to alter how fires burn, we are left with manipulating the third component of the fire environment, the fuels which support the fire. By altering fuel loading and fuel continuity across the landscape, we have the best opportunity to determine how fires burn.

A brief description of each of the fire environment elements follows in order to illustrate their effect on fire behavior.

4.1.1 Weather

Weather conditions are ultimately responsible for determining fire behavior. Moisture, temperature, and relative humidity determine the rates at which fuels dry and vegetation cures, and whether fuel conditions become dry enough to sustain an ignition. Once conditions are capable of sustaining a fire, atmospheric stability and wind speed and direction can have a significant affect on fire behavior. Winds fan fires with oxygen, increasing the rate at which fire spreads across the landscape. Weather is the most unpredictable component governing fire behavior, constantly changing in time and across the landscape.

4.1.2 Topography

Fires burning in similar fuel conditions burn dramatically different under different topographic conditions. Topography alters heat transfer and localized weather conditions, which in turn influence vegetative growth and resulting fuels. Changes in slope and aspect can have significant influences on how fires burn. Generally speaking, north slopes tend to be cooler, wetter, more productive sites. This can lead to heavy fuel accumulations, with high fuel moistures, later curing of fuels, and lower rates of spread. The combination of light fuels and dry sites lead to fires that typically display the highest rates of spread. In contrast, south and west slopes tend to receive more direct sun, and thus have the highest temperatures, lowest soil and fuel moistures, and lightest fuels. These slopes also tend to be on the windward side of mountains. Thus these slopes tend to be “available to burn” a greater portion of the year.

Slope also plays a significant roll in fire spread, by allowing preheating of fuels upslope of the burning fire. As slope increases, rate of spread and flame lengths tend to increase. Therefore, we can expect the fastest rates of spread on steep, warm south and west slopes with fuels that are exposed to the wind.

4.1.3 Fuels

Fuel is any material that can ignite and burn. Fuels describe any organic material, dead or alive, found in the fire environment. Grasses, brush, branches, logs, logging slash, forest floor litter, conifer needles, and homesites (the structures) are all examples. The physical properties and characteristics of fuels govern how fires burn. Fuel loading, size and shape, moisture content and continuity and arrangement all have an affect on fire behavior. Generally speaking, the smaller and finer the fuels, the faster the potential rate of fire spread. Small fuels such as grass, needle litter and other fuels less than a quarter inch in diameter are most responsible for fire spread. In fact, “fine” fuels, with high surface to volume ratios, are considered the primary carriers of surface fire. This is apparent to anyone who has ever witnessed the speed at which grass fires burn. As fuel size increases, the rate of spread tends to decrease, as surface to volume ratio decreases. Fires in large fuels generally burn at a slower rate, but release much more energy, and burn with much greater intensity. This increased energy release, or intensity, makes these fires more difficult to control. Thus, it is much easier to control a fire burning in grass than to control a fire burning in timber.

When burning under a forest canopy, the increased intensities can lead to torching (single trees becoming completely involved) and potentially development of crown fire. That is, they release much more energy. Fuels are found in combinations of types, amounts, sizes, shapes, and arrangements. It is the unique combination of these factors, along with the topography and weather, which determine how fires will burn.

The study of fire behavior recognizes the dramatic and often-unexpected affect small changes in any single component has on how fires burn. It is impossible to speak in specific terms when predicting how a fire will burn under any given set of conditions. However, through countless observations and repeated research, the some of the principles that govern fire behavior have been identified and are recognized.

4.2 Payette County Conditions

Payette County is characterized by relatively mild winters and hot, dry summers. Although infrequent, fires in the rangeland fuel types present much of the County the potential of large, intense and damaging fires.

Payette County has been experiencing steady growth, particularly in and around the community centers. At the same time, the number and value of resources at risk is on the increase, as more and more homes are built in the midst of fireprone fuels. Human use is strongly correlated with fire frequency, with increasing numbers of fires as use increases. The combination of frequent ignitions and flammable vegetation has greatly increased the probability that incendiary devices will find a receptive fuel bed, resulting in increased fire frequency. Discarded cigarettes, tire fires, and hot catalytic converters have increased the number of fires experienced along roadways. Careless and unsupervised use of fireworks also contributes to unwanted and unexpected wildland fires. Further contributing to ignition sources are the debris burners and “sport burners” who use fire to rid ditches of weeds and other burnable materials. Annual field burning is also extensive across the county. Although these fires rarely escape, local fire departments do respond to a few each year.

Fire departments within Payette County have reported a general increase in the number of fires within the county. Although there have been few homes lost to wildland fires in the recent past, the potential is growing. Fire departments feel as though pure luck has been on the side of many homeowners, as more and more fires seem to be controlled at the doorstep of residents’ homes. It is quite probable that homes will eventually be lost to wildland fire. However, there are

a number of actions that can be taken now that can decrease the probability that these events will occur.

4.2.1 County Wide Potential Mitigation Activities

There are four basic opportunities for reducing the loss of homes and lives to fires. There are many single actions that can be taken, but in general they can be lumped into one of the following categories:

- Prevention
- Education/ Mitigation
- Readiness
- Building Codes

4.2.1.1 Prevention

The safest, easiest, and most economical way to mitigate unwanted fires is to stop them before they start. Generally, prevention actions attempt to prevent human-caused fires. Campaigns designed to reduce the number and sources of ignitions can be quite effective. Prevention campaigns can take many forms. Traditional “Smokey Bear” type campaigns that spread the message passively through signage can be quite effective. Signs that remind folks of the dangers of careless use of fireworks, burning when windy, and leaving unattended campfires can be quite effective. It’s impossible to say just how effective such efforts actually are, however the low costs associated with posting of a few signs is inconsequential compared to the potential cost of fighting a fire.

Slightly more active prevention techniques may involve mass media, such as radio or the local newspaper. Fire districts in other counties have contributed the reduction in human-caused ignitions by running a weekly “run blotter,” similar to a police blotter, each week in the paper. The blotter briefly describes the runs of the week and is followed by a weekly “tip of the week” to reduce the threat from wildland and structure fires. The federal government has been a champion of prevention, and could provide ideas for such tips. When fire conditions become high, brief public service messages could warn of the hazards of misuse of fire or any other incendiary device. Such a campaign would require coordination and cooperation with local media outlets. However, the effort is likely to be worth the efforts, costs and risks associated with fighting unwanted fires.

Fire Reporting: Fires cannot be suppressed until they are detected and reported. As the number and popularity of cellular phones has increased, expansion of the #FIRE program throughout Idaho may provide an effective means for turning the passing motorist into a detection resource.

Burn Permits: The issues associated with debris burning during certain times of the year are difficult to negotiate and enforce. However, there are significant risks associated with the use of fire adjacent to expanses of flammable vegetation under certain scenarios. Fire departments typically do not observe the State of Idaho Closed fire season between May 20 to October 20. During this time, an individual seeking to conduct an open burn of any type does not have to obtain a permit within Payette County. Although this is a state-wide regulation, compliance and enforcement has been variable between fire districts. Tackling this issue is difficult. Typically, the duty falls to the chief of whichever fire protection district the burning is planned for. However, this leads to an increased burden on the fire chiefs, who are already juggling other department obligations with obligations to work and to home. There is also considerable confusion on the part of the public as to when a permit is necessary and the procedure for which to obtain the

permit. The best-intentioned citizen may unknowingly break this law for a lack of understanding. Clearly, there is a need to coordinate this process and educate the public.

