

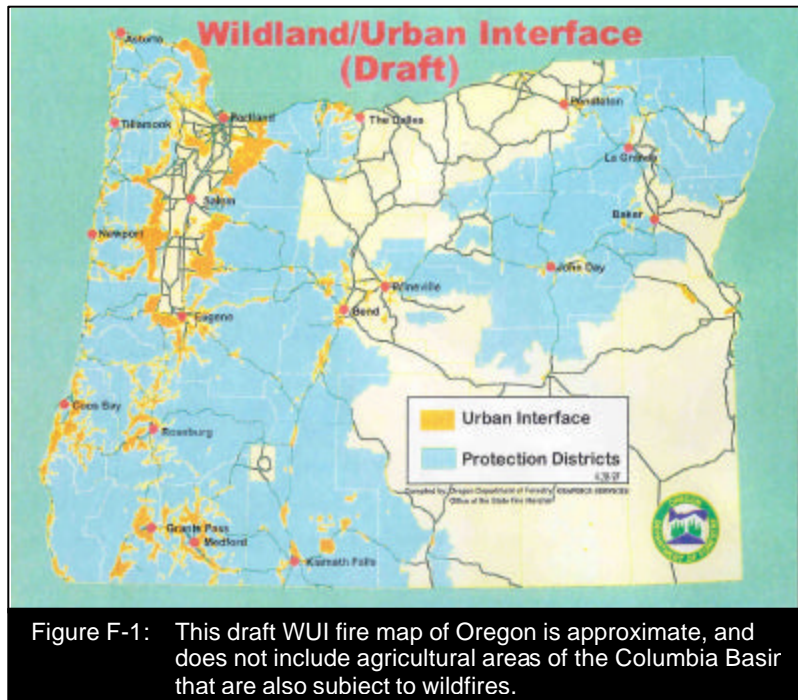
## Fire Chapter - Wildland-Urban Interface Fire Loss Reduction Plan

### Introduction

Wildland fires are a common and widespread natural hazard in Oregon; the state has a long and extensive history of wildfire. Significant portions of Oregon's wildlands and areas adjacent to rural communities, especially in central and eastern Oregon, are dominated by ecosystems dependent upon fire for their health and survival.

Oregon has in excess of 41 million acres (more than 64,000 square miles) of forest and rangeland that are susceptible to wildfire. In addition, significant agricultural areas of the Willamette Valley, north central, and northeastern Oregon grow crops, such as wheat, that are prone to wildfire damage. Communities are also at risk. According to a listing in the 2001 *Federal Register*, 367 Oregon communities are at risk of damage from wildfire.<sup>1</sup>

The majority of wildfires occur between June and October. However, wildfires can occur at other times of the year, when weather and fuel conditions combine to allow ignition and spread. Seventy percent of Oregon's wildland fires result from human activity. The remaining thirty percent result from lightning, occurring most frequently in eastern and southern Oregon.



The financial and social costs of wildfires demonstrate the need to reduce their impact on lives and property, as well as the short and long-term economic and environmental consequences of large-scale fires. Cost savings can be realized through preparedness and risk reduction including a coordinated effort of planning for fire protection and implementing activities among local, state, and federal agencies, the private sector, and community organizations. Individual property owners have a major role to play in this coordinated effort, especially in wildland interface areas.

The wildland-urban interface (WUI) is the area or zone where structures and other human development meet or intermingle with wildland or vegetative fuels. As more people have moved into wildland interface areas, whether for lifestyle or economic reasons, the number of large wildfires impacting homes has escalated dramatically. Many in the population migrating to rural Oregon from urban areas took with them an expectation of structural fire protection<sup>2</sup> similar to the high-density areas they were leaving. Rural fire departments combined with local mutual aid agreements and finally the Conflagration Act<sup>3</sup> attempt to fulfill these expectations, but many homes are still located within areas with little or no structural fire protection. Appendix F-3 to this chapter summarizes for the years 1996 to 2002 fires that were burning outside of areas with structural protection that nevertheless received a structural fire response.

**Appendix F-1 beginning on page F-19 is a list of acronyms and glossary of terms used in this chapter.**

**Appendix F-2, beginning on page F-21 provides a history of wildfires in Oregon.**

Fire suppression costs escalate dramatically when wildland protection agencies must adjust their tactics and structural fire protection resources must be mobilized to protect structures in the path of wildfire. Local and state government costs to support evacuation, traffic control, security, and public information during an interface fire are also significant, but have not been calculated.

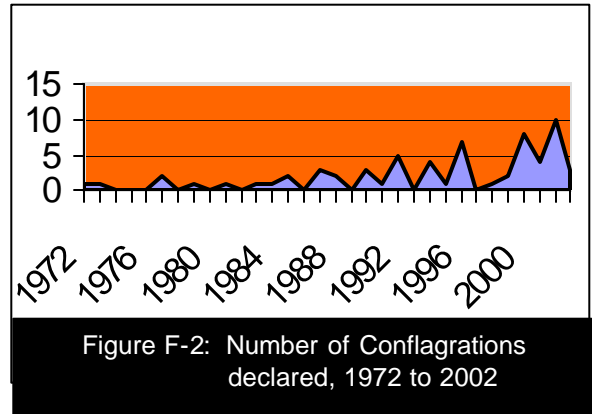
<sup>1</sup> *Federal Register*: August 17, 2001 (Volume 66, Number 160)  
<http://www.epa.gov/fedrgstr/EPA-IMPACT/2001/August/Day-17/i20592.htm>

<sup>2</sup> For a definition of structural fire protection, see Appendix F-1.

<sup>3</sup> Appendix F-1 also includes a definition of Conflagration Act.

The state has also experienced a draining increase in costs associated with enactment of the State Conflagration Act. Governor-declared conflagrations are fires with a threat to life or structure that have exhausted local and mutual aid suppression resources. The Act was established as a civil defense measure to mobilize structural fire suppression resources for massive urban fires. It was first used in 1959 to coordinate aid to an explosion and fire in downtown Roseburg. The Act was not invoked again until 1972, when a wildland fire in Yamhill County threatened homes in what is now known as the wildland-urban interface.

Since then, the Act has been invoked more and more frequently – and nearly always for fires threatening structures in wildland interface areas. For example, the average number of declared conflagrations in the decade after 1977 was about one per year. In the decade after 1987 (a record year) the average declarations per year more than doubled. The average has doubled again since 1998. In 2002, ten wildland fires were declared conflagrations at a cost of \$3.6 million dollars to FEMA and the State of Oregon for structural firefighting response. Additionally, FEMA reimbursed the Oregon Department of Forestry \$2.9 million for its fire suppression costs in those fires.<sup>4</sup>



As a result of the 1987 fire season, and due in large part to FEMA funding provided that year through the Fire Suppression Assistance (FSA) Program, Oregon developed *An Action Plan for Protecting Rural/Forest Lands from Wildfire*. This action plan was updated in 1991 with the *Awbrey Hall Fire Appendix*, developed in response to this fire which burned 22 structures on the western fringe of Bend. A summary of the recommendations from these two action plans are shown in Appendix F-4 of this chapter, including information about the state’s success in implementing the recommendations, or in a few cases, carrying them forward as short or long-term actions in this plan chapter.

## Hazard Analysis / Characterization

### History of Wildfire<sup>5</sup>

Wildfires have been a feature of the Oregon landscape for thousands of years. The early fires resulted from lightning and from the practices of Native Americans. The Blue Mountains, in northeastern Oregon, were so named by early immigrants, due to the existence of a perpetual, smoke caused haze that lingered over the region.

Between 1840 and 1900, wildland fires burned at least two million acres of forestland in western Oregon. It is believed that settlers caused many of these fires. Following the establishment of the U.S. Forest Service and the Oregon Department of Forestry, in 1905 and 1911 respectively, an aggressive and coordinated system of fire prevention and suppression emerged. However, it took several decades before significant gains were made.

Fires during the years 1933, 1939, 1945 and 1951 burned in the same general area, a vast tract of forest in the northern Coast Range that became known as the Tillamook Burn.

Better suppression and more effective fire prevention campaigns combined to drastically reduce fire losses following World War II. Suppression improvements included organized suppression crews, which supplanted the old system of hiring firefighters on an as-needed basis whenever a fire occurred; construction of an extensive system of forest roads; the use of aircraft for the aerial delivery of personnel and retardant; the invention and modification of chain saws, portable water pumps and bulldozers; and refinements in weather forecasting and fire reporting. Prevention benefited from war-era campaigns that united prevention and patriotism, and which birthed movements such as Smokey Bear and Keep Oregon Green.

<sup>4</sup> Fire Management Assistance Grant Program funding provided to Oregon, calendar year 2002

<sup>5</sup> The table “History of Wildfires in Oregon” is Appendix F-1 to this chapter.

