

Managing Fire on Lands Protected by the State of Idaho

*A Handbook for Policy Makers,
Landowners
and Idaho Citizens*



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Introduction

Wildland fires are conspicuous events in Idaho every year. Each summer seems to bring larger and more destructive fires in the forest and rangelands of the state. Landowners lose valuable resources, industry is denied access to raw materials, outdoor recreation opportunities are curtailed and commerce is negatively impacted in resource dependent communities. Fire protection costs funded with tax dollars continue to increase.

Managing Fire on Lands Protected by the State of Idaho is designed to provide policy makers and interested parties in Idaho with convenient access to facts, figures and trends in wildland fire occurrence through the 2008 fire season. It includes information about efforts to protect the things Idahoans value through a collective response to those fires. While not comprehensive, this handbook answers frequently asked questions and provides points of contact for those who need more detailed information.

Some information about federal fire policy and protection is included for statewide context and comparison. The focus of this handbook however, is on areas of the state protected by the Idaho Department of Lands, the Clearwater-Potlatch Timber Protective Association and the Southern Idaho Timber Protective Association. Wildfire response in these areas is under the direction of the state and is funded by a combination of Idaho tax revenues and assessments on forest landowners.

Underlined words and phrases are defined in Appendix 2.



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Idaho Wildfire Fast Facts

-  388 - Annual Number of Fires
-  10,999 - Average Annual Acres Burned
-  10 - Number of IDL Forest Protective Districts
-  2 - Number of Timber Protective Associations
-  50% - Percentage of Fires Started by Lightning
-  3.5 % - Percentage of Fires Started by Arson
-  28.3 Acres - Average Fire Size
-  \$9,710,000 - Annual General Fund Costs
-  \$2,965,000 - Annual Dedicated Fund Costs
-  1994 - Year With Most Fires (937)
-  2000 - Year With Most Acres Burned (98,000)
-  100% - IDL Employees With Fire Responsibility
-  \$10.65 - Starting Hourly Wage IDL Firefighter
-  \$2,435 - Hourly Rate for Retardant Aircraft

History of Fire in Idaho

The history of wildland fire and efforts to control it in Idaho mirror the fire history of the nation. Prior to statehood fire burned freely in seemingly limitless tracts of timber that dominated the northern and central parts of Idaho. As the population increased and the economy grew after statehood, sawmill owners and loggers wanted to protect the live, green timber on which their livelihoods depended from fire.

The Idaho Legislature acknowledged the concerns of timber operators in 1905 and mandated that open fires in the forest be controlled. Legislators also authorized the State Land Commissioner to arrest people who violated this requirement and deliver them to the sheriff for prosecution.

Early Timber Owner Response

At the same time, timber owners acknowledged their corporate and individual responsibilities and began cooperative efforts to suppress wildfires and protect their interests. These forerunners of today's timber protective associations were founded on the concept that cooperation between timber owners and state and federal agencies was essential to effective fire detection and suppression. This "Idaho Idea" as it became known, worked so well that it shaped the cooperative nature of fire protection throughout the nation.

1910 Fire

In 1910 the "Big Blowup" burned over 3,000,000 acres primarily in northern Idaho and western Montana. Wallace, Idaho and several smaller communities were destroyed and 85 people were killed. In the aftermath of this catastrophe, forestry officials banded together to

develop the means to control wildfire across the nation. Congress passed the Weeks Act in 1911 and the Clarke-McNary Act in 1924, promoting cooperation between federal and state protection agencies. These laws remain key to the cooperative nature of fire protection today.



The Idaho Legislature strengthened the original state wildland fire law in 1925. For the first time forest land owners were held responsible for providing “adequate and efficient” fire protection that met the approval of the State Forester. The State Forester in turn was directed to provide the protection if the landowner did not and then bill the landowner for the actual costs of that protection, including suppression.

1966 & 1967— Pivotal Years

In 1966 and 1967 the best efforts of hard working state and timber protective association employees, coupled with the commitment of all their equipment, could not stop large, intense fires such as Huston Ranch and Sundance. The physical and monetary resources of Idaho were not equal to the task and the state was compelled to turn to the federal agencies for assistance. These seasons exposed significant inadequacies in the training of Idaho firefighters and the quality of their equipment, as well as in the ability of the state to pay the costs of wildland fire suppression.

The severity of the 1966 and 1967 fire seasons caused state officials to re-evaluate the foundations of wildland fire protection in Idaho and to make changes in Idaho Code in 1968 and 1972. In recognition that the

resources valued by Idaho citizens were no longer limited to harvestable timber these revisions spread the costs of protection beyond timber. While still requiring forest landowners to provide protection, the law limited the potential liability accruing to the landowner by establishing a maximum protection assessment (set at \$.18/acre in northern Idaho and \$.10/acre in southern Idaho in 1968) and committed general tax revenue to expenses over that amount. They provided money to aggressively upgrade fire fighting equipment and to improve training for state fire fighters. They confirmed the State as the primary protection resource and empowered the State Forester to enter into agreements with federal agencies to formalize cooperative fire response.

The amount of protection assessment charged to forest landowners has increased over time, and a \$10.00 residential surcharge for improved forested parcels was added in 1993. The basic structure of the law however, is largely unchanged today.

The Sundance Fire was ignited by lightning on August 11, 1967, east of the town of Coolin on Priest Lake. It was discovered and contained at 35 acres on August 23 but jumped the lines six days later. On September 1 a cold front with strong winds drove the fire rapidly to the northeast. During the nine hour period from 2:00 to 11:00 PM the fire travelled 16 miles and burned over 50,000 acres. Fire brands were carried miles in front of the blaze threatening



the towns of Naples and Bonners Ferry. The energy released by the firestorm was so intense it uprooted large trees and twisted the steel girders of the bridge over the Pack River. Two firefighters were overrun and killed. The Sundance Fire is still considered one of the most devastating fires in Idaho history.

Interagency Cooperative Fire Agreement

The cooperative fire agreement between the state and the federal protection agencies was modified in 1983 in response to the recommendations of a legislative committee. The committee was convened to examine ways to bring more stability to protection funding. The revised agreement called for drawing jurisdictional response boundaries to balance the costs of protection so that the need for agencies to bill one another was eliminated. The framework of that agreement remains in effect today.

National Fire Plan

Following the difficult fire season of 2000 the President directed the Secretaries of Agriculture and Interior to prepare a report recommending how best to respond to severe wildland fires, reduce the impact of wildland fires on rural communities and ensure sufficient firefighting resources in the future. This report, titled *Managing the Impacts of Wildfire on Communities and the Environment: A Report to the President In Response to the Wildfires of 2000*, was approved in September 2000. Along with the associated budget, this report is called the National Fire Plan.

In October of 2000, Congress passed the Disaster Mitigation Act requiring that every state create a state hazard mitigation plan that meets the standards of the Federal Emergency Management Agency (FEMA). It also required that communities develop a local hazard mitigation plan as a condition of eligibility for emergency funding in the event of a federally declared disaster.

Idaho complied with the state requirement when the *Idaho Statewide Implementation Strategy for the National Fire Plan* was adopted in July 2002. The Implementation Strategy creates a protection

partnership between the state and the counties by:

- Establishing the Idaho State Fire Plan Working Group made up of representatives of state and federal agencies, Idaho counties, the Idaho Fire Chiefs Association and the Nez Perce and Coeur d'Alene tribes. The role of the Working Group is to facilitate implementation of the National Fire Plan in Idaho.
- Emphasizing collaborative fire protection planning between the state and the counties.
- Calling for the creation of County Wildfire Protection Plans (CWPP). A CWPP is a document developed by an individual county that meets the intent of the federal requirement for a local hazard mitigation plan by identifying hazards and prioritizing treatments to reduce them. Federal agencies must consider priorities identified in the CWPP when developing fire management plans or when conducting hazardous fuels treatments.
- Creating county wide collaborative groups made up of wildfire agencies, fire departments, emergency managers and other interested parties. These groups are responsible for updating and implementing the CWPP.



Every Idaho county has completed a CWPP.

Who Pays for Wildfire Protection in Idaho?

Preparedness

Fire protection funding is grouped into two categories. The first is preparedness, providing resources to be at the ready in advance of an actual fire. This includes hiring fire fighters, ensuring they have necessary training, tools and supplies and purchasing or leasing equipment such as fire engines and helicopters.