4.2.1.2 Education

Once a fire has started and is moving toward home or other valued resources, the probability of that structure surviving is largely dependent on the structural and landscaping characteristics of the home. Also of vital importance is the accessibility of the home to emergency apparatus. If the home cannot be protected safely, firefighting resources will not jeopardize lives to protect a structure. Thus, the fate of the home will largely be determined by homeowner actions prior to the event.

The majority of the uncultivated vegetation in Payette County is comprised of timberlands. These fuels tend to be very flammable and can support very fast moving and intense fires. In many cases, homes can easily be protected by following a few simple guidelines that reduce the ignitability of the home. There are multiple programs such as FIREWISE that detail precautions that should be taken in order to reduce the threat to homes, such as clearing timber or cured grass and weeds away from structures and establishing a green zone around the home.

However, knowledge is no good unless acted upon. Education needs to be followed up by action. Any education programs should include an implementation plan. Ideally, funds would be made available to financially assist the landowner making the necessary changes to the home. The survey of the public conducted during the preparation of this WUI Fire Mitigation Plan indicated that approximately 59% of the respondents are interested in participating in this type of an activity.

4.2.1.3 Readiness

Once a fire has started, how much and how large it burns is often dependent on the availability of suppression resources. In most cases, rural fire departments are the first to respond and have the best opportunity to halt the spread of a wildland fire. For many districts, the ability to reach these suppression objectives is largely dependent on the availability of functional resources and trained individuals. Increasing the capacity of departments through funding and equipment acquisition can improve response times and subsequently reduce the potential for resource loss.

In order to assure a quick and efficient response to an event, emergency responders need to know specifically where emergency services are needed. Continued improvement and updating of the rural addressing system is necessary to maximize the effectiveness of a response.

4.2.1.4 Building Codes

The most effective, albeit contentious, solution to some fire problems is the adoption of building codes in order to assure emergency vehicle access and home construction that does not “invite” a fast and intense house fire. Codes that establish minimum road construction standards and access standards for emergency vehicles are an effective means of assuring public and firefighter safety, as well as increasing the potential for home survivability. County building inspectors should look to the fire departments in order to assure adequate minimum standards. Fire districts may want to consider apparatus that may be available during mutual aid events in order that the adopted standards meet the access requirements of the majority of suppression resources. In Payette County, such standards may be drafted in consultation with the Fire Chiefs in order to assure accessibility is possible for all responding resources.

Coupled with this need is the potential to implement a set of requirements or recommendations to specify construction materials allowed for use in high risk areas of the county. The Payette County Commissioners may want to consider a policy for dealing with this situation into the future as more and more homes are located in the wildland-urban interface.

4.3 Payette County’s Wildland-Urban Interface

Individual community assessments have been completed for all of the populated places in the county. The following summaries include these descriptions and observations. Local place names identified during this plan’s development include:

Table 4.1. Payette County Communities

Community Name	Planning Description	Vegetative Community	National Register Community At Risk? ¹
Payette	Community	Rangeland	Yes
Fruitland	Community	Rangeland	Yes
New Plymouth	Community	Rangeland	Yes

¹Those communities with a “Yes” in the National Register Community at Risk column are included in the Federal Register, Vol. 66, Number 160, Friday, August 17, 2001, as “Urban Wildland Interface Communities within the vicinity of Federal Lands that are at high risk from wildfires”. All of these communities have been evaluated as part of this plan’s assessment.

Site evaluations on these communities are included in subsequent sections. The results of FEMA Hazard Severity Forms for each community are presented in Appendix II.

4.3.1 Mitigation Activities Applicable to all Communities

4.3.1.1 Homesite Evaluations and Creation of Defensible Space

Individual homesite evaluations can increase homeowners’ awareness and improve the survivability of structures in the event of a wildfire. Maintaining a lean, clean, green zone within at least 100 feet of structures to reduce the potential loss of life and property is highly recommended. Assessing individual homes in the outlying areas can address the issue of escape routes and home defensibility characteristics. Educating the homeowners in techniques for protecting their homes is critical in these environments.

4.3.1.2 Travel Corridor Fire Breaks

Ignition points are likely to continue to be concentrated along the roads and railway lines that run through the county. These travel routes have historically served as the primary source of human-caused ignitions. In areas with high concentrations of resource values along these corridors, fire lines may be considered in order to provide a fire break in the event of a roadside ignition. Access route mitigation can provide an adequate control line under normal fire conditions. Alternatively, permanent fuel breaks can be established in order to reduce the potential for ignitions originating from the main travel roads to spread into the surrounding lands.

4.3.1.3 Power Line Corridor Fire Breaks

The treatment opportunities specified for travel corridor fire breaks apply equally for power line corridors. The obvious difference between the two is that the focus area is not an area parallel to and adjacent to the road, but instead focuses on the area immediately below the

infrastructure element. Protection under the high tension power lines is strongly recommended. This may be an opportunity for intensive livestock grazing practices as a tool for reducing fine fuels around significant infrastructure.

4.4 Communities in Payette County

4.4.1 Vegetative Associations

The vast majority of land within the valley bottoms has been converted to irrigated cropland, with few patches of native vegetation remaining. One notable exception is the Payette River Wildlife Management Area, to the north of New Plymouth. Although some remnant communities of native vegetation do exist within the Management Area, they are isolated by the braided nature of the river, by roads, or by surrounding irrigated lands. Thus, there are few natural fuel complexes to support wildland fire.

Agricultural practices have created a patchwork of green, lush vegetation and cured rangeland. This patchwork helps to break the continuity of fuels that are available to burn. Damaging fires in agricultural lands are infrequent; however, these fuel types could potentially support a very fast-moving albeit, low intensity, fire. Under dry and windy conditions, fires in these vegetative types can burn thousands of acres in a single burning period.

In contrast, the persistently warm and arid uplands in the southern and eastern portions of the county are characterized by continuous expanses of grass and brush rangeland vegetation, capable of supporting large wildland fires. The xeric vegetation and hot, dry and windy conditions increases the potential for large rangeland fires.

The last decade has seen the proliferation of Cheatgrass, an exotic grass species that is able to out compete native bunchgrasses. Cheatgrass responds well to soil disturbance and is found in abundance along roadsides, driveways, new construction areas, and in recently burned areas. Over time, vegetative species composition in unmanaged or non-irrigated land has shifted toward fire prone species, particularly in high use areas where disturbance is common. Under dry and windy conditions, fires in these vegetative types can burn thousands of acres in a single burning period.

4.4.2 Overall Fuels Assessment

Fuels throughout the upland areas of Payette County are quite consistent, dominated by grasslands and sage. Areas dominated by grass with scattered sage can be described as Fuel Models 1 and 2 (FM1 and FM2). Fires in these fuel types tend to be spread rapidly, but burn at relatively low intensity. Where grasses become less consistent, wind is needed to push fires through the bunchgrass. Sage-dominated fuel complexes can be described as FM6. Typically, fires in this fuel type require a moderate wind in order to push the fire through the fuels. Without wind, the fire will drop to the ground. In the absence of fine fuels, fire spread will stop. However, wind driven fires in any of these fuel types can burn significant acreage in a short period of time. During an August day with 20 mile an hour winds, fires in these fuel types can burn over 3,000 acres in a single hour, with flame lengths of over 20 feet.