In the early 1970s, an increasing number of wildland fires affected or involved homes. Suburban growth continued through the 1980s, and by the early 1990s frequent and destructive wildland interface fires had become a major concern of the State Forester, the State Fire Marshal, and the Legislature. In the 1990s, about 100 structures burned in wildland fires. Thousands more were threatened, and losses and suppression costs skyrocketed.

In 1997, the Legislature passed Senate Bill 360, the Oregon Forestland-Urban Interface Fire Protection Act, "to provide a complete and coordinated fire protection system." The Act recognized that "forestland-urban interface property owners have a basic responsibility to share in a complete and coordinated protection system..." In addition, during the last decade, concerted efforts have been made to prevent and mitigate wildland interface fires, including enactment of the Wildfire Hazard Zone<sup>6</sup> process and inclusion of defensible space requirements in the state building code. Significant efforts have been made to increase voluntary landowner participation through aggressive awareness campaigns, such as FireFree, Project Impact, Firewise, and by locally created and funded programs.

Also, firefighters have benefited from improved training, coordination, and equipment. Other examples of recent improvements include better interagency initial attack cooperation, a significant increase in the numbers of private crews and fire engines under contract to wildfire agencies, formation of structural incident management teams, and regional coordination of fire suppression.

**100,000 acres or more  
burned in...**

1910, 1914, 1915, 1918,  
1919, 1922, 1924, 1926,  
1928, 1929, 1931, 1932,  
1933, 1936, 1939, 1945,  
1951, 1987, 1996, 2002.

However, fires in 2002 underscored the need for urgent action. Fires sparked by intense mid-summer dry lightning storms burned hundreds of thousands of acres of Oregon forestland. There were ten Governor-declared conflagrations, with as many as five events running concurrently. More than 50 structures burned and thousands more were threatened; at one point, the entire Illinois Valley in southwestern Oregon, the home of approximately 17,000 people, was under imminent evacuation alert due to the vast Florence/Biscuit Fire.

The 2002 fire season resulted in intense competition for fire suppression resources, locally, regionally and nationally, and clearly emphasized the need for communities, especially those without structural fire protection, to be accountable for reducing their own fire risk by increasing defensible space around structures and improving access for suppression equipment, thereby reducing the need for structural suppression and conflagration aid requests.

Recent fire seasons bring the wildland interface problem to the forefront and the problem of overabundant dense forest fuels is a focus of public discussion. The forest fuels issue is a major, continuing problem that has received Presidential level attention. Work is underway to reduce fuels in wildland interface areas, but the task is massive and, while improvement is occurring, it will take many years and a substantial financial commitment to complete and sustain. The perceived need to reduce fuels is not universally accepted and remains controversial, especially on federally owned lands.

Like the acres burned by wildfires, the costs associated with wildfires - initial attack suppression, extended attack, fire suppression support, mitigation, training and education, and prevention - all continue to climb.

Increased risk of landslides and erosion are secondary hazards associated with wildfires that occur on steep slopes. Wildfires tend to denude the vegetative cover and burn the soil layer creating a less permeable surface prone to sheetwash erosion. This - in turn - increases sediment load and the likelihood of downslope failure and impact.

Wildfires can also impact water quality (e.g., drinking water intakes). During fire suppression activities some areas may need coordinated efforts to protect water resource values from negative impact.

Wildfire smoke may also have adverse effects on air quality health standards and visibility, as well as creating nuisance situations. Strategies to limit smoke from active wildfires are limited, but interagency programs exist to alert the public of potential smoke impact areas where hazardous driving or health conditions may occur.

Figure F-3: Secondary hazards

<sup>6</sup> For a definition of Wildfire Hazard Zone, see Appendix F-3.

## **Types of Wildfire**

Wildfires burn primarily in vegetative fuels, outside highly urbanized areas. Wildfires require a suppression response because they are burning out of control or threatening to spread out of control. Wildland fires can be categorized as agricultural, forest, range, or wildland-urban interface fires.

### **Agricultural**

Agricultural fires burn in areas where the primary fuels are flammable cultivated crops, such as wheat. This type of fire tends to spread very rapidly, but is relatively easy to suppress if adequate resources are available. Structures threatened, if any, are generally those belonging to ranchowners. There can also be significant losses in terms of agricultural products.

### **Forest**

Forest fires are the classic wildfire. These fires burn in fuels composed primarily of timber and associated fuels, such as brush, grass, logging residue and thick stands of reproduction. Due to variations in fuel and topography, this type of fire may be extremely difficult and costly to suppress.

### **Range**

Range fires burn across lands that are typically open and lack heavy stands of timber or large accumulations of fuel. Such lands are used predominately for grazing or wildlife management purposes. Juniper, bitterbrush, and sage are common fuels involved.

### **Wildland-Urban Interface**

Fires involving the wildland interface occur in portions of the state where urbanization and natural vegetation fuels allow a fire to spread rapidly from natural fuels to structures and vice versa. Especially in the early stage of such fires, structural fire suppression resources can be quickly overwhelmed, increasing the number of structures destroyed. Such fires are known for the large number of structures that are simultaneously exposed to fire. Nationally, wildland interface fires commonly produce widespread losses. Thus far, Oregon has escaped the level of property losses experienced by neighboring states.

## **Probability**

Fire is a critical component of forest and rangeland ecosystems found in all portions of the state. Many of these ecosystems are dependent upon the existence of fire, or on a viable substitute, for their continued existence. Even the western Oregon forests, in the "wet" portion of the state, depend upon fire. It is a common myth that an unbroken carpet of old growth timber blanketed western Oregon prior to the beginning of European American settlement. In fact, fire and other natural forces had created a mosaic of different aged timber stands across the region. New factors are now influencing the occurrence and severity of wildfires. These factors include poor forest health, abnormally high amounts of vegetation arising from a century of aggressive fire exclusion, and long-term changes in weather patterns.

In Oregon, wildfires are inevitable. Although thought of as a summer occurrence, wildland fires can and do occur during any month of the year. The vast majority of wildfires burn during the July to October time period. Dry spells during the winter months, especially when combined with winds or with dead fuels, result in fires that burn with an intensity and a rate of spread that often surprises people.

During a typical year, in excess of 2,500 wildland fires are ignited on protected forestlands in Oregon. ODF statistics show that approximately two-thirds of these fires are caused by human activity; the others are due to lightning. Over the past ten years the overall trend in the incidence of human caused fires has been downward. When compared to Oregon's rapidly increasing population, the trend in the number of wildland fires per 1,000 population has been falling. However, the number of acres being burned by those decreasing number of fires, and the frequency of structural losses, has been growing.

### Lightning

Lightning strikes Oregon thousands of times each year. The frequency of lightning, and lightning-ignited fires, is lower in the northwest portion of the state compared to the remainder of the state.

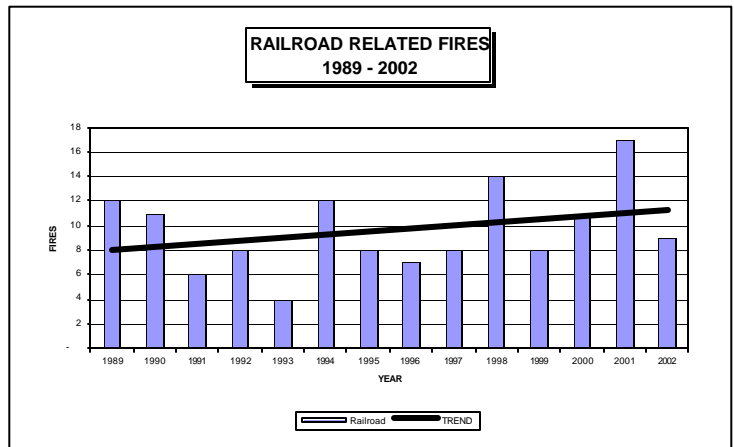
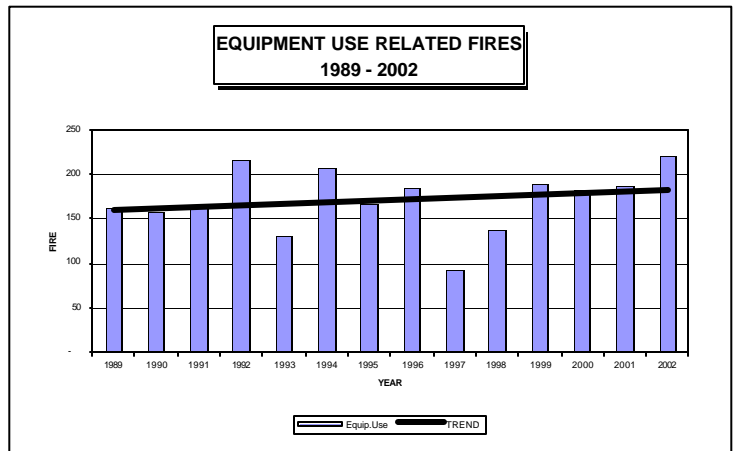
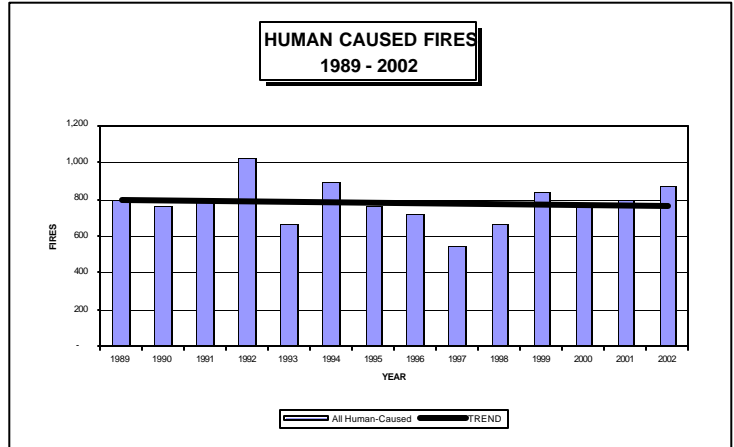
### Equipment Use