Another important element of preparedness is prevention, the effort to reduce the incidence of human caused fires. Public service announcements on radio and television, highway signs, and booths at public events such as county fairs remind people of the dangers of wildfire and ways to exercise care when using fire in the wildland. These multi-agency efforts are coordinated under the non-profit umbrella, Keep Idaho Green, an organization that has been in existence since the 1940s.



Preparedness in areas of the state where the Idaho Department of Lands (IDL) or one of the timber protective associations has direct protection responsibility is funded by a combination of general tax revenues, federal funds and assessments on parties who own forested land.

In 2006 the forest land assessment was increased from \$.45 to \$.55 per acre (\$13.75 minimum) with a surcharge of \$20.00 for forested parcels with

structures. These assessments are collected through county property tax billings and are deposited into an account dedicated to supporting preparedness. The Legislature gives IDL authority to spend from this account to pay preparedness costs.

The source of funds which were used to pay for preparedness (over \$66,500,000) between Fiscal Years 1999 and 2008 is shown in Figure 1.

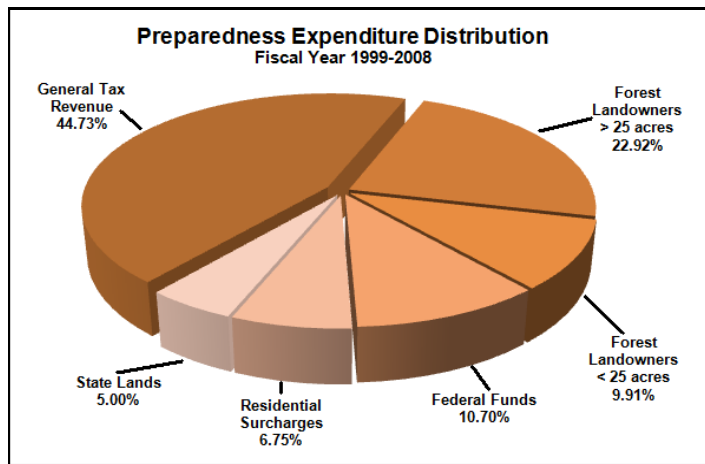


Figure 1

Suppression

The second component of protection is suppression. When personnel and equipment are dispatched to a fire, payment for those resources while assigned to the fire is made from the general fund through deficiency warrant authority granted by the Legislature to the State Board of Land Commissioners. Deficiency warrant authority allows IDL to spend money to promptly suppress wildfires without prior Legislative appropriation. Leasing retardant aircraft is also considered a suppression cost. When the Legislature convenes in January it reviews the suppression bills

incurred during the previous fire season, and appropriates funds to resolve the expenditures. Between the 1999 and 2008 fire seasons Idaho spent over eighty million dollars on wildfire suppression, all paid from the general fund.

The source of funds spent for the total protection program, both preparedness and suppression, between Fiscal Years 1999 and 2008, is shown in Figure 2.

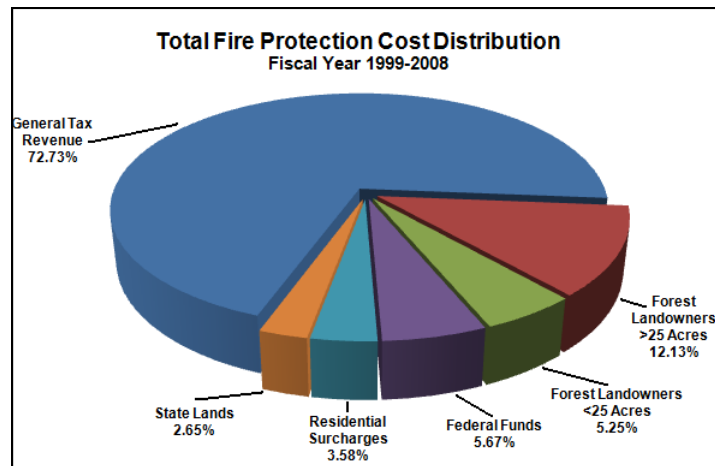


Figure 2

Why Do Some Fires Cost More To Suppress Than Others?

The cost of suppressing a wildfire is a direct result of the number and type of resources deployed on the fire. Fire managers have an array of resources at their disposal. They decide which mix of resources to use based on their evaluation of the fire situation, and which will be most effective in suppressing the fire. Small fires that are detected and attacked quickly can often be managed in a few hours by two or three firefighters armed with shovels and a fire engine.

Controlling a larger high intensity fire may require hundreds of firefighters, aircraft, helicopters, bulldozers and other heavy equipment. A fire like this might take weeks to suppress.

The primary influences on how intensely a fire burns and how fast it moves over the landscape are terrain, weather and fuel. Fires spread more quickly on steeper terrain. They burn more intensely and are more difficult to control in hot, dry or windy conditions. A fire in relatively light fuels may burn rapidly over several hundred acres, but may not require as large a commitment of resources as a ten acre fire in heavy timber. Each of these factors must be considered by a fire manager when assigning resources to a fire in order to accomplish efficient suppression.

How is Fire Response Organized in Idaho ?

The Idaho State Forester has divided the state into 16 forest protective districts. Two of these districts cover lands protected by the Forest Service and the BLM.

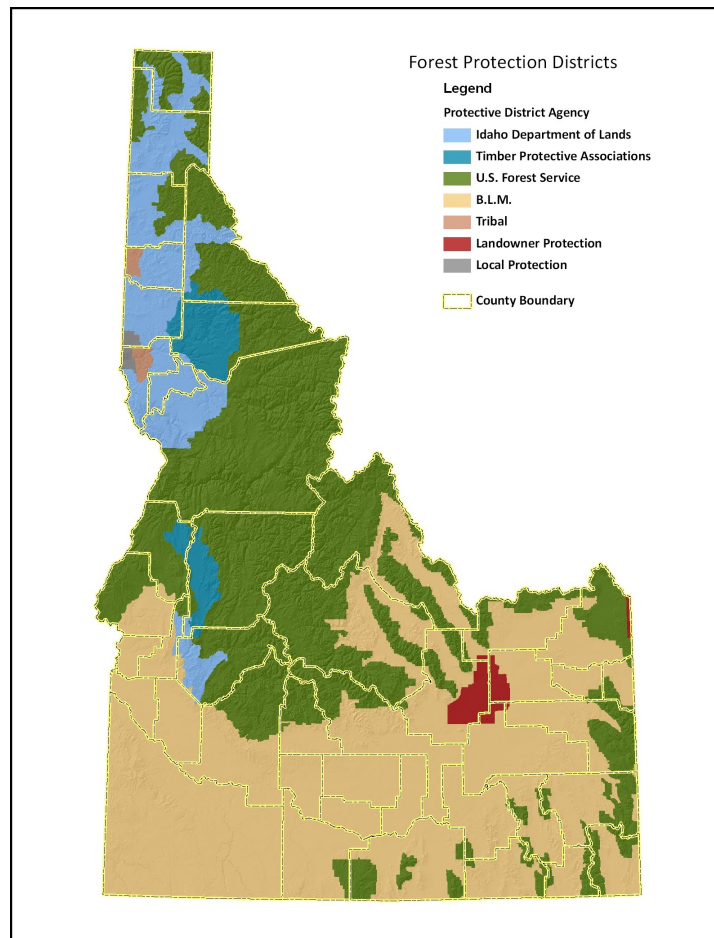


Figure 3

Two others encompass lands protected by the timber protective associations and two are protected by the Tribes. The remaining ten are districts staffed by IDL (Figure 3). Each district is supervised by a fire warden appointed by the State Forester.

One small non-forested area near Lewiston is not included in a forest protective district.

The Need For Cooperation

Staffing and equipping each individual agency to respond to the most critical situation is both physically and fiscally impossible. Consequently, wildfire protection has long been an exercise in cooperation. Agencies and local units are staffed and equipped to respond to an expected level of initial attack and to manage fires of relatively short duration. When those conditions are exceeded they either transfer in resources from elsewhere in their agency or call on other local, state or federal agencies for assistance. This cooperative arrangement includes local and rural districts, all 50 states, the western Canadian provinces, the Forest Service, BLM and other federal agencies.

The Benefits of Cooperation

Over the past ten years Idaho has benefited from the services of fire fighters and equipment from most of the western states, multiple states east of the Mississippi, federal agencies throughout the nation, and Canada, Australia and New Zealand. In return, state and timber protective association employees have assisted on fires and other natural disasters in numerous states and in Canada. In every instance the agency receiving the assistance pays the costs.