Over time, vegetative species composition in unmanaged or non-irrigated land has shifted toward fire prone species, particularly in high use areas where disturbance is common. The last decade has seen the proliferation of Cheatgrass throughout many areas within the Great Basin. Cheatgrass is an exotic grass species that is able to out compete native bunchgrasses. Cheatgrass responds well to soil disturbance and is found in abundance along roadsides, driveways, new construction areas, and in recently burned areas. Under dry and windy

conditions, fires in these vegetative types can burn thousands of acres in a single burning period. The fire structure and its ability to completely dominate disturbed sites provides a dry, consistent fuel bed for fire. Where the exotic has encroached in sagebrush stands, it now provides a consistent bed of fine fuels that actively carries fire without the effect wind. Because of these characteristics, cheatgrass will support fire during times of the year and under conditions which native vegetation would not sustain a wildland fire. After fire disturbance, native species are often replaced by monocultures of cheatgrass. Because of the grasses ability to dominate disturbed sites and its propensity to burn, cheatgrass has the ability to remain dominant once a site is disturbed.

4.4.2.1 Ignition Profile

Natural ignition sources from summertime lightning storms are quite common in Payette County. Lightning strikes in light grass fuels such as those in the eastern and southern portions of the county are quickly extinguished if any precipitation accompanies the storm. Natural ignitions are more common in areas with abundant sage, where woody fuels are able to sustain fire during precipitation events, emerging when surface fuels dry. However during dry lightning events, storm cells can ignite dozens of fires throughout wildland areas.

Human caused fires contribute significantly to the probability of fires in this area. Residential living and recreational use in the area present innumerable ignition sources. Debris burning, discarded cigarettes, children playing with matches, fireworks, roadway fires, and camp fires are just a few of the countless potential human ignition sources in the area. Power line fires resulting from tree contact can also spark fires, especially during windy conditions.

The abundance of human and natural ignition sources and the dry nature of fuels in the area increase the probability of wildland fire. Fire characteristics will depend on fuels type and fuel moisture as well as on weather conditions at the time of ignition. Fires during periods of drought with high temperatures, low humidity and strong winds can quickly lead to fast-moving, destructive wildfires in any fuel type.

4.4.3 Overall Community Assessments

The majority of homes and structures within Payette County are at low risk of loss to wildland fire. The prevalence of irrigated cropland throughout the valley bottom effectively reduces the potential for loss to wildland fire in the majority of areas.

Homes within the light grass and sage fuels typical of the uplands are at a low threat to wildland fire, as fire typically spreads quickly and burns at relatively low intensities. However, there are a number of individual homes that are at much higher risk to wildland fire loss in the area, largely due to use of highly ignitable materials in home construction, or by lack of defensible space surrounding the home. Home defensibility practices can dramatically increase the probability of home survivability. The amount of fuel modification necessary will depend on the specific attributes of the site. Considering the high spread rates typical in these fuel types, homes need to be protected prior to fire ignitions, as there is little time to defend a home in advance of a grass and range fire.

The greatest resources threatened in Payette County are the range resources on the private and public lands in the highlands areas of the county. Payette County supports a significant ranching economy that is partially dependant on grazing of these arid lands. Large fires can significantly impact grazing resources by having a detrimental effect on the local cattle industry.

4.4.3.1 Mitigation Activities

Effective mitigation strategies begin with public awareness campaigns designed to educate homeowners of the risks associated with living in a flammable environment. Residents of Payette County must be made aware that home defensibility starts with the home. Once a fire has started and is moving toward homes or other valued resources, the probability of that structure surviving a passing fire front is largely dependent on the structural and landscaping characteristics of the home. Also of vital importance is the accessibility of the home to emergency apparatus. If the home cannot be protected safely, firefighting resources will not jeopardize lives to protect a structure. Thus, the fate of the home will largely be determined by homeowner actions prior to the event. In many cases, homes survivability can be greatly enhanced by following a few simple guidelines that reduce the ignitability of the home.

“Living with Fire, A Guide for the Homeowner” is an excellent tool for educating homeowners as to the steps to take in order to create an effective defensible space. Residents of Payette County should be encouraged to work with local fire departments and fire management agencies within the county to complete individual homesite evaluations. Home defensibility steps should be enacted based on the results of these evaluations.

4.4.4 Individual Community Assessments

4.4.4.1 Payette

Payette is located at the junction of Highway 95 and Highway 52, at the confluence of the Payette and Snake Rivers. Within the city limits, the community is relatively urbanized, with many roads and green lawns that would not support wildland fire. Land to the north, south and west of Payette is dominated by agricultural use, with little native vegetation present. Irrigation and field plowing provide large firebreaks, with few large, consistent patches of dried vegetation available to fuel a wildland fire. Because of the urban and agricultural characteristics within the vicinity of the community, the majority of Payette is at minimal risk from wildfire.

To the east of town along Bluff Road and Payette Heights, and Payette Heights Road rise the sage and grass covered hills that extend to the Washington and Gem County borders. The housing development in the Payette Heights area exposes some homes sites directly to continuous grass and sage wildland fuels. Generally speaking, these homes have green lawns and adequate defensible space surrounding the building site, reducing the threat of fire moving from the wildlands to the home. There are also multiple points of access to the Payette Heights area, providing for good access and egress for both residents and suppression personnel. Additionally, fire moving from the wildlands to the residential areas would be moving down slope as a backing fire. Overall, the threat to these homes is low, although there are some homes that lack defensible space, exposing individual homes to much greater risk. The greatest potential for wildland fire development comes from ignitions starting in the vicinity of homes, then spreading to wildlands.

To the north of Center Avenue and to the east of both the Payette Heights and Hill Roads, a number of homes have been built within the dry, cured rangeland vegetation. Most building sites have green lawns and adequate defensible space surrounding them. However, there are some notable exceptions, with native vegetation directly abutting the home. This significantly increases the potential for fire to travel from the wildland to the home. There are also a few homes with long, narrow driveways, and inadequate turn-around space for large emergency vehicles. A number of drives also pass through untreated native fuels, potentially cutting-off access to emergency vehicles. Again, the greatest threat to the area is likely to come from

ignitions starting at the home, then spreading to the wildlands. Poor access in the wildland area to the east would limit the effectiveness of suppression resources, increasing the potential for development of large rangeland fires.

Practices associated with orchard operations could potentially increase the potential for ignitions to spread to wildland fuels to the east. Burning of pruned branch wood in proximity to the wildlands could serve as sources for firebrands if burned during dry or windy conditions. Although it appears as there are adequate fuel breaks between the wildlands and pile burn areas, pile burning during adverse conditions could serve as a source for wildland ignitions.

4.4.4.1.1 Community Specific Mitigation Activities

Individual home site evaluations along Bluff Road, Payette Heights Road and Payette within Heights can increase homeowners' awareness and improve the survivability of structures in the event of a wildfire. Current management of the vegetation surrounding most homes provides some protection. However, maintaining a lean, clean, green zone around structures to reduce the potential loss of life and property is recommended. Assessing individual homes in the outlying areas can address the issue of escape routes and home defensibility characteristics. Educating the homeowners in techniques for protecting their homes is critical in these hot, dry environments.

The community of Payette should continue to implement programs related to the signing of roads and house numbers in order to facilitate emergency response. Posting clear road signs warning of traffic restrictions, such as dead-ends and bridge restrictions are all imperative in a wildfire emergency.