Equipment, ranging from small weed eaters to large logging equipment, can readily ignite a wildfire, especially if used improperly. The frequency of fires caused by equipment has been rising in recent years. This increase may be related to the expansion of the wildland interface, which results in more people and equipment in close proximity with forest fuels.

### Railroad

While wildfires caused by railroad activity had been reduced for many years, the incidence has gone up over the past ten-year period. The cause of this upward trend is not readily apparent. Oregon has responded with aggressive fire investigations and renewed emphasis on the removal of vegetation from railroad rights-of-way. The Oregon Department of Forestry has worked to improve communication about fire prevention with railroad operators and has proposed legislative action to strengthen railroad fire prevention regulations.

The graphs on pages F-5 to F-7 reflect data only from those lands protected by Oregon Department of Forestry.



Figures F-4, F-5, and F-6: Human caused, equipment use, and railroad related fires

## Recreation

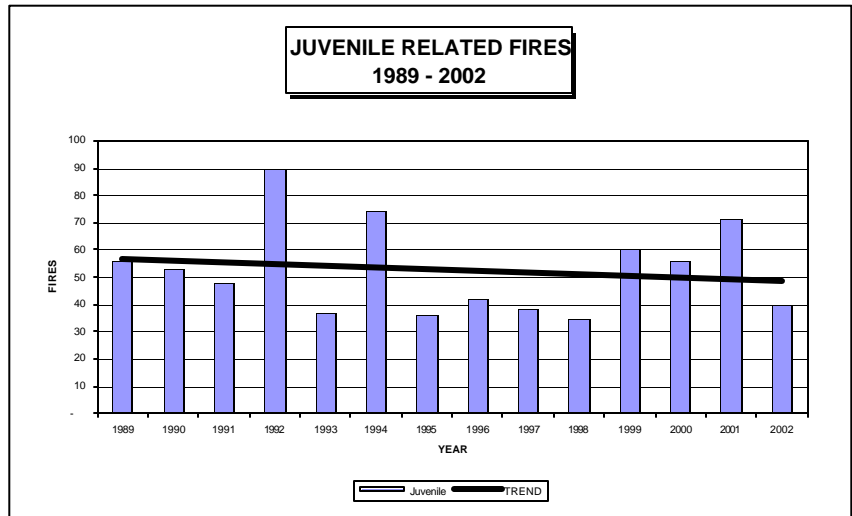
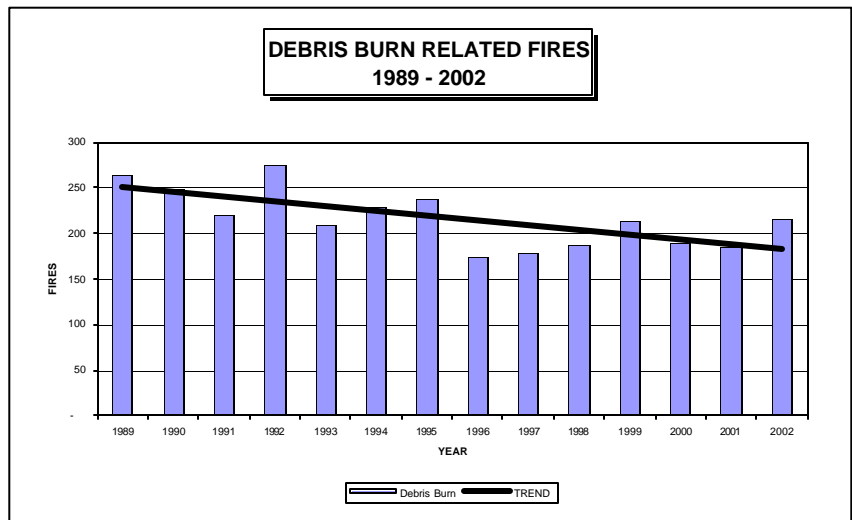
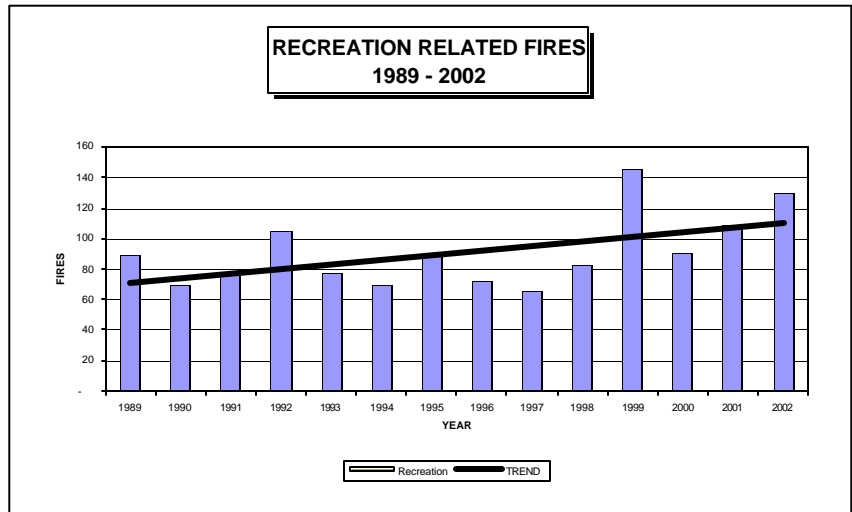
Fires caused by people recreating in and near Oregon's forests have grown moderately over the past ten years. This trend may reflect the state's growing population and a greater interest in outdoor recreation opportunities.

## Debris Burning

Historically, fires resulting from debris burning activities have been a leading cause of wildfires. Aggressive prevention activities, coupled with an increasing use of local burning bans during the fire season, have resulted in a reduction of such fires. Regulations designed to enhance clean air goals have also worked to limit debris-burning opportunities in some urban portions of the state and thus reduced the number of wildfires from this cause.

## Juvenile

The trend in the incidence of juveniles starting wildland fires is downward in recent years. The Oregon Department of Forestry attributes this reduction to a concerted effort by local fire prevention cooperatives to deliver fire prevention messages directly to school classrooms, especially through Smokey Bear programs.