Wildfire dispatch in most of Idaho is also done cooperatively based on priorities established by all

participating agencies. Fire resources are assigned on a "closest forces" concept so that the resources positioned to reach the fire the quickest are sent first, regardless of which protection agency is responsible for the fire or which agency employs the resource.

Department of Lands Fire Cache

A part of Idaho's contribution to fire cooperation is maintenance of a large fire equipment cache in Coeur d'Alene. This cache, one of only 10 regional caches in the nation, has an inventory valued in excess of \$5,000,000. Equipment from the cache is shipped to meet fire needs throughout the western United States.

National Wildfire Coordinating Group

In order to be a full participating partner in the national cooperative fire response system, and to ensure that the state enjoys the benefits of cooperation, Idaho adheres to the safety and training rules established by the National Wildfire Coordinating Group. This group includes representatives of the state and federal wildfire agencies and is responsible for setting national personnel, training and equipment standards. These standards facilitate effective and safe fire operations by ensuring that resources from diverse agencies can operate together in a seamless and efficient manner.

The Role of Federal Agencies

Approximately 65% of Idaho is managed by federal agencies, primarily the Forest Service and the BLM. The state and the federal agencies have jointly established efficient and practical protection boundaries so that the Forest Service and BLM protect primarily federal lands, and the state protects primarily state and privately owned lands.

Offset Acres

Due to the scattered nature of ownership in Idaho, some state and private lands are located in federal protection areas, while some federal lands are included in state protection areas. These are known as "offset acres." Fire managers assign a relative value to each acre to characterize how easily fires can be ignited and how difficult those fires will likely be to control. This value incorporates factors such as fuel types, terrain and distance from a response unit. In recognition of the complexity caused by homes in the wildland, a premium is assigned to any forested acre with a structure. Higher risk acres are assigned a higher relative value than those with a lower risk.

Protection boundaries are drawn to balance these offset values. For example, if the Forest Service protects 100 acres of private land with a higher relative value, the state might be required to protect 500 acres of lower risk federal land to achieve balance. The agency protecting offset acres is responsible for all preparedness costs as well as the costs of suppressing any fire that occurs on or passes through these acres.

Under the offset acre concept the federal agencies currently protect 916,626 acres of state and private land, and IDL and the timber protective associations protect 815,677 acres of federal land.

Offset acres include all federal lands within state protection boundaries. Within federal protection areas only state and private lands that are forested are counted as offset acres. According to Idaho law these are the only lands subject to a wildland fire protection assessment, and thus the only lands on which the state requires fire response.

The Role of Local and Rural Fire Districts

There are over 200 local or rural fire districts in Idaho. These districts have been established by private citizens to provide protection to their property in specific geographic areas. Their primary focus is structure protection and they generally cover non-urban parts of the state that would not otherwise have structural fire protection.

Most local and rural districts also respond to wildfires and frequently are first on the scene. They take action within their capability until resources from a wildfire response agency arrives. When that happens they usually return to their station, although they may remain on the fire to provide protection to threatened structures.

The capability of local districts varies greatly. Some are supported by tax levies. Others are supported by donations and funding events such as raffles and yard sales. Some have paid fire fighters but many rely entirely on volunteers. The quality of equipment also varies based on funding.

State Assistance to Local Districts

IDL supports local and rural districts by providing access to equipment declared surplus by the federal government, known as Federal Excess Personal Property (FEPP). IDL maintains a shop facility in Coeur d'Alene that is committed in large part to refurbishing FEPP fire engines and loaning them to local districts. FEPP also includes equipment such as hoses, ladders, personal protective gear and breathing apparatus.

Over 100 city, county or local fire departments, along with IDL and the timber protective associations

currently benefit from the use of 587 vehicles and numerous other pieces of FEPP. The original acquisition value of this equipment totals more than \$13,000,000.



This federal excess fire engine was refurbished by IDL and loaned to the Winchester Rural Fire District..

The timber protective associations and IDL also provide training to local fire district employees and volunteers to improve their suppression skills and to help ensure their safety when on wildfire assignments.

How Big is the Fire Problem in Idaho?

Citizens of Idaho are familiar with wildland fire. They accept fire as a natural part of the environment in which they live and understand that it affects their lives to some degree every year. Smoke often settles into valleys and curtails outdoor activities. Travel on highways, back country roads and trails may be restricted. Natural resources such as timber and forage are destroyed. Wildlife habitat is degraded. Mud slides into streams and rivers. Fences, homes and outbuildings are burned. Tens of millions of taxpayer dollars are spent and thousands of fire fighters risk their lives.

Most people don't notice the hundreds of fires that never get big, but even these impact the lives of Idaho citizens. Sending trained fire fighters and their equipment to put out fires, regardless of size, costs money and reduces state funds available for other priorities.

The impact of wildfire varies from year to year and region to region in Idaho. Factors that help determine the level of fire activity include the amount of winter moisture, the severity of long-term drought conditions and the intensity of lightning storms during the summer. Fire analysts at IDL have determined from historical records that the single greatest impact on fire activity is the amount of moisture received during the fire season, which typically extends from May through mid-October. A fire season following a dry winter may be relatively light if regular moisture falls during the summer months. The reverse may also be true; some of Idaho's most severe fire seasons have followed winters of abnormally high moisture.

What Values Are At Risk From Wildfire?

Values at risk from the effects of wildfire vary based on individual perspective. They are founded in the objectives of the landowner and those that use the land. Some landowners manage their lands primarily to maintain or restore natural habitats and ecological conditions. Others manage land for personal enjoyment or as a source of revenue.

As landowner objectives differ, so too do their assessment of the destructive nature of a fire. People who manage lands primarily for ecological purposes would not necessarily consider the results of even a large fire as destructive. They might even see it as beneficial if it burns in a manner consistent with the natural fire regime of the vegetative type. Even these landowners however would consider fires that burn too intensely for the vegetative type as destructive to their management goals.

Lands protected by IDL and the timber protective associations are primarily owned by the state and private entities. Most of these lands are actively managed to meet goals that generally include some element of financial return. The state lands protected include wildlife management areas, state parks, and endowment trust lands which are managed to create revenue for public institutions. Private lands may be managed to generate funds for college or medical expenses, as a home site or for visual amenities. In almost all instances even small fires on these lands will be considered destructive in whole or in part by the landowner.

How Many Fires Burn Each Year?

Between 2003 and 2008, an average of 1,450 fires burned over 840,000 acres each year in Idaho. The

number of fires ranged from 901 to 1,941, and the acres burned varied from a low of 18,482 in 2004 to a high of 2,179,769 in 2007.

On land protected by IDL and the timber protective associations the record is similarly uneven. Between 1983 and 2008 the number of fires ranged from 172 in 1980 to 937 in 1994, and averaged 388. Only 417 acres burned in 1992 but over 98,000 burned in 2000.

What Causes Fires In Idaho?

Between 1999 and 2008 lightning caused nearly 50% of wildfires on lands protected by IDL and the timber protective associations (Figure 4). The rest were human caused, mostly the result of debris burning, campfires and equipment use. Equipment use fires include those started by sparks from defective mufflers, overheated brakes and blown tires.

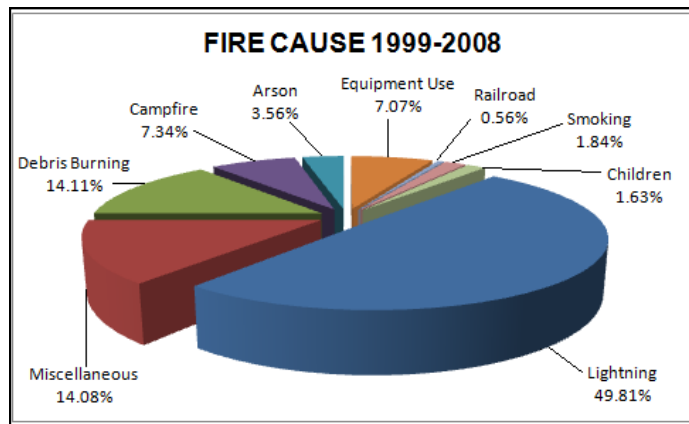


Figure 4

The percentage of fires caused by lightning increases to over 80% in the back country, but falls to about 40% in areas nearer human habitation.

How successful is fire suppression in Idaho?

Between 1983 and 2008 the success rate of IDL and timber protective association fire fighters in suppressing fires during initial attack (10 acres or less) has been steady (Table 1) and exceeds 94% overall.