4.4.4.2 Fruitland and New Plymouth

Both Fruitland and New Plymouth are largely agricultural communities surrounded by irrigated fields and orchards. Both communities sit in the broad, flat Snake River and Payette River Plains. Homes and businesses within the city limits are within urbanized areas, with numerous city streets and green lawns that are devoid of wildland fuels. Most of the lands are heavily irrigated throughout the majority of the summer months resulting in lush, green vegetation year round.

Hybrid poplar plantations have also been established in areas within the river valley. These plantations range from less than an acre in size to fifty acres or larger. Although the plantations are wooded and generate some forest fuels, fuel accumulations tend to be comprised of leaf and small branch wood. The light and compact nature of these fuels and the abundance of shading from the deciduous canopy generally do not result in a volatile fuel complex.

Overall, the threat to these communities is very low. The urban character within the city limits and the agricultural practices in the area virtually eliminate the potential for wildland fire to impinge on these communities.

4.4.4.2.1 Community Specific Mitigation Activities

The communities of Fruitland and New Plymouth should continue to implement programs related to the signing of roads and house numbers in order to facilitate emergency response. Posting clear road signs warning of traffic restrictions, such as dead-ends and bridge restrictions are all imperative in a wildfire emergency.

4.4.4.3 Eastern and Southern Highlands

The eastern and southern highlands include the areas south and west of Washington and Gem Counties and the highlands north of Canyon County to just north of the I-84 corridor. Overall, grass and light sage dominate fuels in these areas. Where cheatgrass has not become well established, fine grass fuels are kept to a minimum due to grazing by cattle. Reducing fine fuels increases the wind speed necessary to carry fire through the wildlands by lessening the consistency of the fuel bed. However, where cheatgrass is well-established, fine fuel continuity is very consistent, reducing the necessary wind speed and increasing the probability of fire spread.

There are scattered homes that have been built upslope of Bluff Road adjacent to dry grass and range fuels. Generally, most homes have adequate defensible space; however, there are some homes that would benefit from further expanding the existing defensible space. Access is generally sufficient, with short driveways and good ingress and egress routes for both emergency and residential traffic. Fuels upslope from the homes tend to be light grass and sage.

There are a number of homes and ranches within the Big and Little Willow Creek drainages, as well as in the saddle between the two drainages. In general, the homes and other structures are removed from the wildland fuels. Most homes are surrounded either by irrigation or by grazed pastureland, reducing the risk of home loss. Access and egress up the Willow Creek drainages is somewhat of a concern. The primary access is on dirt roads from Bluff Road to the west. It is possible that access or egress could be cut-off in the event of wildland fire toward the bottom of the drainages. There are other escape options available to the east; however, travel would be slow and circuitous on the unimproved roadways.

Homes adjacent to the wildlands in the southern portion of the county are generally surrounded by sufficient defensible space. Orchards and feedlots off Elmore Road reduce the potential for fire to move from the wildlands to structures.

4.4.4.3.1 Community Specific Mitigation Activities

Individual home site evaluations wherever rangeland fuels are in proximity to homes and improvements can increase homeowners' awareness and improve the survivability of structures in the event of a wildfire. Current management of the vegetation surrounding most homes provides some protection. However, maintaining a lean, clean, green zone around structures to reduce the potential for loss of life and property is recommended. Assessing individual homes in the outlying areas can address the issue of escape routes and home defensibility characteristics.

Ignition points are likely to be concentrated along the roads and travel corridors. In areas with high concentrations of resource values along these corridors, plow or disk lines may be considered in order to provide a fire break in the event of a roadside ignition. Passage with a disk parallel to an access route can provide an adequate control line under normal fire conditions.

Alternatively, permanent fuel breaks can be established in order to reduce the potential for ignitions originating from the highway to spread into the surrounding lands. Application of a cheatgrass-specific herbicide such as Plateau followed by replanting with fire-retardant grass species such as Crested Wheatgrass can provide a longer-term firebreak.

Continued grazing of public and private lands will maintain lessened levels of fine fuels; thus, increasing the wind speed necessary to push fire through the rangelands. Grazing reduces fine fuels as well as contributing to the ranching economy of the area.

Payette County should continue to implement programs related to the signing of roads and house numbers in order to facilitate emergency response in these areas. Posting clear road signs warning of traffic restrictions, such as dead-ends and bridge restrictions are all imperative in a wildfire emergency.

4.5 Fire Fighting Resources and Capabilities

The Fire Fighting Resources and Capabilities information provided in this section (4.5) is a summary of information provided by the Rural Fire Chiefs or Representatives of the Wildland Fire Fighting Agencies listed. Each organization completed a survey with written responses. Their answers to a variety of questions are summarized here. ***In an effort to correctly portray their observations, little editing to their responses has occurred.*** These summaries indicate their perceptions and information summaries.

4.5.1 Wildland Fire Districts

4.5.1.1 Bureau of Land Management

- Boise BLM Fire Office, 3948 Development Ave., Boise, 83705; 208-394-3400
- Hammett Guard Station, north of Exit 112 on Interstate 84, 208-366-7722
- Bruneau Guard Station, Hot Creek Road, Bruneau, 208-845-2011
- Wild West Guard Station, Exit 13 off I-84, 208-454-0613

The Lower Snake River District BLM does not have any equipment stationed in Payette County and does not provide initial suppression protection for much of the county. Resources and capabilities of the Lower Snake River District BLM have been included in this document. The BLM has been involved in Payette County through assistance to rural fire districts and national fire prevention programs. The Department of Interior, BLM, provided funding for this Wildland-Urban Interface Wildfire Mitigation Plan.

The Lower Snake River District BLM encompasses approximately 5.5 million acres of BLM-managed land in southwest Idaho. Through agreements with the Idaho Department of Land and the National Forest Service, the BLM also provides support on IDL and FS lands in some areas within the district boundary. The border of the district extends from the Nevada border near Jackpot and runs north along Salmon Falls Creek; just west of Hagerman and follows the Snake River from just south of Bliss to King Hill; then runs north to a point approximately 7 miles west of Hill City; then follows the foothills west and north across the Boise Front; up Highway 55 and includes some scattered areas into the Crouch area; then jogs in a northwesterly direction to the Oregon border west of New Meadows.

Special features within the district include the 485,000-acre Snake River Birds of Prey National Conservation Area; the Owyhee Canyonlands; portions of the north and south fork Payette River corridors; the Owyhee Mountains, including the historic Silver City area; the Jarbidge and Bruneau river canyons; and several popular recreation areas and wildland-urban interface areas.

The district's primary station is located in Boise, where 3 crews, with 3 engines per crew are based, along with both helicopter and fixed-wing aircraft resources. One of the three Boise crews is stationed during the day at Boise Fire Station #2 at the base of the foothills. Additional day-use stations are available in Kuna, Hidden Springs, Eagle, and at Juniper Butte.

Additionally, the district has out stations at Bruneau, Hammett, and Wild West (at Exit 13 on Interstate 84). Each facility is staffed by one crew, with three engines, on a 24-hour, 7-day per week basis from mid June to mid September. A dozer also is typically based at Hammett.

BLM crews are neither trained nor equipped for structure suppression. Primary protection responsibilities are on public land throughout southwest Idaho and we respond to fires originating on public lands and those on private land that threaten public land. Additionally, through mutual aid agreements with local fire departments, we will provide assistance when requested on wildland fires.

The BLM does not provide formal EMT services. The crews are trained in first-aid, and some staff members have EMT and first-responder training, but this is not a service we provide as part of our organization.