Figures F-7, F-8, and F-9: Recreation, debris burning, and juvenile related fires

## Arson

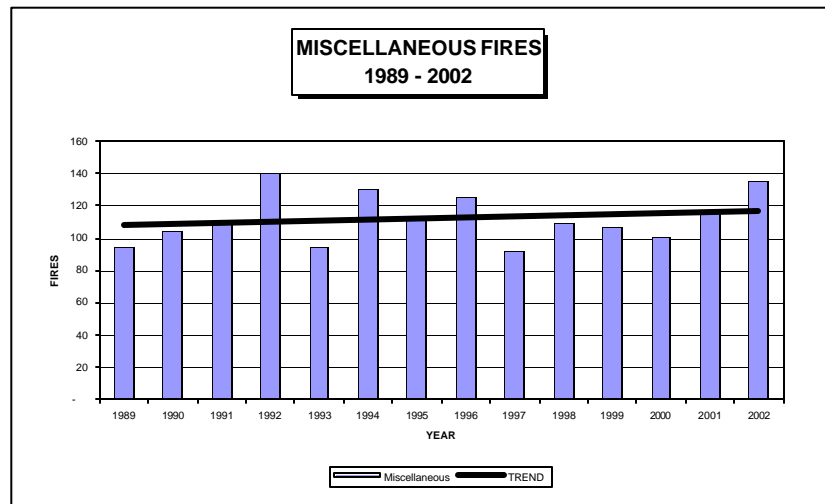
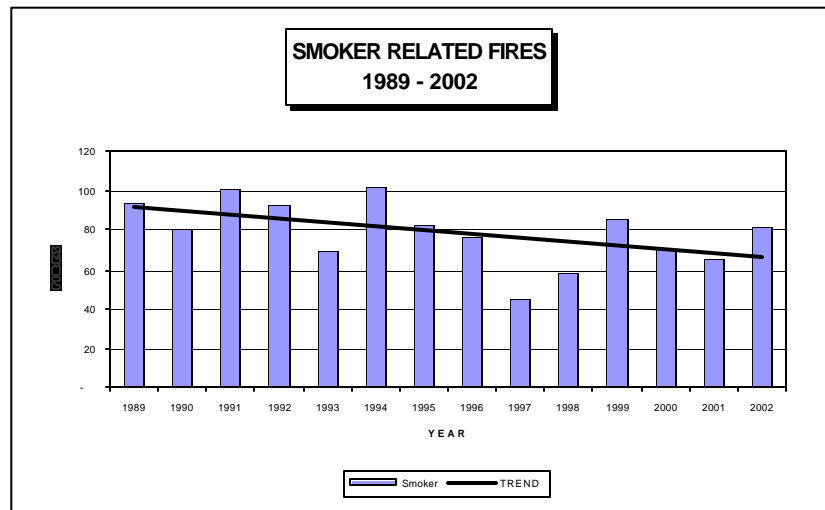
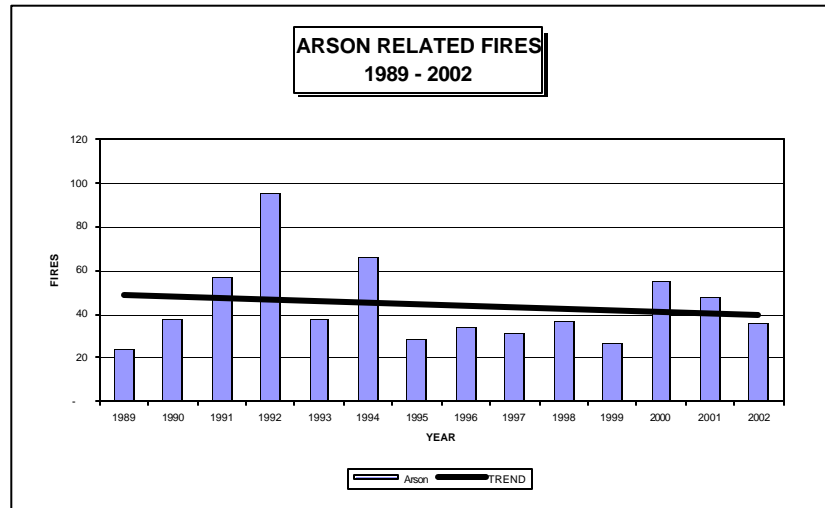
Oregon experienced a rapid rise in the frequency of arson caused wildfires in the early 1990's. In response, the wildland protection agencies and the Oregon State Police instituted a series of aggressive arson prevention activities. The activities included: an interagency wildland arson task force in Central Oregon, increased arson prevention patrols in high wildfire risk areas, and neighborhood watch type programs in high arson incidence areas. The result has been a reversal of the trend, to moderately downward.

## Smoking

The trend in wildland fires caused by smoking and improperly discarded cigarettes is dramatically downward. It is not known if this desirable situation is due to fewer people smoking, better investigation of fire causes, or some combination of the two.

## Miscellaneous

The "miscellaneous" fire cause category is a catchall classification for fires resulting from a wide array of causes. Automobile accidents, burning homes, and electric fence use are but a few of the causes in this category. The frequency of such fires has remained relatively constant in recent years.



Figures F-10, F-11, and F-12: Arson and smoking related, and miscellaneous fires

## Existing Strategies and Programs

The Oregon Legislature has indicated that "...it is declared to be in the public interest that the State Board of Forestry and the State Forester take a lead role in statewide coordination of the forestland-urban interface situation with other state and federal agencies, local governments, and private sector interests that are concerned with fire protection in the interface" [ORS 477.023(3)]. Other fire protection organizations share in the broad goal to reduce wildland fire losses.

Local, state, and national stakeholder organizations are currently assessing existing resources and developing strategies to maximize their collective effectiveness. At all levels of planning, prevention, and suppression, collaborative efforts are in the process of being more clearly defined at local, state, and national levels.

In addition to collaborative efforts, defined strategies include:

- ▶ Development of mapping resources available for local use;
- ▶ Legislation;
- ▶ Improved fire suppression training and equipment;
- ▶ Public outreach and education;
- ▶ Land use planning to reduce the vulnerability of structures to wildfire hazards; and
- ▶ Effective use of and access to funding.

Oregon's plan to implement these strategies can be found in the short and long-term actions proposed in this chapter.

### **Partners for Disaster Resistance and Resilience: Oregon Showcase State Initiative**

The goal of the partnership is to provide a comprehensive, cost-effective approach to enhance disaster safety, risk reduction, and preparedness statewide. The partnership fosters collaboration among private and public agencies; works with communities and organizations to determine needs, identify issues and resources; and helps develop state, regional, and community plans and strategies for risk reduction. The partnership is working to institutionalize disaster protection through existing short and long-range policies, procedures, programs, designs, and plans.

While the partnership's work is multi-hazard, it has and will continue to work with partners specifically on the wildland-urban interface issue. The partnership provides community training, technical resources, and connections with state and national programs such as Firewise. Additionally, the partnership provides opportunities for local, state, and federal agencies to work together to determine needs, and identify issues, resources, and potential solutions for risk reduction in the wildland-urban interface. To date the group has hosted and will continue to promote joint working sessions between these agencies and communities to address this risk.

### **Land Use Planning**

Since 1973, Oregon has maintained a strong statewide program for land use planning. The foundation of that program is a set of nineteen statewide planning goals. The goals express the state's policies on land use and on related topics. The Statewide Land Use Planning Program is a partnership among the state, administered through the Department of Land Conservation and Development (DLCD), and Oregon's cities and counties. Cities and counties implement the requirements of the statewide planning goals through state-approved local comprehensive land use programs. Statewide planning goals with particular relevance to WUI fire hazards are Goal 4 - Forest Lands, Goal 7 - Natural Hazards, and Goal 14 - Urbanization. Goal 4 requires local governments to minimize risks associated with wildfire when new dwellings or other structures are allowed in forestlands. Goal 7 requires local governments to develop programs to reduce risks to people and property from a variety of natural hazards, including wildfire. Goal 14 mandates that cities have urban growth boundaries (UGBs) to provide for urban uses and to limit urban-type development on rural resource lands outside of UGBs.

## **Local Fire Departments and Rural Fire Protection Districts**

Local structural fire protection agencies and wildland fire protection agencies are strong partners in the protection of structures in Oregon's wildland-urban interface areas. In some locations, such as the area immediately west of Portland, structural fire agencies have complete responsibility for the prevention and suppression of both wildland and structural fires. Across much of the state, structural fire agencies and the Oregon Department of Forestry have mutual aid agreements, which provide up to 24 hours of firefighting assistance, for wildfires that threaten structures on each other's protected area of responsibility. (See Appendix F-3: Structural Fire Protection Department Responses Beyond Their Boundaries)

Additionally, Oregon law provides that the owners of wildland property may be subject to the protection, assessment and taxation of both a local structural fire agency and the Oregon Department of Forestry. In such cases, the local rural fire department and Oregon Department of Forestry jointly protect these properties with fire departments focused on protecting structures and ODF focused on protecting forest resources.

## **Rangeland Fire Protection Associations**

Rangeland fire protection associations are nonprofit, locally governed and operated landowner associations organized to provide fire protection on rangeland areas of eastern Oregon that are outside of both a forest protection district and a rural fire district. State law provides for the formation of these associations under the authority of the Oregon Board of Forestry, with assistance from the Oregon Department of Forestry. There are currently six associations that collectively protect about one million acres of land, and a seventh is in the process of forming.

## **State and Federal Agencies**

State agencies Oregon Department of Forestry and the Office of State Fire Marshal, and federal agencies U.S. Forest Service, the Bureau of Land Management, and a few others are primarily responsible for prevention and suppression of wildfires in Oregon. These agencies' activities are closely coordinated at the local and regional levels to ensure an adequate, swift, safe and cost effective response to wildland fires. Regional coordination is achieved primarily through the Pacific Northwest Wildfire Coordinating Group (PNWCG), which is made up of representatives from the wildland and structural agencies having primary responsibility for the prevention and suppression of fire. PNWCG establishes interagency policies, carries out joint projects and coordinates the most effective and efficient deployment of firefighting resources.