INITIAL ATTACK SUCCESS		
Time Period	Years >95%	Average
1983-1995	3	94.31%
1995-2008	6	94.39%

Table 1

Despite this success, the average fire size has steadily increased since the early 1980s (Figure 5).

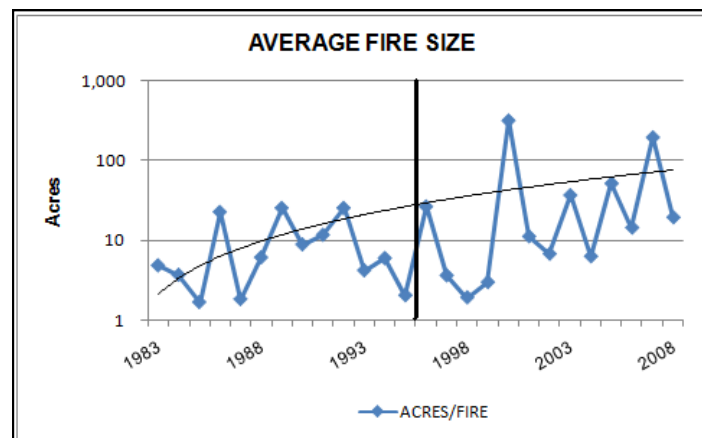


Figure 5

This means that those fires that cannot be contained at initial attack are growing larger than they did in previous years.

For the 13 years ending in 1995 the average fire size was 10.78 acres (Table 1). The average fire size exceeded 10 acres in three of those years. In the subsequent 13 year period the average was 51.48 acres, and the annual average was greater than 10 acres in six years; it exceeded 300 acres in 2000 and was nearly 200 acres in 2007.

How Much Does It Cost To Fight Fire In Idaho?

Between the 1999 and 2008 fire seasons Idaho taxpayers provided nearly \$82,000,000 to put out wildfires. This includes the costs of personnel, equipment and supplies only when working to suppress fires.

For accounting purposes suppression costs are traditionally separated into four categories: personnel, aircraft, vehicles and equipment, and other. The "other" category includes such items as protective gear, meals and other support items, and expenses of treating injuries sustained on the fire line. Between the 1998 and 2007 fire seasons state suppression costs were distributed as shown in Figure 6.

The distribution of costs varies considerably from year to year based on the nature of the fire season. Relatively cool seasons characterized by small fires suppressed during initial attack typically have a higher percentage of total costs in the personnel category. A season with larger fires on the other hand, will see a higher proportion of total expenses in the aircraft and other categories.

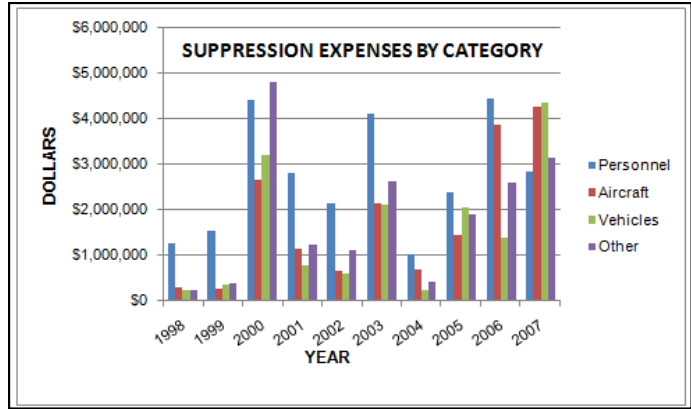


Figure 6

Large fires in particular inflate the expenses in the other category due to the high cost of supporting large work forces for extended periods. In the 2000 fire season IDL experienced two large long duration fires, Burnt Flats and Maloney Creek, and in that year more money was spent in the other category than any of the remaining three categories.

Although not clear from Figure 6, between 1998 and 2007 personnel costs have declined as a percentage of total suppression expenses while the remaining categories have increased (Figure 7).

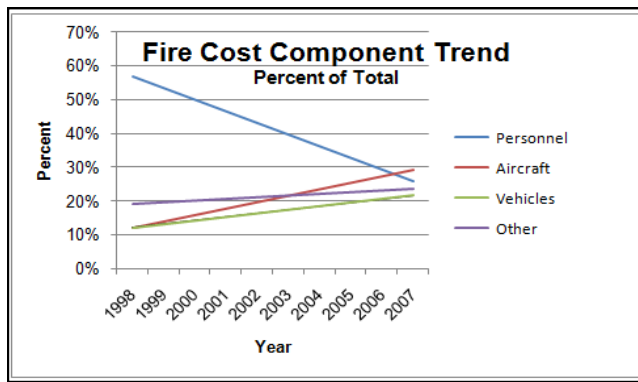


Figure 7

On an inflation adjusted basis five of the six most expensive fire seasons in Idaho history have occurred in the past decade (Figure 8).

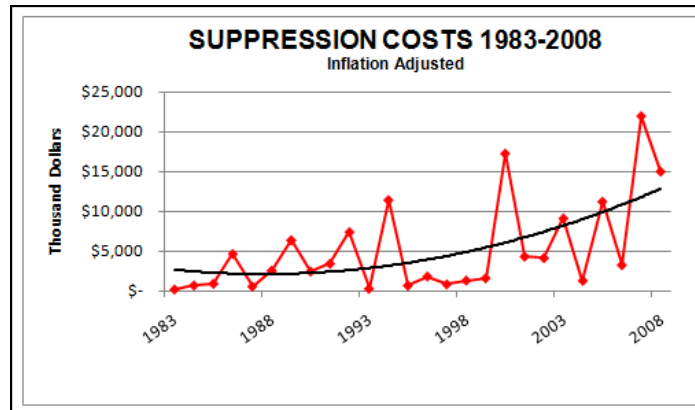


Figure 8

Why Are Fire Sizes And Costs Increasing?

In recent years fire managers have documented extreme fire behavior seldom before seen. Fires burn more intensely and move faster than previously experienced. This makes control difficult and at times nearly impossible even with the most vigorous efforts. The factors impacting the size of wildfires, the intensity with which they burn, their resistance to control and the costs to suppress them include:

- ***The Numbers And Size Of Fires Burning:*** When an agency is facing multiple fires or when a large fire absorbs resources it must establish priorities regarding which fires to attack first. This may result in the remaining fires growing bigger than they would otherwise.
- ***The Availability Of Suppression Resources Locally, Regionally And Nationally:*** When fire resources are committed to fires in other

locations, resources needed to manage local fire emergencies can be restricted. This condition has occurred more frequently in recent years.

- ***Climactic Conditions:*** The western United States has experienced a drier and warmer climate in recent years. This has been characterized by increasingly strong drought conditions which contribute to more intense fires. Expectations are that this trend will continue for the foreseeable future.
- ***Weather Conditions:*** The factor with the greatest impact on fire behavior is the weather experienced during the fire season. Hot temperatures, low relative humidity and high winds contribute to extreme fire behavior and multiply risks to firefighters.
- ***The Availability And Moisture Content Of Fuels:*** Fuel loading on both forest and range lands in the west exceeds historical conditions. This is particularly prevalent on federal lands where traditional fuel management tools such as logging have been curtailed, but the condition exists even on some state and private lands. Fires burn more intensely when more and drier fuels are available.
- ***The Presence Of Homes And Improvements In The Fire Vicinity:*** While wildland firefighters do not suppress structure fires, they tend to give priority treatment to wildfires in the vicinity of homes in order to reduce the threat to citizens and property. As a result other fires may get bigger and be more destructive than they otherwise would. In addition, more people in the vicinity of fires often requires that fire fighters concentrate some resources on ensuring safe evacuation of the public from the fire area.
- ***Unit Costs Of Firefighting Resources:*** The cost of fire fighting resources have generally increased

over the past decades. Some have increased well in excess of the rate of inflation. The cost of fire retardant delivered to fires for example, has increased 50% more than the rate of inflation since the late 1960s.

Fuel costs have escalated dramatically in the past two years thereby increasing the rate for fuel using equipment such as engines, bulldozers and chainsaws.

Personnel costs have also grown but at a rate less than that of inflation. Current Idaho state firefighter wages are 12% below what they would be if they had kept pace with inflation since 1968 (Figure 9).



Figure 9

Who is Responsible for Fire Protection in Idaho?

Forest Landowner Responsibility

Idaho law requires that *forest* landowners provide, "...protection against the starting, existence or spread of fires" on their property (Idaho Code §38-111). As an alternative they can join with other forest landowners to provide protection as a member of a timber protective association. If a landowner does not provide protection either individually or by joining an association, the law directs the state to provide protection and assess the landowner for the service. This responsibility has been assigned to IDL.