Personnel: The fire program staff totals 135 individuals, including 20 permanent employees, 40 career-seasonal employees who work up to nine months each year, and 75 seasonal employees on staff from roughly June to September. These are all paid staff members trained in wildland fire, but not in structure protection.

Mutual Aid Agreements: The BLM has an interagency working relationship with the US Forest Service (Boise National Forest and Payette National Forest) and the Idaho Department of Lands and the crews are dispatched on a closest-forces concept to public lands. Additionally, the BLM has mutual aid agreements with approximately 42 community fire departments.

Top Resource Priorities:

- **Training:** Increasing the amount and level of training for and with partner community fire departments .
- **Communications:** Using the Rural Fire Assistance Program to allow departments to purchase radios for partner community departments to facilitate communication, coordination, and safety at the fire scene.

The district encompasses a broad spectrum of resources at risk, including recreation sites, power lines, wildlife habitat, wilderness study areas, wild horse management areas, historic districts, cultural and archaeological sites, and a range of vegetation types, from rare plant species to sagebrush and timber resources.

Table 3.1 summarizes available equipment.

Truck #	Assigned Station	Make/ Model	Capacity (gallons)	Pump capacity (GPM)	Type
7158	Duck Valley	Internat'l	Heavy 800 – 1000	120 GPM	Wildland
7130	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7131	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7132	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7133	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7134	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7135	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7136	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7137	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7138	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7154	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7155	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7143	Hammett	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland

Table 4.2. BLM Equipment List for Wildland Fire Protection

Truck #	Assigned Station	Make/ Model	Capacity (gallons)	Pump capacity (GPM)	Type
7144	Hammett	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7145	Hammett	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7146	Bruneau	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7147	Bruneau	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7148	Bruneau	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7140	Wild West (exit 13, I-84)	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7141	Wild West (exit 13, I-84)	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7142	Wild West (exit 13, I-84)	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7150	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7151	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7156	Boise	Internat'l	Heavy 800 – 1,000	120 GPM	Wildland
7161	Boise	Ford	Light 300	120 GPM	Wildland

- The LSRD has 3 dozers, one of which is stationed in Hammett; and two in Boise
- The LSRD also has 3, 3500 gallon water tenders.
- There are 4 Fire Lookouts, one on Squaw Butte, north of Emmett; one on South Mountain, southeast of Jordan Valley; one on Danskin Peak, north of Mountain Home; and one on Bennett Mountain, northeast of Mountain Home.

Additionally, suppression resources include:

- **Helicopter:** The district has an Aerospatiale helicopter on contract from June to October and an 11 member helitack crew. U.S. Forest Service helitack crews stationed at Lucky Peak and Garden Valley are available for assistance if needed and if they are not assigned elsewhere. Additionally, there are other helicopter resources equipped for fire missions that are available on a call-when-needed (CWN) basis.
- **Fixed-Wing:** The district has a contract AeroCommander 500S fixed-wing aircraft, staffed by a pilot and the air attack supervisor. The air attack supervisor coordinates aerial firefighting resources and serves as an observation and communications platform for firefighters on the ground.
- **Air Tankers:** There are typically two air tankers (fire retardant planes) on contract in Boise during the fire season. However, these aircraft are considered national resources and are assigned where they're needed at any particular time. Other, nearby, air tankers are located in McCall and various locations in Nevada and Oregon. There are also contract single-engine air tankers (SEATS) located in Vale, Oregon, and Twin Falls, Idaho.

The primary operational challenges facing the district include:

- Continued development of wildland-urban interface areas across the district.
- Communications and coordination with current, new, and developing community fire departments and working with them to stay abreast of communication and technological developments so that we can continue and improve working together effectively at the fire scene.

- Internally, an operational challenge is to have sufficient and appropriate staff available throughout the year to foster partnerships with local departments and facilitate continued and improved coordination, training, communications, and other joint efforts with our partners across the district.
- Our effectiveness in addressing these challenges will largely hinge on funding available for the fire program and its various elements.

4.5.2 Local Fire Districts

4.5.2.1 Payette City and Rural Fire Department

Jeff Sands, Payette City & Rural Fire Chief
 17 South 7th Street
 Payette, Idaho 83661
 C600js@hotmail.com

Department Summary

Payette City and Rural Fire departments are responsible for fire protection in the City of Payette, the county seat within its city limits. Payette Rural covers approximately the North half of the county, part of Washington county and part of the Oregon slope area in Malheur County in Oregon. We have one station with both city and rural trucks housed together. There are two city full time fire staff from 8 to 5, M-F, and 28 volunteer firemen that are paid by call. We do both structural, wildland firefighting, rescue and extrications in our coverage area. We have mutual aid agreements with Snake River Valley Chiefs that has about 23 other departments in our area. Also with Idaho Department of Lands and Lower Snake River Dist. BLM in Boise. Our city is a tax based and subscription dues maintain our rural. Both departments make joint purchases on equipment to be more efficient and to make the best use of minimal dollars. All firemen respond to both city and rural calls.

Priority Areas

Out Growth of Station: The station that holds our city and rural department is completely under sized. Tax records show this building being built in 1949 and was not built to be a fire station. We have equipment housed outside that has to be drained to keep from freezing. We also have an education unit and command vehicles that remain outside in the weather that makes wear, tear, and repairs greater and removes vehicles from use at times. Our building does not permit us to replace vehicles with what is needed for our growth because they will not fit in this facility. Housing fire equipment is completely limited along with very minimal room for training. There are no showers or turnout storage, parking is so limited firemen park in other business areas during fires and training. The area around the trucks is less than 20 inches in spots makes it very difficult to enter and maneuver around during fire calls or returning to station. There is not enough room to pull trucks in front to reload or service properly. Without major funding for this problem the departments as a hole will find it very difficult to keep up with the pace of our growing community.

Fire fighting vehicles: The city has put in for grants through FEMA for a new pumper for two years now, the city needs to replace an aging unit that would have larger storage capacity. As the city expands we now have a green belt walk way that goes along the river that has put more wild land and water ways in the city area with no vehicle's to cover this area do to terrain. The

rural is on a list with BLM for a heavy engine type 4 (used), this is much needed for this department, and we could use two of these type units. These vehicles would replace a light type 6 homemade unit that has almost 200,000 miles on it. Grants have allowed us to replace our old tanker with a new tanker/pumper with greater water storage. As our area grows it would be to our advantage for the City and Rural to have a combined Heavy Rescue vehicle with extrication and mass casualty capabilities for the needs of our area.

Residential Growth: All indications show, that residential growth will be to the North and East of the city. The terrain, landscape and building permits show growth to that area. In a mitigation report from Dynamac Corp. in 2001, it indicated water line extension on 7th Avenue North would help. As growth has continued, it appears that a water line up Center Avenue and 7th Ave. North across Payette Heights road to Watts Lane would be a great improvement for water supply. It would shorten tanker shuttle turn around time on fires on Payette Heights and Hill road and would give us a major water supply in case of wildland fires moving into residential areas off of the foothills. Other areas of concern are Little Willow and Hill Road. The possibility of draft pipes systems in year around water locations for trucks to draft from could greatly increase fire-fighting capabilities and shorten turn around time on fires. Possibly well and tank storage or possible landowner fire department co-op in the Little Willow Creek and Hill Road areas could increase water supplies. All of these things could help limit losses and possibly lower insurance rates.