Coordination of structural firefighting resources occurs under Oregon's Emergency Conflagration Act. When directed by the Governor, this Act allows the State Fire Marshal to mobilize and dispatch structural firefighting personnel and equipment when a significant number of structures are threatened by fire and local structural fire suppression capability is exhausted.

### **Oregon Department of Forestry**

The Oregon Department of Forestry (ODF) protects approximately 15.8 million acres of land. The majority of these lands are privately owned. The state owns about 800,000 acres of these lands, and the federal Bureau of Land Management owns another three million acres of land protected by ODF in western Oregon. Included within the state protection system are three nonprofit Forest Protection Associations, protecting land in Coos, Curry, Douglas and northern Klamath counties. About 1,100 wildland fires are suppressed each year on state protected lands.

### **Office of State Fire Marshal**

The Office of State Fire Marshal (OSFM) works to protect life and property from fire and hazardous materials and has a collaborative role in the development of statewide and community fire plans. As part of its fire prevention programs, the OSFM provides technical assistance to local fire departments and structurally unprotected communities in high-risk wildland-urban interface areas.

The 2002 fire season resulted in intense competition for federal, state, and local resources. This emphasized the need for communities, especially those with little or no structural fire protection, to be accountable for:

- ▶ Reducing their own fire risk;
- ▶ Increasing defensible space around structures;
- ▶ Reducing the need for structural suppression requests and conflagration requests; and
- ▶ Improving access for suppression equipment in communities with organized fire protection.

The OSFM works with local public and private leadership to ensure community successes in reducing wildland fire risk and losses.

### **Forest Service, U.S. Department of Agriculture**

The U.S. Forest Service (USFS) has primary responsibility for the protection of nearly 15.7 million acres of land. All of these lands are within the 13 national forests and one national grassland located in the state. About 1,250 wildland fires are suppressed each year on lands protected by the USFS.

### **Bureau of Land Management, U.S. Department of the Interior**

The Bureau of Land Management (BLM) manages and protects about 13.2 million acres. Nearly all of this land is in central and eastern Oregon and much of it is rangeland. About 360 wildland fires are suppressed on BLM lands each year.

### **Bureau of Indian Affairs, U.S. Department of the Interior**

Although there are a number of Indian reservations across Oregon, the Bureau of Indian Affairs (BIA) wildfire protection effort is primarily limited to the 644,000-acre Warm Springs Reservation in central Oregon. Most other reservation lands in Oregon are protected by the Oregon Department of Forestry. About 100 wildland fires are suppressed each year.

### **National Park Service, U.S. Department of the Interior**

The National Park Service provides protection to the lands it manages in Crater Lake National Park and in the John Day Fossil Beds National Monument. Together, these two units include approximately 297,000 acres. About 20 wildland fires are suppressed on Park Service lands each year.

### **Fish and Wildlife Service, U. S. Department of the Interior**

The U.S. Fish and Wildlife Service is responsible for direct fire protection activities on the larger units of the national wildlife refuge system in Oregon, including the Hart Mountain National Antelope Refuge and the Malheur National Wildlife Refuge. About 10 wildland fires are suppressed on national refuges each year.

### **Unprotected Lands**

There are two types of unprotected lands in Oregon, those that have forest or rangeland protection but no structural fire protection and those that have no form of fire protection whatsoever. Lands lacking structural fire protection are found throughout the state but occur most frequently in the Coast Range, in the Cascade Mountains, and in small communities and subdivisions across central and eastern Oregon. Examples include Dodson-Warrendale in Multnomah Co. and Austin in Grant Co.

An estimated five million acres of land have no form of fire protection whatsoever. While most of this land is concentrated in north central and southeast Oregon, unprotected lands are present across the state, including the Willamette Valley. The Oregon Department of Forestry and the Office of State Fire Marshal encourage the formation of rangeland fire protection associations, where appropriate. The two agencies have also recently initiated outreach efforts on personal responsibility to homeowners in structurally unprotected areas.

## Hazard Mitigation Successes

Since adoption of the action plans<sup>7</sup> that resulted from a series of WUI fires in 1987 and the Awbrey Hall Fire in 1990, Oregon has had great success in its efforts to reduce the vulnerability of the state to wildfire hazards. Some of these successes result from partnerships between local, state, and federal agencies, and some involve the private sector and nonprofit organizations.

### 1. Wildfire Hazard Zones

The process to identify and declare the presence of wildfire hazard zones (WHZ) resulted from legislative action in 1993, spurred on by the 1990 Awbrey Hall Fire in central Oregon. The primary focus of the WHZ process is to address the problem of widespread use of flammable roofing materials in fire prone areas through instruments of conveyance. For some communities, complying with local covenants means that flammable roofing materials must be used. WHZ can supersede such requirements.

The WHZ process allows any local jurisdiction with building code or life safety ordinance authority to identify the presence of a WHZ, using a required set of criteria. Once declared, provisions of Oregon's building code become applicable. These provisions prohibit the use of flammable roofing materials on new construction and require the use of fire-safe materials when roofing is replaced. Other provisions are also activated, for example the requirement to clearly identify the address of a structure.

### 2. Senate Bill 360

Known as the Oregon Forestland-Urban Interface Fire Protection Act of 1997, Senate Bill 360 is now being implemented, on a priority basis, across Oregon. The Act recognizes that actions needed to address the wildland interface problem must include the active participation of local community leaders and, most importantly, individual landowners. It also recognizes that one solution or set of solutions will not fit all of the varied situations found in Oregon.

Senate Bill 360 establishes, for the first time in Oregon, a comprehensive statewide policy regarding fire protection and mitigation in wildland interface areas. It defines the wildland interface and sets in place a process to identify and classify these areas. The legislation also provides standards to help wildland interface owners more effectively manage and minimize hazards that could ignite or spread fire on their property.

When the Senate Bill 360 laws are implemented in a county, a committee of local representatives formally identifies and classifies their wildland interface. Individual property owners are then contacted and informed of the standards they are required to meet to make their property less prone to loss or damage from wildfires. The property owners have up to two years to bring their property into compliance and to have it certified. Owners who fail to obtain certification become subject to a liability of up to \$100,000 for the cost of suppressing fires starting on their property and spreading due to their failure to comply.

### 3. Statewide Land Use Planning Requirements

Oregon has some of the most stringent land use planning standards and requirements in the nation. One portion of the Statewide Land Use Planning Program,<sup>8</sup> identified as "Goal 4," addresses areas zoned as "forest lands." State regulations require that local jurisdictions establish and enforce criteria that minimize the risks associated with wildfire when new dwellings and structures are constructed. The regulations go on to require that dwellings be adequately protected from fire, that roads meet certain access standards, that fuel breaks be established and maintained and that only fire retardant roofing materials be used. Another state planning goal, Goal 7, requires local jurisdictions to adopt comprehensive inventories, policies and implementing measures that will reduce the risk to people and property from natural hazards, including wildfires. Normally, a local jurisdiction must properly respond to this mandate within 36 months after being notified by the state that new or updated information on a particular natural hazard exists.

---

<sup>7</sup> A summary of the recommendations of these actions plans can be found in Appendix F-2 to this chapter.

<sup>8</sup> Oregon's nineteen statewide planning goals may be found at... <http://www.lcd.state.or.us/goalhtml/goals.html>

#### 4. Local Fire Prevention Programs

A number of community-based fire prevention efforts exist across the state. One of the most recognized is the FireFree program, which originated in the Bend area of central Oregon. Following the Awbrey Hall and Skeleton Fires on the outskirts of Bend, the SAFECO Insurance Company contacted the Bend Fire Department with an offer to help address wildfire danger in the Bend area. The two organizations created an award winning community-wide wildland interface program called "FireFree! Get In The Zone."

The FireFree campaign has focused on ways to mitigate the risk and damage of wildfires and promotes a change of the public's behavior and attitudes about wildfire safety within the wildland interface. A major goal of FireFree is to educate and motivate residents to take responsibility to reduce wildland fire risk. Program components include mass media advertising, public relations efforts and educational materials, as well as cooperative programs with local organizations and businesses. The best known portion of the program starts in March of each year: television, radio, and print media advertise weekends for local residents to take vegetation they clear from around their homes to county operated reception sites for free disposal.