Forest landowners include large industrial landowners who own and manage land primarily to grow raw material for the timber products industry. They also include small, non-industrial landowners for whom financial return may not be the primary management focus, and homeowners who value their forested acreage primarily as a place to live.

In reality no individual private landowner has the resources necessary to provide protection to the standards required by the state. As a result IDL provides protection for almost all private forest land in the state, either directly or through contracts or cooperative agreements with timber protection associations or other agencies. The only exceptions are those landowners (approximately 65) who are members of one of the two timber protective associations. All private forest landowners in the state pay the same forest landowner assessment required by Idaho Code, including those who are members of a timber protective association.

The Forest Service, BLM, Idaho National Engineering and Environmental Laboratory, and National Park Service provide protection to federal lands in Idaho.

Non-Forest Landowner Responsibility

Owners of land that does not meet the definition of forest pay no fire protection assessment to the state even though a wildland fire agency may respond to fires on their land. They are not required by law to provide wildfire protection on their lands. Non-forest landowners may attack wildfires on their lands but are not required to do so unless they threaten forested land.

Private non-forested lands include ranches and farms, as well as some residential parcels.

“No Man’s Land”

Since there is no legal requirement that wildfires on range land be suppressed, and because some local citizens have not chosen to organize local fire districts, there are blocks of non-forested land that have no organized wildland fire response. These areas are commonly referred to as “no man’s land.” While wildland fire managers will attack a fire on non-forested lands if in their judgment it poses a threat to forested lands, they are otherwise under no obligation to do so.

What is the Policy Regarding Fire Fighting in Idaho?

Idaho Code §38-110 requires that the Director of the Department of Lands (who is also the Idaho State Forester) organize fire response in the state to provide “adequate, effective and economical protection of forest and range lands.” Range land refers only to non-forested land “adjacent to or intermingled with forest land.” (§38-101 (b)).

Uncontrolled Wildfire A Nuisance

Idaho Code §38-107 declares uncontrolled wildfire a nuisance due to its “menace to life and/or property,” and requires reasonable efforts for “immediate” suppression. It also authorizes the Director of the Department of Lands and fire wardens to take action to “summarily” abate the wildfire nuisance. In recognition of these legal mandates and the property and resources at risk, IDL and the timber protective associations pursue a policy of aggressive initial attack. The objective is to stop fires while they are relatively small and can be suppressed quickly. This policy is designed to ensure that state and private property is protected and tax dollars are saved.

Wildland Fire Suppression Tactics

State fire managers employ suppression tactics that are based on the values at risk of burning, and the current and expected fire conditions. In all cases firefighter safety is the primary consideration. Most fires are subject to direct attack, where fire lines are located immediately adjacent to the flames in order to control the fire perimeter. Fire control efforts may be focused some distance from the fire (indirect attack) however, if in the judgment of fire managers, more

direct control tactics will be ineffective or unreasonably dangerous. They base their decisions on how intensely the fire is burning and how intensely it is expected to burn in the future.

In some situations a fire manager may be able to anticipate fire behavior based on experience and training. In more complex situations sophisticated predictive models to help understand how intensely a fire will burn and how quickly it will move in a particular direction may be used.

How Does Federal Firefighting Policy Differ From State Policy?

Appropriate Management Response

Federal agencies in Idaho protect primarily federal lands. This does not mean that public and private values are not impacted by fires on federal land, but fewer private or state owned resources are at direct risk of burning from fires within federal protection areas. Federal agencies manage wildfire according to federal law and policies. The guiding federal fire policy is Appropriate Management Response. Appropriate Management Response gives federal fire managers the flexibility to choose from an array of fire suppression tactics that range from direct perimeter control to keep acres burned to a minimum, to allowing a non-human caused fire to burn within carefully prescribed conditions, but without active suppression efforts. These latter fires are called "wildland fire use fires". The fire manager chooses the tactic based on an evaluation of risks to firefighter and public safety, resource objectives that might be achieved through the fire, burning conditions, values at risk, and costs.

"Wildland fire use fires" allow federal fire managers to restore or maintain ecological or resource values by letting fire play its natural disturbance role in the landscape where appropriate. It may also be employed in some instances where traditional land management tools are not likely to be available. In most cases the zones where specific tactics may be employed are identified and mapped prior to the fire season. Federal fire managers are committed to working to minimize impacts on communities and

private property, both within and outside the area in which the wildland fire use fire is allowed to burn.

Impact Of Federal Fire Policy On State Protected Lands

Some people have expressed concern that federal fire policy will allow fires to grow large while burning on lands protected by a federal agency, and then burn onto lands under state protection with large impacts on state firefighting resources and the state budget. It is possible that a fire burning on one agency's protection will burn across protection agency boundaries with these results. The likelihood of this happening from federal to state protection is reduced by the fact that state protection areas are located predominantly on the western side of the state, upwind of federal protection areas. A review of 25 years of fire records identified only one instance of a large fire moving from lands under federal protection to those where the state had fire control responsibility. In that case state fire managers on the scene expressed full agreement with the response and tactics of the federal suppression efforts.

Where federal agencies protect state and private lands, they attack fires that threaten those resources aggressively to minimize damage to non-federal resources.

While both state and federal fire managers have the flexibility to select suppression tactics based on fire conditions, the state policy in all cases is to extinguish the fire at the minimum size allowed by firefighter safety and the resources available. There is no provision for wildland use fires on lands protected by the state or one of the timber protective associations.

Are Landowners Allowed to Fight Fire on Their Own Property?

Many Idaho landowners want to help suppress wildfires that occur on or threaten their property. In Idaho they have that right. This impulse is understandable and is reminiscent of the pioneering spirit of early settlers who recognized their personal responsibility in dealing with the threat of wildfire.

The nature of fire and fire fighting in the twenty-first century however, increases the threat to anyone working on a fire. Heavy equipment, high volume retardant aircraft and large helicopters require careful coordination to ensure fire fighter safety. Each year even some of the best trained and equipped firefighters are hurt while fighting fires. Eleven wildland fire fighters have died in Idaho in the past 10 years.

The already high risk of fire fighting is magnified by the extreme burning conditions common in recent years. These conditions often necessitate prompt movement of personnel from the path of a fast moving flame front to safe locations. If fire managers are unaware of the presence or location of people on the fire, or are unable to reliably communicate with them, as is often the case with private parties, the risks inherent in fire fighting are significantly increased.

Some fire managers have been subject to criminal and civil liability actions in recent cases of fire fighter injury. This makes them more reluctant to have untrained personnel on the line.

State fire managers try to keep landowners informed of fire conditions to ensure that landowner actions are conducted in a safe manner and in locations where the risk is reasonable. They will advise landowners to leave areas where the risk is too great. They do not order landowners off fires on their own property but may suggest that they work in a support role rather than directly on the line. They may tell citizens to leave the fire if they are not on their own property.

When landowners want to assist in the fire fighting effort they should first contact the fire manager. In that way their participation can be accommodated so that they contribute to the overall suppression effort, and do so in a manner that helps ensure the safety of all firefighting resources.

What is an Incident Management Team?

An incident management team is a cadre of fire management professionals with the training and experience to manage complex emergency fire situations. As such it is a tool to help protection agencies manage fire situations that exceed their resources. Each team is supervised by an Incident Commander, supported by specialists with expertise in operations, logistics, plans and finance and administration. Incident management teams are commonly comprised of qualified individuals from various state and federal agencies. Teams are classified as Type 1, 2, or 3, based on the complexity of fires they are qualified to manage. Type 1 teams are assigned to the most complex situations. Type 3 teams are usually composed of individuals from other units within the protection agency and from units of other agencies in the local area.

When Is A Team Needed?

An incident management team is assigned to relieve a wildfire agency that no longer has the resources to effectively manage the local fire situation. This usually happens when a single large fire reaches a level of complexity that exceeds the knowledge, experience or resources available to the agency. It may also happen when a large number of fires start in a short period of time causing an excessive initial attack workload, or when resources readily available to the agency have been depleted. In these situations the protection agency requests assignment of a team. These requests are driven not only by the current fire situation and resource availability, but also by what weather and burning conditions are expected in the future.