Communications and Equipment: Communications in our area has been a continuing effort. The hills to the East and South in our coverage area present problems and the need for more towers and repeaters will be needed. The need for a countywide set of channels and TAC options could possibly help in communication. Police and fire having both channels in our vehicles to be able to communicate with each other on large-scale events would keep us better informed. The need for updated dispatch panel consoles in our dispatch center would greatly enhance our communication capability. With the new digital channel radios, part of the p25 Project funding for this update will have cost runs that out pace budgets. GPS units could also help in communications in our area. Equipment needs are always ongoing, as standards change it is hard for small departments to keep up with small budgets. Large items such as hose replacement for trucks; air packs and turnout gear for 30 people are not going to be funded without the help from grants. The prices of these items out pace budget funds.

Firefighter Recruitment and Training: With the case of most departments' recruitment, training is at a limited supply. Training in rural areas is a problem because of volunteers being able to get time off of work during the week from their job and being able to get instructors for weekends. The fast pace lives we all live reflect in getting people to volunteer their time on a 24-7-365 day. One thing that would possibly help would be a training facility that has training towers and different props that could be utilized all year round. Multi agency training could be set up and this could also help gain interest in volunteers.

Public Education and Regulations: Public education in the department was started in 2001. We received a FEMA and RFA grant on our rural department and put together an education trailer that we use throughout the year. As of the year-end 2003 we have met with over 22,000 people on fire and related safety topics. Education is a great way to help set trends and change attitudes. Our city department has put in for a grant through FEMA for an education trailer that would be able to expand our program. Possibly billboard signs and radio ads over the area through out the year on fire safety topics could have great results. One item that needs to be addressed is a county ordinance in regards to unregulated burning. The lack of a permit and call in system before burning to stop false alarms calls. This is taxing on already limited funds, and unattended burning gets out of hand in our rural areas. Addressing property is another item that needs to be looked at. In this very rural area, police, fire, and medic staff all have trouble with

the lack of proper addresses being posted at entrances to property. Establishing a uniform addressing and marking system on all entrances of property in the county would be a great improvement.

Current Resources

City:

- 1986 Pierce 1500 GPM Pump 750 gallon tank - pumper
- 1977 Alafrance 1250 GPM Pump 750 gallon tank - pumper
- 1999 Tahoe Command Vehicle (Joint City/Rural)
- 1 Education Unit

Rural:

- 1994 Ford 110 GPM 250 gallon tank – light brush/air sp.
- 2004 Pierce 1000 GPM 2778 gallon tank – pumper/tender
- 1984 Ford 110 GPM 200 gallon tank –light brush unit
- 1994 Pierce 1000 GPM 1000 gallon tank pumper/rescue
- 1973 Alafrance 1250 GPM 500 gallon tank pumper
- 1994 Ford Bronco Command Vehicle (Joint City/Rural)
- 1 Education Unit

4.5.2.2 Fruitland Fire Department

Rick Watkins, Chief
208-452-4421
rwatkins@fruitland.org
200 S. Whitley Drive
Fruitland, Idaho 83619

Department Summary

Fruitland Fire Department is a function of the City of Fruitland and is responsible for structural fire protection and hazardous materials incidents within the corporate boundaries of City of Fruitland which consists of approximately three square miles. One station exists at the City Hall complex located in the center of future growth patterns for the City. The station has direct access to U.S. Highway 95. Department personnel consists of 25 paid-call members. City of Fruitland has a Protection Class 4 rating from the Idaho Survey and Rating Bureau. Our chief area of concern is structural fire protection, but due to the physical proximity of our community in the region approximately forty-five percent of our call volume is mutual aid assistance to neighboring communities. Of this percentage over half of the requests are for assistance with wildland fires.

Priority Areas

Residential Growth: Fruitland has and continues to experience significant residential growth with an increase in population from 2400 in 1990 to 3805 in 2000. Population forecasting projects 4586 by 2005, 5412 by 2010, 6276 by 2015 and 7123 by 2020. Housing units have increased from 962 in 1990 to 1518 in 2000. Housing unit forecasting projects 1810 by 2005, 2120 by 2010, 2450 by 2015 and 2770 by 2020. Though most of the housing in Fruitland is less than 30 years old, density has increased due to rising land and development costs. Future land use projects single family dwelling acreage at 42% of total land use in Fruitland with large lot residential acreage (minimum 5 acres) at 18% and multi-family residential acreage at 3% of total land use.

Commercial and Industrial Growth: Since the mid-1980's Fruitland has experienced significant commercial and industrial growth with the addition of Swire Coca Cola Bottling facility, Dickinson Frozen Foods food processing facility, Sporting Lives life preserver manufacturing, and Woodgrain Millwork which produces wood moldings, windows and doors. Medical facilities have increased in the late 1990's and early 2000's with the addition of several dental and doctor offices, Holy Rosary's Dominican Health Services Urgent Care Clinic, Primary Health Urgent Care Clinic and St. Luke's Mountain States Tumor Institute. Many more medical facilities are planned in the near future. Commercial ventures have included a new bank, strip mall, restaurants and rental office facilities. These structures and the inherent potential for large fires prompted the addition of an aerial ladder truck to the department's fleet of vehicles. Future land use projects commercial acreage at 17%, light industrial acreage 15% and heavy industrial acreage at 2% of total land use.

Institutional Growth: The mid-1980's also sparked an increase in the need for educational facilities in Fruitland. New high school and elementary school additions, new gymnasium, and new middle school have increased the square footage of these types of structures immensely. In the meantime, a large 1930's vintage three story structure that housed the high school has been operated by a non-profit organization that utilizes the auditorium area for public events and rents out office space and gymnasium for different types of educational and business functions. A new elementary school, gymnasium, performing arts building and sports facilities are scheduled to begin construction in 2005. Public land acreage, including recreational park lands total 3% of total land use.

Fire Flow: Fire flows within the system typically range from 1,000 gpm to over 3,000 gpm. Very few hydrants have available fire flows less than 1,000 gpm. Fire flows are less than 1,000 gpm in the area at the east end of the system on East 1st Street. The lines are dead-ended and the water main connecting to this area is undersized. Current system pressure requirements are met with typical pressures at peak hour demand conditions between 44 and 62 psi. Storage capacity of the system is 1.2 million gallons using one 1 million gallon ground level storage tank and one 200,000 gallon elevated storage tank. Future demand will require an additional 465,000 gallons of storage to keep up with demand.

Fire Fighting Vehicles: Limited funding has made modern fire apparatus purchases few and far between. The department is currently acquiring a new 1500 gpm pumper through a FEMA Aid to Firefighters Grant. Rolling stock ranges from 22 to 36 years of age.

Open Burning Regulations and Building/Fire Codes: Open burning regulations are relatively loose in that open burning may be conducted 365 days a year between the hours of 1000 hrs. and 1600 hrs. Very few accidental fires have been experienced and the open burning periods have been credited with this. Ordinance Officer patrol and liberal burning periods appear to allow accumulations of garden waste, paper, scrap wood, etc. from being a problem. The City has adopted the most current versions of the International Fire and Building Code and enforcement is conducted by one full-time Building Official and two part-time certified State Fire Inspectors.

Effective Mitigation Strategies

The Department has been able to maintain its effectiveness by upgrading equipment through the acquisition of federal and state grants along with funds received from contract fires through state and federal agencies from wildland and forest fires. Our focus is to replace or enhance existing resources with newer, technologically sound equipment that can be used in different settings. For example, recent use of a grant will provide several new self-contained breathing apparatus for suppression activities, but will still be effective for hazardous materials incidents.