#### 5. National Fire Plan and Other Federally Funded Projects

Since funding of local fire planning, prevention and mitigation projects first became available in 2000 under the National Fire Plan (NFP). Oregon has aggressively sought funding for a wide variety of projects. NFP monies can be used to fund fuels reduction, education and prevention, community planning and alternative uses of fuels. As of mid-2003 the Oregon Department of Forestry has received approximately \$17 million. These monies have been used primarily to fund fuels reduction efforts on individual properties, and to establish community fuel breaks in the most wildfire prone portions of the state. NFP funds have also been used to help spread the FireFree program outside of central Oregon, to educate local officials about the wildland interface situation and how they can help, to implement Senate Bill 360, to improve public awareness about the wildfire problem and to better identify areas at risk. The NFP has also funded a wide variety of projects through a number of nonprofit organizations and local governments.

#### 6. Fire Prevention Cooperatives

Since the mid-1970's, fire prevention cooperatives have been highly successful at the creation and delivery of cost effective fire prevention programs that address specific local needs. Cooperatives increase the effectiveness of local fire prevention efforts by identifying common fire problems and then developing a joint approach. The cooperative concept recognizes that no one agency has the personnel, expertise or financial resources needed to develop, implement and deliver all of the fire awareness, education and public safety needs of a region of the state.

FireFree is a national model developed in Oregon that predates the more recent nationally known Firewise. Four local agencies in the Bend area and SAFECO joined together in 1997 to create "FireFree! Get In The Zone," a public education campaign designed to increase resident participation in wildfire safety and mitigate losses from wildfire. The partnership includes the Bend Fire Department, Deschutes County fire agencies, City of Bend Development Service, the Deschutes National Forest, Oregon Department of Forestry, the Office of State Fire Marshal, Keep Oregon Green, and other local, regional, and federal partners, including private businesses.

The multi-year campaign addresses ways to reduce the risk of damage by wildfires in Deschutes County and beyond. The campaign aims to educate the public about wildfire safety and promote behaviors and attitudes that translate into creating defensible space around homes and businesses.

<http://www.firefree.org/>

Developed by the National Fire Protection Association, the Firewise program features templates to help communities to reduce risk and protect property from the dangers of wildland fires. Along with an interactive, resource rich website full of free materials, the program offers training throughout the nation on utilizing their program.

<http://www.firewise.org/>

Figure F-13: FireFree and Firewise

## **7. Wildland Fire Mitigation for Structures in Areas with Little or No Structural Fire Protection**

The Office of State Fire Marshal has developed a partnership with the Oregon Department of Forestry to help residents in high-risk communities that have little or no structural fire protection to reduce their risk of loss from wildland fires. They are collaborating with U.S. Forest Service, Bureau of Land Management, the Pacific Northwest Wildfire Coordinating Group, Oregon Partners for Disaster Resistance and Resilience, and the University of Oregon Program for Watershed and Community Health. In Josephine County, community organization and support activities are currently underway in the Williams, Wolf Creek-Sunny Valley, and Illinois Valley areas. Activities in Grant County are focused on unincorporated communities, and are planned and implemented to support concurrent activities in incorporated cities having structural fire protection. OSFM staff is meeting with community leaders and helping them identify interface mitigation priorities. They also work with collaborators and others to increase survivable space around structures and reduce the need for structural suppression mobilization via the Conflagration Act.

## **8. FEMA's Assistance to Firefighter/Prevention and Safety Grants**

Assistance to Firefighter grants, used to fund apparatus, equipment and training programs, have helped many Oregon fire departments increase their capacity to initial attack wildland interface fires and have enabled them to improve training and equipment standards, needed for firefighting response under the Conflagration Act. The Office of State Fire Marshal has conducted grant-writing workshops (some in partnership with FEMA Region Ten) for local fire departments and has provided information and consultation on applying for grants.

## **9. Community Fire Plans and Mitigation Plans**

Through the National Fire Plan and FEMA's Pre-Disaster Mitigation Program, a number of Oregon communities have developed comprehensive fire plans. Examples include the Applegate Partnership Fire Plan and the Central Oregon Partnership for Wildfire Risk Reduction Strategy Framework.

Additionally, many counties have or are in the process of developing and adopting all-hazard mitigation plans through the Pre-Disaster Mitigation Program to maintain eligibility for FEMA mitigation dollars in the event of a disaster. For communities at risk from wildfire, these mitigation plans include a chapter on wildfire risk and mitigation strategies for the wildland-urban interface.

## **10. Rural Fire Assistance and Volunteer Fire Assistance Grants**

Using federal Rural Fire Assistance and Volunteer Fire Assistance grant programs, administered by the Oregon Department of Forestry, approximately \$1 million is annually distributed to local fire departments. These funds have been used primarily to improve firefighter skills and to purchase badly needed equipment. Because the funds are distributed on a priority basis, determined by need, most of the grants are received by small fire departments, many of which are located in or adjacent to interface areas.

## Short-Term Actions

Short-term actions are those actions that agencies are capable of implementing within their existing resources and authorities. Only state agencies are listed under “lead” or “support” below. Occasionally federal agencies, local governments, and other organizations may be shown in the text of the proposed action as a cooperating partner in implementing the action. Progress on actions is reported to the State Interagency Hazard Mitigation Team.

### 1. Continue high priority on initial attack on fires as they start in high-risk WUI zones

In areas where wildland fires begin, rapid and effective initial attack activities concentrate suppression resources on new ignitions, so that fires are not given an opportunity to grow or to threaten structures. Such a strategy reduces losses from fire, results in less firefighter and public exposure to dangerous fire behavior, and lowers the overall cost of suppression. Currently 94% of WUI fires on ODF protected lands are stopped at ten acres or less. Oregon will endeavor to determine the geographic areas that are not currently meeting this standard in WUI areas (prior to the start of the 2004 fire season) and work to increase resources needed in the areas identified (by the start of the 2005 fire season).

Lead: Oregon Department of Forestry and Office of State Fire Marshal  
Support: Pacific NW Wildfire Coordinating Group  
Timeline: 2004-2005  
Resources: All wildland and structural fire agencies  
Category: Risk reduction; preparedness

### 2. Leverage grant funds to build initial attack capacity in high risk interface areas

Wildland fire suppression agencies and local structural fire departments have demonstrated that quick and adequate initial attack action is able to reduce structural and timberland losses. Extinguishing wildland fires while they are small significantly reduces the number of fires that meet Conflagration Act and FEMA funding criteria. Small rural volunteer fire departments need interface firefighting apparatus, equipment, and training to build initial attack capacity. Potential funding sources for improvements include Assistance to Firefighter grants, Rural Fire Assistance grants, State Fire Assistance grants, and Volunteer Fire Assistance grants.

Oregon will strive to assess needs and develop solutions through collaboration with federal, local, and other state agency partners, then identify and apply for grants to leverage funds to meet these needs. This action should include determining current resources and gaps, and result in increased capacity of local RFPDs to effectively suppress fires before they burn out of control, threaten structures, and require many times more resources.

Lead: Oregon Department of Forestry and Office of State Fire Marshal  
Timeline: Through January 2004 (for FY 2005 grants)  
February 2004 – January 2005 (for FY 2006 grants)  
Resources: Oregon Department of Forestry and Office of State Fire Marshal staffs, federal grant programs  
Category: Risk reduction; preparedness

### 3. Develop, enhance and implement education programs designed to mitigate the wildfire hazard and reduce wildfire losses

Actively encourage and promote local awareness and education programs designed to mitigate the hazards of wildland fires and reduce losses from wildfires. Collaborate with the Pacific Northwest Wildfire Coordinating Group and other agencies, as opportunities allow, to enhance consistency in the development and application of standards. Determine local resources and capacity; define needs and solutions to increase capacity.

Lead: Oregon Department of Forestry  
Support: Office of State Fire Marshal  
Timeline: 2004 and annually  
Resources: Oregon Department of Forestry and Office of State Fire Marshal staffs  
Category: Risk reduction

#### **4. Continue implementation of the Oregon Forestland-Urban Interface Fire Protection Act (Senate Bill 360) in Deschutes and Jackson counties; begin Klamath County.**

Deschutes and Jackson counties are the two Oregon counties that have experienced the most frequent occurrence of large, damaging wildland interface fires. Funding to begin implementation in Klamath County is currently available and will be initiated during early 2004. Oregon will identify and classify interface lands within these counties and notify affected landowners of the standards and mitigation required.

Lead: Oregon Department of Forestry  
Support: Office of State Fire Marshal, Department of Land Conservation and Development  
Timeline: Through June 2005  
Resources: Oregon Department of Forestry staff; county governing bodies, National Fire Plan funding  
Category: Planning and preparedness

#### **5. Update and improve wildland interface maps**

Through a National Fire Plan grant, Oregon received \$50,000 to identify and map high wildfire risk areas and the wildland interface. When completed, these maps will be used to help identify and prioritize hazardous fuels reduction projects, complete the statewide communities-at-risk prioritization, Senate Bill 360 implementation, and to strategically plan long-range actions. This action will assist in the implementation of long-term action #2.