The Role Of A Team

When a team is activated and assembles on scene it is fully briefed on the fire situation, the values at risk and the suppression objectives by the protection agency. Following the briefing the team assumes management responsibility for the fire(s) to which it is assigned. This allows the local protection agency to replenish its resources and focus them on the fire situation elsewhere on the unit.

While assigned to the fire, the team acts under the direction of an employee of the agency on whose protection the fire occurs, commonly called a Line Officer. The job of the Line Officer is to ensure that the team manages the fire in an economical manner with full consideration for public and fire personnel safety and in accordance with protection agency objectives and policies. When the situation is restored to a manageable level the team is released and the protection agency resumes management of the fire.

Because of the large amount of support equipment and supplies necessary to support the personnel and other resources assigned to a large fire, the costs of suppression increase substantially anytime a team is assigned. This is particularly true with Type 1 and 2 teams. Because of this, state and timber protective association wildfire managers request a team only when conditions clearly dictate the need.

Of the 39 teams requested by state and timber protective association fire managers between 1999 and 2008, two were Type 1 and 15 were Type 2 (Figure 10). Eleven of these 39 assignments occurred in 2007.

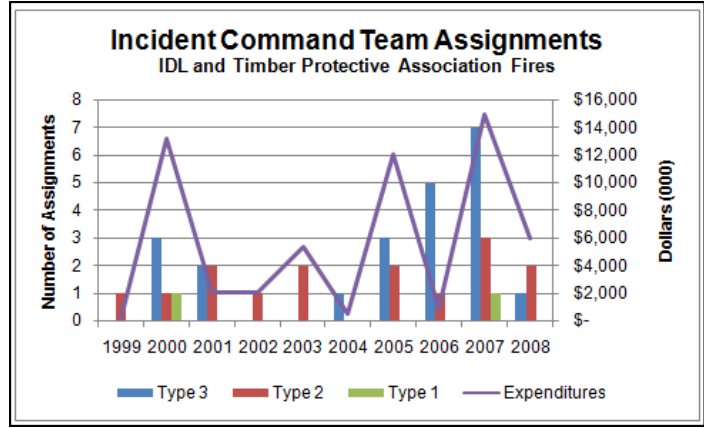


Figure 10

What is the Wildland Urban Interface?

The Wildland/Urban Interface (WUI) consists of areas where human habitation adjoins or is mixed with the forest or range wildland and wildland fuels. The character of the WUI varies from urban areas directly abutting the wildland to isolated ranches, farms and cabins scattered through the wildland. Examples of the former include the interface between the foothills and the City of Boise and the forest along the edges of Coeur d'Alene and St. Maries. Examples of the latter abound throughout the state.

The term WUI is relatively new, but the condition has existed since settlement times. It has expanded significantly in the past two decades as Idaho communities have grown and an increasing number of people have sought the amenities of living in a more rural environment. This trend is more pronounced in some areas but is evident statewide in different degrees.

How Extensive Is The WUI In Idaho?

As a part of the Idaho *Comprehensive Strategy for implementing the National Fire Plan* Idaho counties have developed County Wildfire Protection Plans, designed to identify high priority wildfire response areas. As a part of these plans counties have formally designated areas that qualify as WUI.

Of the 6,297,400 acres under direct state protection, 4,890,210 (77.65%) has been designated by the counties as WUI. The remaining 1,407,187 acres (22.35%) are classified as wildland. Eighty-two percent (4,029,995 acres) of the WUI is designated

as Intermix consisting of non-urban locations where fuels are continuous both within and outside developed areas. Eighteen percent (860,214 acres) is designated as Rural WUI, characterized by small clusters of widely scattered structures such as ranches, farms and summer cabins.

How Does The WUI Affect Wildfire Response And Tactics?

The increasing presence of people and structures in the wildland complicates the job of suppressing wildfires. Because of the risk to public safety, property and improvements, the primary focus of firefighting in the WUI can shift to protection of structures and residents. If this happens direct suppression of the fire can become a secondary objective.



Even agencies such as IDL and the timber protective associations which continue to abide by a “keep them small” approach to firefighting, are compelled to modify suppression tactics to account for threats to private citizens. This risk to forest and range resources will be increased to the extent that fire fighting resources are assigned to protecting structures or groups of structures, or evacuating residents.

How Do Fire Characteristics Differ Between The WUI And The Wildland?

The characteristics of fires in the WUI are significantly different than those in the wildland. While nearly 78% of the lands within IDL and

timber protective association districts has been designated as WUI, between 1997 and 2006:

- 76% of fires started in the WUI. This percentage has increased over the past 10 years.
- 92% of acres burned were in the WUI. This percentage has increased from 53%.
- 83% of wildfire suppression costs were incurred on fires that started in the WUI. This percentage has increased from 48%.
- 44% of WUI fires were human caused. Less than 20% of fires outside the WUI were human caused.
- In both the wildland and the WUI roughly 95% of fires were suppressed before they exceeded 10 acres. This record of initial attack success is excellent but on average these fires burned more acres in the WUI than in the wildland.

These figures demonstrate the disproportionate impact fires in the WUI have on wildfire protection in Idaho. Not only does the presence of humans lead



to more fires, the fires get bigger and cost more to put out. This is likely due to the added fire fighting tasks of ensuring that people are evacuated from threatened areas,

and homes and other improvements are protected. If resources are assigned to protect improvements they are not available to control the perimeter of the fire. When this occurs the fire itself tends to get bigger, and bigger fires cost more to suppress.

How Is The WUI Changing?

Over the past ten years the number of timbered parcels with residences on them has increased at a rate of 5% per year. The estimated market value of homes on rural parcels has increased 10% per year. Yet much of the designated WUI in Idaho still has not been developed to the extent it could be. This means that the potential for expansion in the number of homes in the WUI and expansion of the WUI itself, is great.

Timber and structures are the most economically valuable resources at stake from wildfire. In 2007 Assessors in Idaho counties estimated the market value of homes in rural areas at over \$23,000,000,000. Timber on state and private lands in 2007 had a value of approximately \$11,100,000,000. Between 2000 and 2007 the value of rural homes has increased while the value of timber has remained level. In 2001 for the first time rural home values exceeded timber values.

What Resources Are Available To Help WUI Homeowners?

The National Fire Plan includes provisions to mitigate the risk to homeowners in the WUI by reducing fuels in the wildland and improving the capacity of local structural protection districts. They also include efforts to educate homeowners on steps they can take to protect their homes from fire. In addition, a number of state and federal grants that provide financial assistance to communities and homeowners are available. These grants are awarded on a competitive basis by the Idaho State Fire Plan Working Group. Since 2001 over \$60,000,000 in grant money and equipment has been distributed to Idaho counties and rural districts.

What Can Homeowners In The WUI Do To Help Protect Their Homes?

People who live in the wildland can not eliminate the risk of wildfire to their homes. They can however, take steps to make their homes less likely to burn in the event of a wildfire. These include building with fire resistant materials and creating defensible space by removing flammable fuels, such as wood piles and combustible vegetation from near the structure.

Defensible space (Figure 11) provides a buffer between an advancing fire and the structure and may give structural protection resources a safe location to stage efforts to protect the structure. Defensible space should extend at least 100 feet on all sides of the building, although the design of the space itself can vary based on terrain and the flammability of the surrounding fuels.

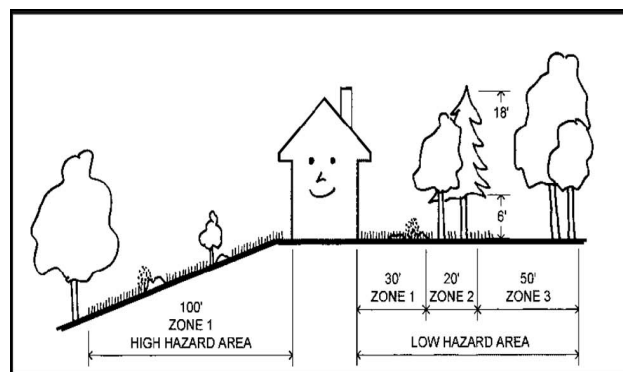


Figure 11

Homeowners can also work with their neighbors to organize a fire district where one does not exist, or strengthen an existing district, in order to provide structural protection. IDL, the timber protective associations, the State Fire Marshall, the Forest

Service and the BLM can provide assistance to citizens who want to pursue this. These agencies can also provide information on the availability of financial grants, equipment and training.

Where Can A Landowner Go For More Information?

In Idaho, National Fire Plan Grants are available to, and are administered by the counties. The counties prioritize hazard reduction needs and develop grant applications for review by the Idaho Fire Plan Working Group. Individuals or communities who see a need for a grant should contact the county officials.