Future plans may include substations to be constructed in the north Fruitland area and south at Palisades Junction. These substations would be constructed as growth and density increases. It would be most appropriate to begin the process of land acquisition in these areas as an investment while market values are still reasonable.

Education and Training: The Department emphasizes training and with four training officers much individualized attention can be given to personnel. Drills are held twice each month for three hours each. The January and February drills are replaced by one or two full day specialized sessions per month. The “Essentials Weekend” is required within two years of joining the Department. This weekend is sponsored by the Snake River Valley Training Officers Association and provides a general outline of all facets of firefighting from structural to wildland.

Tours are provided throughout the year for daycare centers, Head Start programs and elementary school-aged children. The Department also participates in Health Fairs sponsored by the local school district in the junior and high schools. Over 1,000 children are given the “fire prevention” message each year.

Cooperative Agreements: Mutual Aid agreements exist with the Snake River Valley Fire Chiefs Association and include two departments to our west, eight departments to our north, four departments to our east and four departments to our south. Agreements also exist with the U.S. Forest Service, Idaho Department of Lands and Bureau of Land Management (Idaho and Oregon). These organizations have been valuable resources when an incident is just too large to handle alone.

Current Resources

- 1968 Ford American-LaFrance Structural Engine with 1000 gallon tank and 750 gpm pump
- 1972 Seagrave 100 foot Aerial Ladder
- 1978 American-LaFrance Structural Engine with 750 gallon tank and 1250 gpm pump.
- 1982 Pierce Mini-Attack Pumper/Brush Truck with 250 gallon tank and 400 gpm pump
- 1986 Chevrolet Van with Cascade System and HazMat Kit. Also used as a secondary Command Vehicle

These are all housed in a three-year old fire station that was added to City Hall. The station includes three large drive-thru bays, men’s and women’s locker room/shower/restroom facilities, small equipment repair work room that includes a breathing air compressor and cascade system, storage/laundry room, and a training room. This station currently houses three ambulances.

Future Considerations

As a city-only department there are obviously many areas close to Fruitland that are under the jurisdiction of New Plymouth Rural, Payette Rural or Parma Rural fire departments. It has been suggested from several property owners within the Fruitland Impact Area that a Fruitland Rural be considered.

A new 1500 gpm custom structural engine is currently being bid and mostly funded through a FEMA grant. Most of the rolling stock is aged and though it is very well maintained, it should be replaced within the next ten years. Other items the Fruitland Fire Department needs or will need as the community grows include: a brush truck, a newer engine, a ladder truck, and extrication equipment.

It is important that wildland grants through the BLM and other agencies be provided to assist in updating and acquiring personal protection equipment and the necessary tools needed to fight

that type of fire. It is very difficult to justify to the City Council that local taxpayers should equip a “city only” department with anything but structural protective gear.

As the population increases and valuable land causes more building density it will be important to increase personnel numbers and the corresponding equipment and PPE to make their jobs efficient and safe.

4.5.2.3 New Plymouth / Sand Hollow Rural Fire Departments

New Plymouth Fire Protection District
Allen Blevins, Chief
208-278-5027
blevins1@fmtc.com
P.O. Box 219
New Plymouth, ID 83655

Department Summary:

New Plymouth Fire Protection District is responsible for structure and wildland fire protection, hazardous materials incidents, and extrication for the south east portion of Payette County. The district area is approximately 210 square miles and includes 15 ½ miles of I84, the city of New Plymouth, the Sand Hollow Community and the surrounding rural areas. This department is responsible for fire protection of a fertilizer plant and chemical warehouse, both of which are within the city limits of New Plymouth. Department personnel consist of 12 paid-call members.

Priority Areas:

Residential Growth:

The fire district has experienced significant residential growth in all areas of the district. Indications are that this trend will continue into the foreseeable future.

Commercial and Industrial Growth:

The district hasn't experienced a lot of growth until the last couple of years. At this time, there are two new industrial parks currently under construction in our district and we expect this trend to continue with the rising population.

Communications:

Communication capabilities in our district are barely adequate. Topographical features within the district make radio communications with county dispatch and other agencies difficult to impossible in some areas.

Fire Fighting Vehicles:

Due to limited funding, the age and capabilities of the fire fighting vehicles in our department has been a concern. Though we have been able to upgrade three of our vehicles, the remaining vehicles in our department are still a major concern.

Open Burning Regulations and Building/Fire Codes:

Open burning regulations are relatively loose in that open burning may be conducted 365 days a year. Burning is permitted between the hours of 0800 hrs and 1700 hrs within the city limits, and between the hours of 0800 hrs and 2000 hrs in the rural areas in our district unless a burn ban is in effect.

Effective Mitigation Strategies:

The department has recently upgraded three of our fire trucks, the newest being the 2004 Kenworth Pumper which we purchased in April of 2004. The funds for this truck came from many years of saving by our Rural Commissioners. We have been able to, with a lot of help from BLM grants, upgrade all our wildland equipment and personal protective equipment.

We have recently received a grant for spare bottles for our department, but we did not receive air packs to go with them, so they are of no use to us.

Future plans may include a new station and substation at Sand Ho9llow. We have already purchased the land for the new station and hope to get funding through the public and/or a grant to build the new station.

Education and Training:

The Department emphasized training and holds at least two drills a month for three hours each. The "Essentials Weekend" is required within one year of joining the department. This weekend is sponsored by the Snake River Valley Training Officers Association and provides a general outline of all facets of firefighting from structural to wildland. Our department also trains in house for wildland firefighting and does our own pack tests. We also require all firefighters on our department to hold valid Red Cards in order to respond to any wildland fires outside our district or to go on any BLM fires.

Public Education is provided throughout the year to numerous clubs, church groups, and schools. The department participates in Fire Prevention Education in area schools and holds a Fire Prevention Week for the New Plymouth Migrant Summer School Program.

Cooperative Agreements:

Mutual Aid agreements exist with the Snake River Valley Fire Chiefs Association and include contracts with the Bureau of Land Management (Idaho) and the Idaho Department of Lands. These organizations have been valuable resources when the incident is too large to handle alone.

Current Resources:

- 2004 Kenworth Structure Engine, 1000 gallon tank, 1250 pump
- 1976 Seagrave Structure Engine, 750 gallon tank, 1250 pump
- 1986 Kenworth Tender, 4000 gallon tank, 800 gpm PTO pump
- 1988 GMC Tender, 2000 gallon tank, 250 pump
- 2001 Ford F450 Brush Truck, 250 gallon tank, 150 gmp pump
- 1983 GMC ¾ Ton Brush Truck, 250 gallon tank, 150 gmp pump

Future Considerations:

New Plymouth Fire Protection District will continue to be actively engaged in upgrading and modernizing existing vehicles and equipment. Protecting our firefighters, our community, and surrounding areas is our paramount objective.

As stated before, we have already purchased the land needed to build a new station. At the present time we are housed at the city hall in cramped conditions with no room for growth. A new station will provide the fire department with much needed space and training facilities to allow the department to keep pace with needs of the firefighters and the community.