DLCD will coordinate with ODF as ODF proceeds with mapping wildland-urban interface zones. New maps and related information generated through the SB 360 process is subject to local government review and response under statewide planning goal 7.

Lead: Oregon Department of Forestry  
Support: Various federal, state and local agencies  
Timeline: Through June 2004  
Resources: Oregon Department of Forestry staff; National Fire Plan funding  
Category: Risk identification

#### **6. Develop a matrix of current SB 360, National Fire Plan, and other wildfire interface mitigation projects to improve collaboration and reduce duplicative efforts**

There is currently no clearinghouse for the dozens of wildfire hazard mitigation projects being implemented throughout Oregon, most of which are funded with federal grant funds. A matrix showing project locations, funding sources, lead agency, and mitigation category will allow collaborators to join and support existing efforts, rather than seek funding for duplicative projects. The matrix will also be used to identify high-risk areas that have mitigation efforts in place and those that do not. Once completed, Oregon will be able to determine where dollars are being spent, projects are underway, and areas are not being served or are being underserved.

Lead: Oregon Department of Forestry & Office of State Fire Marshal  
Support: Partners for Disaster Resistance, Pacific Northwest Wildfire Coordinating Group, Department of Land Conservation and Development  
Timeline: December 2003  
Resources: Oregon Department of Forestry & Office of State Fire Marshal staffs  
Category: Planning and preparedness.

## 7. Analyze ignition probability statistics to target mitigation efforts at leading causes

It is important to understand the ignition probability from homes within and adjacent to the wildland interface because of the ignition risk to nearby wildlands. This requires correlating Oregon Department of Forestry interface ignition data with Office of State Fire Marshal fire incident reports, analyzing trends and identifying target audiences. Having data on the leading causes of ignitions, organized by county, will help establish a course of action for prevention programs.

Lead: Office of State Fire Marshal  
Support: Oregon Department of Forestry  
Timeline: Through January 2004  
Resources: Office of State Fire Marshal and Oregon Department of Forestry staffs  
Category: Risk identification

## 8. Develop a risk assessment methodology

FEMA, the National Fire Plan, and National Association of State Foresters called for the development of a risk assessment methodology for use by community coordination groups and government agencies to aid in the identification and prioritization of federal grant funds. ODF is currently developing a methodology. This methodology is to be published, and will include: the number of communities; level of hazard and risk; a summary of protection capability; and the values at risk in these communities.

Lead: Oregon Department of Forestry  
Support: Various federal, state agencies and local community programs  
Timeline: December 2003  
Resources: Oregon Department of Forestry staff; National Fire Plan funding  
Category: Planning and preparedness

## 9. Increase the number of local governments using the Wildfire Hazard Zone process to mitigate wildfire risk and losses

The Wildfire Hazard Zone process gives local governments leverage to require wildfire resistant construction in residential areas assessed to be at high risk from wildland fire. Oregon plans to increase the number of local governments that have adopted these zones by determining which are currently using this process, and – having identified the highest rated communities via short-term #8 above – determine those that would benefit most by adopting Wildfire Hazard Zones.

Lead: Office of State Fire Marshal  
Support: Oregon Department of Forestry, Oregon Department of Land Conservation and Development  
Timeline: Through June 2005  
Resources: Office of State Fire Marshal and Oregon Department of Forestry staffs  
Category: Risk reduction; regulation

## 10. Notification plan for air quality and health impacts from wildfire

The Department of Environmental Quality (DEQ), in consultation with the Oregon Department of Forestry and county health officials, has prepared a *Wildfire Natural Events Action Plan*. This plan addresses wildfire events where smoke impacts in populated areas are imminent or already occurring. A public notification process is identified to advise the public on the possible health effects from smoke, describing actions to minimize smoke exposure and suggest precautions that can be taken by the public.

The plan outlines how DEQ will communicate with county health officials during these events, and coordinate with the Department of Forestry in tracking wildfire smoke impacts that may affect air quality in populated areas of the state. As part of the plan, ODF provides weather and wildfire smoke impact forecasts, as needed, during major fire events to assist DEQ in advising the public on potential areas where smoke may be especially concentrated.

Lead: Oregon Department of Environmental Quality  
Support: Oregon Department of Forestry  
Timeline: Ongoing  
Resources: Incorporated into DEQ and ODF current workload. No additional funding needed.  
Category: Risk reduction

## Long-Term Action Plan

Long-term actions are those that will require new or additional resources or authorities to implement. Only state agencies are listed under “lead” or “support” below. Occasionally federal agencies, local governments, and other organizations may be shown in the text of the proposed action as a potential cooperating partner in implementing the action. Progress on actions is reported to the State Interagency Hazard Mitigation Team.

### **1. On a priority basis, implement the Oregon Forestland-Urban Interface Fire Protection Act of 1997 (Senate Bill 360) in additional counties**

Improvements in the implementation and administration of Senate Bill 360 will be identified during the initial activities in Jackson and Deschutes counties, and will be incorporated into efforts in succeeding counties. Implementation will be initiated in additional counties, based on fire occurrence frequency, on seasonal weather patterns, on fuel conditions and on the number of structures at risk.

Lead: Oregon Department of Forestry  
Support: Office of State Fire Marshal, Department of Land Conservation and Development  
Timeline: 2004 to 2010  
Resources: Oregon Department of Forestry and Office of State Fire Marshal staffs, county commissions and federal grant programs  
Category: Planning and preparedness

### **2. Prioritize communities at risk and - in collaboration with local coordination groups - seek to implement high priority interface fire mitigation projects**

Oregon will continue to aggressively seek and facilitate funding for communities for a wide variety of mitigation projects. Funding sources include, but are not limited to, National Fire Plan grants, Rural Fire Assistance grants, Volunteer Fire Assistance grants, Payments to States Title II and Title III funds, and Rural Community Assistance. To be competitive, projects must address high-risk priorities and be planned and implemented in collaboration with local stakeholders. Projects will reduce fuels in wildland interface areas, establish community fuel breaks, educate local officials, improve public awareness about wildland interface fire hazards and build local capacity to mitigate wildland interface fire risk and losses.

Grant proposals submitted for WUI fire projects will be evaluated based on the merits of each proposal and the rating of each community (see short-term #8). Oregon will therefore determine the number of communities and/or projects to support, based on the risk assessment and the quality of proposals as measured by the likely outcomes each will produce. Oregon will also need to determine its highest priorities for fuels reduction and fuel breaks.

Goal 4 of the Statewide Land Use Planning Program<sup>9</sup> requires local jurisdictions to establish and enforce criteria minimizing the risks associated with wildfire when new dwellings and structures are constructed. Regulations include establishment and maintenance of fuel breaks. Communities need to determine the location and number of fuel breaks, as well as develop funding to make them happen.

Lead: Oregon Department of Forestry  
Support: Office of State Fire Marshal, Department of Land Conservation and Development, Pacific Northwest Wildfire Coordinating Group, Partners for Disaster Resistance  
Timeline: Through January 2004 (for FY 2005 grants)  
February 2004 – January 2005 (for FY 2006 grants)  
Resources: Oregon Department of Forestry and Office of State Fire Marshal staffs  
Category: Planning and preparedness

---

<sup>9</sup> Oregon's nineteen statewide planning goals may be found at... <http://www.lcd.state.or.us/goalhtml/goals.html>

### **3. Reduce fuels and develop community fuel breaks in high risk, high priority wildland interface areas**

Develop and implement a process to identify where, on a priority basis, interface fuels should be reduced and where fuel breaks should be established to better protect communities from wildland fires. Oregon plans to help accomplish such fuels work by providing technical advice in those communities with the highest risk ratings, and by working to facilitate adequate funding.

Lead: Oregon Department of Forestry

Support: Office of State Fire Marshal

Timeline: 2004 to 2007

Resources: Oregon Department of Forestry and Office of State Fire Marshal staffs, federal grant programs

Category: Risk reduction

### **4. Develop a plan to ensure and maintain initial attack capability in high-risk wildland interface areas**

Conduct periodic reviews of wildland initial attack capability and formulate recommendations for improvement, where analysis indicates that resources are not adequate to achieve desired levels of rapid and effective initial attack activities on new fire ignitions.