The Idaho Fire Plan Working Group also maintains a website (<http://www.idahofireplan.org>) providing access to information regarding defensible space and community assistance grants. The site includes grant qualification criteria and assistance on preparing grant applications.

Other informative websites include:

- Idaho Department of Lands
<http://www.idl.idaho.gov/bureau/firemgt.htm>
- Idaho State Fire Marshall
<http://www.doi.idaho.gov/sfm/firemars.aspx>
- Firewise Communities
<http://www.firewise.org/>
- USDA Forest Service
http://www.fs.fed.us/fire/prev_ed/index.html
- Bureau of Land Management
http://www.blm.gov/nifc/st/en/prog/fire/community_assistance.html

What Is A Timber Protective Association?

Idaho Code allows forest landowners to band together and form timber protective associations to provide wildfire protection on their lands. Timber protective associations are subject to rules established by the state. Their qualifications to provide adequate protection must be certified each year by the State Forester and confirmed by the State Board of Land Commissioners.

At one time there were a large number of timber protective associations in Idaho. Most disbanded as the state expanded its role and provided more cost effective fire protection. Two remain today.

The Clearwater Timber Protective Association, was formed in 1905; the Potlatch Timber Protective Association was formed in 1906. In 1965 these two organizations joined forces and became the Clearwater Potlatch Timber Protective Association (CPTPA). CPTPA is headquartered in Orofino and protects over 988,000 acres of land in the Clearwater River basin. The employees of the CPTPA respond to wildfires in the most active fire district in the state.



The Southern Idaho Timber Protective Association (SITPA) was formed in 1904 and is headquartered in McCall. SITPA employees respond to wildfires on over



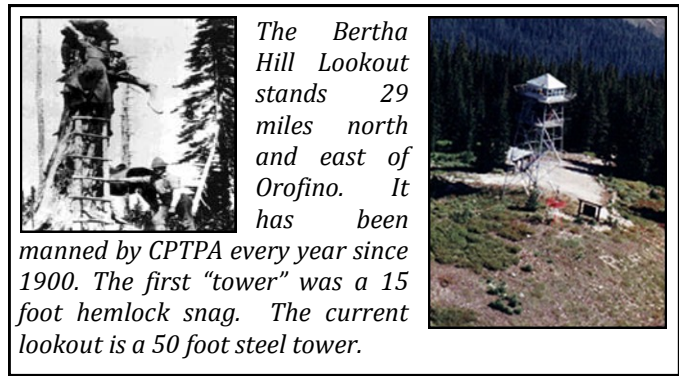
430,000 acres stretching from the Little Salmon River to south of Smith's Ferry, including the highly visible recreation areas around Cascade and McCall.

Both CPTPA and SITPA provide protection to lands owned by members and, under contract with the state, all other forested lands within their boundaries.

How do Timber Protective Associations Operate?

Timber protective associations operate in much the same way as an IDL district. The funding structure is the same combination of forest landowner assessments and general tax revenues as it is for IDL districts. The objective of stopping fires while small through quick, effective initial attack applies to both. Timber protective associations are governed by a board of directors made up of association members. The state is a member of both timber protective associations and is represented on their respective boards.

CPTPA and SITPA carry on the long timber protective association tradition in Idaho. They are fully integrated into the cooperative response fabric of the state. They are effective and trusted members of the Idaho wildfire community and are full cooperators in wildland fire suppression in the west.



The Bertha Hill Lookout stands 29 miles north and east of Orofino. It has been manned by CPTPA every year since 1900. The first "tower" was a 15 foot hemlock snag. The current lookout is a 50 foot steel tower.

APPENDIX 1
EXCERPTS FROM IDAHO CODE

Appendix 1

TITLE 38 CHAPTER 1 IDAHO FORESTRY ACT

38-107. UNCONTROLLED FIRES A NUISANCE -- ABATEMENT -- CIVIL LIABILITY. Any forest or range fire burning out of control or without adequate and proper precautions having been taken to prevent its spread, is hereby declared a public nuisance, by reason of its menace to life and/or property. Any person responsible through his conduct, acts and/or control of property or operations for either the starting or the existence of such fire is hereby required to make a reasonable effort to control or extinguish it immediately, without awaiting instructions from the director of the department of lands or a fire warden. The director of the department of lands or any fire warden may summarily abate the nuisance thus constituted by controlling or extinguishing such fire and the person wilfully or negligently responsible for the starting or existence of such fire shall be liable for the costs incurred by the state or its authorized agencies in controlling or extinguishing the same. The amount of such costs shall be recovered by a civil action prosecuted in the name of the state of Idaho and any amounts recovered shall be paid to the state treasurer for deposit to the forest protection fund. Civil liability provided for herein shall be exclusive of and in addition to any criminal penalties otherwise provided.

38-110. FOREST PROTECTIVE DISTRICTS -- FIRE WARDENS. The director of the department of lands of the state of Idaho shall divide the state into districts to be known and designated as forest protective districts, having due regard in establishing

the boundaries thereof, to the adequate, effective and economical protection of forest and range lands therein; he shall appoint one (1) fire warden for each of the districts of the state on the recommendation of the protection agency representing the forest land owners in each such district, who shall at all times be responsible to and under the direction and control of the director of the department of lands and shall perform such duties at such times and places as he shall direct. Fire wardens shall hold office until their appointment is revoked and the director of the department of lands may revoke the same at any time. The fire warden so appointed may, subject to approval by the director of the department of lands, appoint deputy fire wardens within their respective districts and such appointments may be revoked at any time by the fire warden or director of the department of lands. All the officers provided for in this act shall have and exercise police powers while engaged in performing the duties of their respective offices.

38-111. PROTECTION BY OWNER -- ASSESSMENTS -- BUDGET OF PROTECTIVE DISTRICTS. Every owner of forest lands in the state shall furnish or provide therefor, throughout the closed season, protection against the starting, existence or spread of fires thereon, or therefrom, in conformity with reasonable rules and standards for adequate protection, to be established by the state board of land commissioners. An owner of forest lands who maintains a membership in good standing in a forest protective association operating under agreement with the state board of land commissioners, which association maintains a standard of protection approved by said board and who pays the assessments to the association in the amounts required in this section, shall be deemed to have fully complied herewith. In the event the owner

of any forest land shall neglect or fail to furnish the protection required in this section, the director of the department of lands shall provide such patrol and protection therefor at actual cost to the owner of forest lands. For private owners of forest lands whose total acres of forest lands are twenty-six (26) acres or more, the state board of land commissioners shall establish this cost not to exceed sixty cents (60¢) an acre per year. For private owners of forest lands whose total acres of forest lands are twenty-five (25) acres or fewer, the minimum assessment per year shall be equal to the per acre cost multiplied by twenty-five (25). In addition to any other assessment prescribed in this chapter, the state board of land commissioners shall establish a surcharge to be levied and assessed in an amount not to exceed twenty dollars (\$20.00) for each improved lot or parcel, to defray the cost of fire suppression on forest land caused by the existence of the improvements. In the event an assessment is made in an amount less than the maximum hereinbefore provided, and an actual loss occurs which exceeds the amount budgeted and for which assessments have been made, the director of the department of lands, with the approval of the board, may require an additional assessment to be made and paid, which together with the original assessment shall not exceed the maximum assessment set forth in this section. Such additional assessment shall be levied and collected in the same manner as herein provided for the collection of such original assessments. The liability provided in this section shall be calculated for each forest protection district or association separately, and shall be calculated solely upon the charges assignable to fire control or presuppression of fires within each district or association.

Each forest protective association actively engaged in forest protection under agreement with

the state board of land commissioners shall each year prepare in detail, a budget of all estimated operating costs for the next calendar year and shall submit this budget to the board for approval before June 30 of the current year.

Except for the provisions of section 38-122, Idaho Code, and cases of proven negligence by the landowner or his agent, no other charges or assessments for fire protection shall be made or assessed or collected from those forest landowners participating as provided herein.

APPENDIX 2
DEFINITIONS

Appendix 2 Definitions

Appropriate Management Response: A federal fire response strategy whereby any specific action suitable to meet fire management objectives is employed. Appropriate Management Response is typically developed for a specific location in advance of fire ignition and is based on the protection agency strategies. It encompasses a range of tactical options, from monitoring to intensive suppression actions.