Department Wish List (needs):

1. Build a new station
2. Personal Protective Equipment (Wildland and Structural)
3. Air Packs and spare bottles
4. Wildland Heavy
5. New Radio System
6. New Pumper
7. New Tender
8. Training materials
9. Substation and equipment for Sand Hollow
10. Command vehicle

4.5.2.4 Parma Rural Fire Department

James Cook, Chief
208-722-5716 station, 208-722-6175 home
parmafire@widaho.net
P.O. Box 429
Parma, Idaho 83660

District Summary

The Parma Rural Fire District is comprised of land in Northern Canyon County and Southern Payette County. We provide protection to the City of Parma and the town of Roswell as well as outlying areas. Our total area is approximately 180 acres, which includes the urban areas, farmland, and BLM property. We have one station, currently in Parma City at 2nd and Main. We are in the process of remodeling a building at 29200 Hwy. 95, just north of the city limits. We hope to occupy this new site by September 2004. We are a full volunteer department with 25 members. Our main duty is to protect life and property (structures) within our district, but we also provide mutual aid to departments within the Snake River Chief's Association and the Canyon County Chief's Association. Also within our district is an ambulance service providing medical transport services to our community.

Priority Areas

Residential Growth: As the valley grows, the expansion continues into the outlying areas. We are witnessing this within our community. We have two new subdivisions within city limits, one with 17 lots and another with 31 lots. The latter has two more phases to go through, making its total over 90 new houses. This does not include the new houses and business structures in the country. With this growth we will need more resources.

Communications: Communications with our dispatch center is not as good as it should be. We have several areas with virtually no coverage, by either radio or cell phone. Repeaters in strategic locations are needed for the safety of our emergency crews, both fire and ambulance, as well as police. We also need more portable radios for better scene control and firefighter safety.

Firefighting Vehicles: Vehicles are always a concern. With limited resources we are always struggling to maintain our fleet. We have applied for grants for vehicles but have been unsuccessful thus far. We will continue to do so until our fleet is current.

Burn Permit Regulations: Our county has a burn ordinance, but lacks the resources to properly enforce it. All open burning needs to be monitored for safety, and compliance with ordinances.

Effective Mitigation Strategies

Our district continually tries to keep pace with expansion in our fire protection areas, and has been able to purchase two fire vehicles in the past 7 years, one rescue truck and a 3000 gallon tender. The intent of the department is to continue to replace our aging fleet with newer and more reliable vehicles.

We have a process to inspect driveways of new residences in our district. This will ensure good access for our firefighting vehicles.

Future plans include radio repeaters in strategic locations, adding more portable radios, and continuing to upgrade our facilities. We will need to look at additional stations as our area grows.

Education of the public with regard to open burning would be beneficial to everyone. Knowing when and how to burn would reduce the amount of public assist type calls for our department.

Education and Training

Our department stresses the importance of good training, and provides in-house training at least twice a month. In addition to this training, we are members of the Snake River Valley Training Association as well as the Treasure Valley Training Association. These associations offer additional in-depth training to us year round. We encourage our members to take advantage of all the training they can.

Cooperative Agreements

The Parma Rural Fire District has mutual aid agreements with the Snake River Chiefs Association and the Canyon County Chiefs Association. These agreements link us to more than 30 area fire departments. We also work with the BLM on ground in Payette County that is in our district, but is public property managed by them. We have a good working relationship with all of the above mentioned agencies.

Current Resources

- 1968 Ford American-LaFrance Structural Engine with 500 gallon tank and 500 gpm pump
- 1968 American-LaFrance Engine with 500 gallon tank and 1000 gpm pump
- 1974 International Tender with 1700 gallon tank and 125 gpm pump
- 1986 Chevrolet Tender with 1700 gallon tank and 125 gpm pump
- 2001 International Tender with 2950 gallon tank and 500 gpm pump
- 1997 International Rescue Vehicle with 500 gallon tank and 250 gpm pump
- 1991 Ford F-250 Brush Truck with 200 gallon tank and 125 gpm pump
- 1991 Ford F-700 Brush Truck with 300 gallon tank and 250 gpm pump
- 1999 Chevrolet Command Vehicle

**All of the above vehicles are the property of the fire district.*

Future Considerations

The Parma Rural Fire District will continually strive to update our equipment and facilities. We will occupy a new station in late summer 2004. This will give us adequate storage for all of our current equipment under one roof. When our district grows in its population base, another station will need to be added, possibly two. As with all fire districts, our primary concern is firefighter safety and protection of our citizens from fire damage or loss of life. Toward this end we will need to continually update our equipment and expand our training programs and facilities. We would like to see an area wide training facility built on our property, serving the departments with which we have mutual aid agreements. Good communications is also essential, as stated before, and repeaters will be needed to accomplish this.

Needs

The most pressing need of our department is replacing our aging pumper trucks, one is a 1968 model and the other is a 1969. Neither of these trucks can meet the current requirement for first line engines. We also need more SCBA air packs and an air compressor for filling our breathing air bottles. As already stated, we will be occupying a new station this summer, but will need to monitor growth patterns for future station placement. As we grow, we will also need more personnel on our department, with the need for additional personal protection gear for these new firefighters. We also will need a utility type trailer to haul such things as extra cribbing for vehicle extrication and possibly trench rescue.

4.6 Issues Facing Payette County Fire Protection

4.6.1 Subscription Districts

The Payette Rural Fire District is a subscription district. Not all landowners in the district "subscribe" or pay into the rural district for fire protection. This places the district in an uncertain yearly budgeting process, being unable to depend on a steady funding flow. Department resources are also unnecessarily used in the annual task of mailing billings separate from county taxes and doing collection duties. The fire department response to all fires within its district regardless of whether a landowner has paid or not. This results in many landowners reaping the benefits of having rural fire protection, but not paying to support that protection.

4.6.2 Out Growth of Current Rural District Boundaries

Due to growth in the county over the last 15 years the current district boundaries do not always allow for the closest fire fighting capabilities to respond. For Payette County the three towns of New Plymouth, Fruitland and Payette should be the focal points for three Rural Fire Districts. These districts could be combined city/rural districts with separate budgets, but equipment and housing held in common. The synergy of combining city and rural districts would alleviate problems of manpower, training and equipment by combining the strengths of city and rural districts into more efficient firefighting forces. Mutual aid agreements among these districts along with better funding flow (see comments on subscription districts) would result in better overall coverage in the county.

4.6.3 Structural Fires in Sand Hollow Fire District

Residents near the rural community of Sand Hollow are without any local housed fire equipment. The New Plymouth Rural Fire Department contracts some of their structural protection resources to this area and the Bureau of Land Management provides wildland fire protection; however, the response time for resources from New Plymouth or the area BLM office

is considerable. Intense wildfires could easily move into the settled areas prior to the arrival of suppression resources.

4.6.4 Under-sized Facilities

The station that houses the Payette Rural and City is under sized. Records show this building being built in 1949 and was not built to be a fire station. Equipment is housed outside during the winter that has to be drained to keep from freezing. The building does not permit the acquisition of replace vehicles with what is needed meet the growth of the community because they will not fit into the current facility.

4.6.5 Water Supply in the WUI

As growth continues along the edges of the established communities, water for wildland firefighting and structure protection is increasingly difficult to access. Across the county additional accessible water sources are needed.

4.7 Current Wildfire Mitigation Activities in Payette County

4.7.1 Payette County Ordinance 8-10-6

Payette County currently has an ordinance prohibiting private residential construction abutting Bureau of Land Management lands. This ordinance requires a 200 foot buffer between BLM ownership boundaries and private structures. Construction materials are also limited to those with more fire-resistant properties such as stucco or brick. These regulations are strictly enforced; however, a waiver may be granted upon request if special circumstances exist. Ordinance 8-10-6 is designed to protect residences in the wildland urban interface from wildfire by mandating the creation of a defensible space.