BLM: The Bureau of Land Management is the Federal agency responsible for management of public lands. The BLM is primary responder to wildland fire on 337,900 acres of state and private forest land in Idaho.

Clarke-McNary Act: A 1924 act of Congress that expanded the cooperative and matching funds provisions of the Weeks Act to include all watersheds in the nation.

Climate: The prevailing pattern or average weather conditions at a particular place, as determined by the temperature and meteorological changes over a period of years.

Closest Forces: Fire response concept under which the first resource dispatched to a reported wildfire is the one which will reach the fire the soonest, regardless of which agency employs the resource.

County Wildfire Protection Plan: A fire protection plan developed by a local community establishing priorities for the protection of life, property, and critical infrastructure in the wildland–urban interface, and addressing such issues as wildfire response, hazard mitigation, community preparedness, and structure protection.

Cooperative Fire Agreement: An agreement between fire protection entities that defines the location of agency direct protection responsibilities, the level and location of cooperation they will each provide, the conditions under which they will provide assistance to each other, and how the costs of assistance will be determined and paid.

Defensible Space: An area around a residence that has been designed to provide a zone of protection against wildland fire. The protection measure in this zone typically consist of removal of flammable fuel, or the planting of vegetation that is resistant to fire.

Deficiency Warrant Authority: Authority granted by the Idaho Legislature allowing a state entity to spend tax dollars without appropriation. The State Board of Land Commissioners has been granted this authority to pay the costs of wildland fire suppression. Expenses accrued under deficiency warrant authority are resolved by the legislature by appropriation at the beginning of the next legislative session.

Direct Attack: A method of suppression that treats the fire along its burning edge, by wetting, cooling, smothering, or chemically quenching the fire or by mechanically separating the fire from unburned fuel.

Direct State Protection: Those areas of the state where the Idaho Department of Lands or one of the timber protective associations is the first responder to wildland fire.

Endowment Trust Land: State owned land granted to Idaho at statehood to support public institutions, primarily public schools. Endowment lands are managed in trust by the Idaho Department of Lands to maximize long-term financial return to the nine endowed institutions.

Federal Excess Personal Property (FEPP):

Federally owned equipment that is no longer needed by the federal government and is loaned to State Foresters for the purpose of wildland and rural firefighting. The FEPP program is authorized under the Federal Property and Administrative Service Act of 1949. Most FEPP property is sub-loaned to local fire departments.

Finance and Administration: The incident command section responsible for administrative and financial considerations on a fire.

Fire Equipment Cache: A warehouse facility in which a pre-determined complement of fire fighting tools, equipment and supplies is stored ready to be shipped to a fire when requested.

Fire Protection: All actions taken to reduce the economic, social and environmental impacts of wildfire. Protection includes preparedness and suppression activities.

Fire Warden: An individual appointed by the Idaho State Forester to exercise fire prevention, detection, and control within a specified geographic area known as a fire protection district.

Forest Land: Land with sufficient brush or flammable forest growth of any kind or size, living or dead, standing or down, including debris or growth following a fire or removal of forest products, to constitute a fire menace to life (including animal) or property.

Forest Protective District: A specifically designated geographic region of the state established to facilitate the efficient and effective control of wildland fire. Each forest protective district is supervised by a Forest Warden assigned by the State Forester.

Forest Service: Federal agency responsible for management of national forests. The Forest Service is primary responder to wildland fire on 578,730 acres of state and private land in Idaho

Fuel Loading: The amount of fuel present expressed quantitatively in terms of weight of fuel per unit area, usually tons per acre. This may be available fuel or total fuel and is usually expressed as dry weight.

Idaho Department of Lands: The state agency with primary wildland fire response authority in Idaho.

Idaho State Fire Plan Working Group: The Idaho State Fire Plan Working Group (ISFPWG) is a multi-agency collaborative body charged with assisting counties with their County Wildfire Protection Plans and their associated countywide working groups, dissemination of information, and oversight and prioritization of grant assistance programs in order to facilitate the implementation of the National Fire Plan in Idaho.

IDL: Idaho Department of Lands

Incident Management Team: A team made up of an incident commander and appropriate general and command staff personnel assigned to a fire when a local protection is no longer capable of managing the local fire situation.

Incident Commander (IC): The individual responsible for overall management of an incident management team assigned to a fire. The IC reports to the Agency Administrator for the agency having incident jurisdiction. This position may have one or more deputies assigned from the same agency or from an assisting agency(s).

Indirect Attack: A method of suppression in which the control line is located some considerable

distance away from the fire's active edge. Generally done in the case of a fast-spreading or high-intensity fire and to utilize natural or constructed firebreaks or fuel breaks and favorable breaks in the topography. The intervening fuel is usually backfired; but occasionally the main fire is allowed to burn to the line, depending on conditions.

Initial Attack: An aggressive suppression action consistent with firefighter and public safety and values to be protected. The objective of initial attack is to stop the spread of the fire and put it out at least cost.

Local or Rural Fire District: An organization established primarily to provide structural fire protection to a designated geographic area outside of areas under municipal fire protection. A local or rural district may have taxing authority. Officials may be appointed or elected. Some districts have paid staff but many are staffed by volunteers.

Logistics: The incident command section responsible for providing facilities, services and supplies in support of management of a fire.

National Fire Plan: The fire response program passed by Congress following the 2000 fire season. The purpose of the fire plan is to actively respond to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity for the future by focusing on firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

National Wildfire Coordinating Group (NWCG): A group formed under the direction of the Secretaries of the Interior and Agriculture to improve the coordination and effectiveness of wildland fire activities and provide a forum to discuss, recommend appropriate action, or resolve issues and problems of substantive nature. Members include six federal

agencies, the Intertribal Timber Council, and the National Association of State Foresters. NWCG provides a formalized system to agree upon standards of training, equipment, qualifications, and other operational functions.

Offset Acres: State or private acres protected by a federal agency, or federal acres protected by the Idaho Department of Lands or a timber protective association. Offset acres are balanced on a relative risk basis so that the effective risk protected by one agency on behalf of another are roughly equivalent.

Operations: The incident command section responsible for all tactical operations on a fire.

Plans: The incident command section responsible for collection, evaluation and dissemination of tactical information related to the fire, and for the preparation and documentation of fire action plans.

Preparedness: Activities taken in advance of fire occurrence to ensure effective suppression. This includes recruiting and training personnel, planning the organization, maintaining fire equipment and fire control improvements, and procuring equipment and supplies.

Protection Assessment: The per acre charge assessed on forest landowners in Idaho to help pay the costs of fire preparedness funding. The assessment is authorized under Idaho Code 38-111.

Range Land: Non-cultivated land covered with native grasses or other forage plants making it best suited for grazing of domestic and wild animals, and which is adjacent to or intermingled with forest land.

Residential Surcharge: The assessment charged to forest landowners who have structures on their forest land. The surcharge is designed to help offset the additional fire control complexity caused by

structures in the wildland. The surcharge is authorized by Idaho Code §38-111.

State Board of Land Commissioners: The executive board directing the activities of the Idaho Department of Lands. The Board is comprised of the Governor, Secretary of State, State Controller, Attorney General and Superintendent of Public Instruction.

State Forester: The state official with primary responsibility for wildland fire protection in the state. The Idaho State Forester is the Director of the Idaho Department of Lands.

Suppression: All actions taken to extinguish or confine a fire beginning with its discovery.

Timber Protective Association: A group of landowners who join together to provide wildland fire protection to members. Timber protective associations also provide protection to all landowners within a specified forest protection district under contract with the Idaho Department of Lands. Timber protective associations are formed under the authority of Idaho Code §38-111.

Weather: The general condition of the atmosphere at a particular time and place, with regard to elements such as temperature, moisture, relative humidity, and cloudiness.

Weeks Act: A 1911 act of Congress that established the authority of the federal government to enter into cooperative fire protection agreements with State Foresters, and provided a system of matching funds to support that protection.

Wildland: An area in which development is for the most part absent, except for roads, railroads, power lines, and similar transportation facilities.

Wildland Fire: Any non-structure fire that occurs in the wildland.

Wildland/Urban Interface: The area where structures and other human development meet or intermingle with natural wildland vegetation.

Wildfire: Any fire occurring on wildland except the fire burning under prescription.

Wildland Fire Use Fire: A naturally-ignited wildland fire which is allowed to burn under pre-defined conditions in order to accomplish specific resource management objectives in pre-defined area. Wildland fire use fires are monitored to ensure that the burning conditions and burning area are not violated.

WUI: Wildland Urban Interface.