Lead: Oregon Department of Forestry and Office of State Fire Marshal

Support: Pacific Northwest Wildfire Coordinating Group

Timeline: 2004 and annually after each fire season

Resources: Oregon Department of Forestry and Office of State Fire Marshal staffs

Category: Risk reduction; preparedness

## **Appendix F-1: Acronyms and Glossary of Terms Used in this Chapter**

|      |  |
|------|--|
| DLCD | Department of Land Conservation and Development                            |
| EMD  | Emergency Management Division (more commonly Oregon Emergency Management)  |
| EOP  | Emergency Operations Plan  |
| FSA  | Fire Suppression Assistance (now Fire Management Assistance Grant Program) |
| MOU  | Memorandum of Understanding  |
| NFP  | National Fire Plan   |
| ODF  | Oregon Department of Forestry  |
| OEM  | Oregon Emergency Management  |
| ORS  | Oregon Revised Statute   |
| OSFM | Office of State Fire Marshal   |
| RFPD | Rural Fire Protection District   |
| SB   | Senate Bill (Oregon Legislature)   |
| SFM  | State Fire Marshal (more commonly Office of State Fire Marshal)            |
| WUI  | Wildland-Urban Interface   |
| WHZ  | Wildfire Hazard Zone   |

**Conflagration**, in the context of this chapter, means Governor-declared fires with an imminent threat to life or structures that have exhausted local and mutual aid suppression resources.

**Conflagration Act** is state legal authority established as a civil defense measure to mobilize structural fire suppression resources for massive urban fires. It was first used in 1951 to coordinate aid to an explosion and fire in downtown Roseburg. The Act was not invoked again until 1972, when a wildland fire in Yamhill County threatened homes in what is now known as the wildland-urban interface. It must be authorized by the Governor. The act includes authorization for OSFM to assign firefighting forces and equipment beyond mutual aid agreements. It also designates reimbursement for aid to those departments participating.

**FireFree** is an Oregon and national model developed in Oregon that predates the more recent nationally known Firewise. Four local agencies in the Bend area and SAFECO joined together in 1997 to create "FireFree! Get In The Zone," a public education campaign designed to increase resident participation in wildfire safety and mitigate losses from wildfire. The partnership includes the Bend Fire Department, Deschutes County fire agencies, City of Bend Development Service, the Deschutes National Forest, Oregon Department of Forestry, the Office of State Fire Marshal, Keep Oregon Green, and other local, regional, and federal partners, including private businesses.

The multi-year campaign addresses ways to reduce the risk of damage by wildfires in Deschutes County and beyond. The campaign aims to educate the public about wildfire safety and promote behaviors and attitudes that translate into creating defensible space around homes and businesses.

<http://www.firefree.org/>

**Firewise** is a program developed by the National Fire Protection Association (NFPA); the program features templates to help communities reduce risk and protect property from the dangers of wildland fires. Along with an interactive, resource rich website full of free materials, the program offers training throughout the nation.

<http://www.firewise.org/>

**National Fire Plan** is a federal program helps manage the impact of wildfire on communities. It has five main components: firefighting, rehabilitation and restoration, hazardous fuel reduction, community assistance, and accountability. The state foresters have agreed upon a process for completing an assessment in 2003-4 for evaluating communities at risk to better prioritize funding of National Fire Plan projects.

**Oregon Senate Bill 360** in 1997 established the policy and framework for meeting the fire protection needs of the wildland-urban interface. One of goals of the bill is to define the Interface in Oregon and establish a process and system for the classification of the Interface. Formal classification committees in each county will accomplish the classification. Work has begun in Jackson and Deschutes counties, with the remainder of the state planned for classification over the next ten years.

**Structural fire protection** is protection of structures by established municipal fire departments and rural fire protection districts with specific equipment and training.

**Wildfire Hazard Zone** means the portion of a local government jurisdiction that has been determined to be at risk of a catastrophic wildfire. The purpose of such a designation is to define those areas where buildings need to be made more survivable from fires spreading from adjacent wildlands. The WHZ process was established by the 1993 Oregon Legislature. Participation by local governments is voluntary.

**Wildland-Urban Interface (a.k.a.: Wildland Interface, Forestland-Urban Interface, Interface)** is an area where structures are adjacent to or are intermingled with natural vegetative fuels which is prone to the occurrence of wildland fires.

## Appendix F-2: History of Wildfires in Oregon

The information contained in the table that follows is derived from a variety of sources. It is not a complete history of fires in Oregon; it focuses on fires that were large and/or interface. The “gap” on the table between the years 1952 to 1965 is a real gap; there were no large, significant fires in Oregon during those years. Gaps in the record prior to 1933 are due to lack of historical data.

| Year | Fire Name                | Cause                 | Conflagration Act Fire? | FEMA Fire? | Lives Lost | Structures Lost | Comments   |
|------|--------------------------|-----------------------|-------------------------|------------|------------|-----------------|--|
| 1848 | Nestucca                 | Unknown               |                         |            |            |                 | Northern Coast Range, 300,000 acres                                      |
| 1849 | Siletz                   | Unknown               |                         |            |            |                 | Northern Coast Range, 800,000 acres                                      |
| 1853 | Yaquina                  | Unknown               |                         |            |            |                 | Central Coast Range, 480,000 acres                                       |
| 1868 | Coos Bay                 | Land clearing         |                         |            |            |                 | Southern Coast Range, 300,000 acres                                      |
| 1902 | Columbia                 | Land clearing         |                         |            |            |                 | Various fires in and near the Columbia River Gorge, 170,000 acres        |
| 1933 | Tillamook                | Logging               |                         |            |            |                 | First of the Tillamook Burn fires, Northern Coast Range, 240,000 acres   |
| 1936 | Bandon (and others)      | Logging               |                         |            | 11         | 400             | Southern Coast Range, with other fires elsewhere in state, 225,000 acres |
| 1939 | Saddle Mountain          | Logging               |                         |            |            |                 | Second of the Tillamook Burn fires, 190,000 acres                        |
| 1945 | Wilson River/Salmonberry | Unknown               |                         |            |            |                 | Third of the Tillamook Burn fires, 180,000 acres                         |
| 1951 | North Fork/Elkhorn       | Logging               |                         |            |            |                 | Fourth of the Tillamook Burn fires, 33,000 acres                         |
| 1966 | Oxbow                    | Road Maintenance      |                         |            | 1          |                 | Douglas County, Central Coast Range, 43,368 acres                        |
| 1972 | Yamhill County           |                       | Yes                     |            |            |                 |  |
| 1977 | Wasco County             |                       | Yes                     |            |            |                 |  |
| 1977 | Yamhill County           | Agricultural Activity | Yes                     |            |            |                 | West of Carlton  |
| 1979 | Pine Grove/Juniper Flat  |                       | Yes                     |            |            |                 | Wasco County   |
| 1981 | Redmond                  |                       | Yes                     |            |            |                 |  |
| 1983 | Moro                     |                       | Yes                     |            |            |                 |  |
| 1984 | Crooked River Ranch      |                       | Yes                     |            |            |                 |  |
| 1985 | Maupin                   |                       | Yes                     |            |            |                 |  |
| 1985 | Crooked River Ranch      |                       | Yes                     |            |            |                 |  |

| Year | Fire Name          | Cause                 | Conflagration Act Fire? | FEMA Fire?           | Lives Lost | Structures Lost | Comments   |
|------|--------------------|-----------------------|-------------------------|----------------------|------------|-----------------|--|
| 1987 | Bland Mountain     | Agricultural Activity | Yes                     | Yes<br>FEMA-2060-FSA | 2          | 14              | Southern Cascade Range, near Canyonville, 10,300 acres |
| 1987 | Silver             | Lightning             |                         |                      |            |                 | Southern Coast Range, 97,000 acres                     |
| 1987 | Upper Myrtle       | Lightning             |                         | Yes<br>FEMA-2062-FSA |            |                 | Douglas County, 3,332 acres                            |
| 1987 | Savage Creek       | Lightning             |                         | Yes<br>FEMA-2063-FSA |            |                 | Jackson County, 4,031 acres                            |
| 1987 | Sykes Creek        | Lightning             |                         | Yes<br>FEMA-2064-FSA |            |                 | Jackson County, 10,313 acres                           |
| 1987 | Howard Creek       | Lightning             |                         |                      |            |                 | Josephine County, 15,200 acres                         |
| 1987 | Shady Lane         |                       | Yes                     | Yes<br>FEMA-2065-FSA |            |                 | Polk County  |
| 1988 | Wasco County       |                       | Yes                     |                      |            |                 |  |
| 1988 | Walker Mountain    | Lightning             |                         | Yes<br>FEMA-2069-FSA |            |                 | Josephine County, 2,100 acres                          |
| 1988 | Ontario            |                       | Yes                     |                      |            |                 |  |
| 1989 | Dooley Mountain    | Lightning             |                         |                      |            |                 | Baker County   |
| 1990 | Delicious          | Lightning             | Yes                     |                      |            |                 | Deschutes County, 1,704 acres                          |
| 1990 | Awbrey Hall        | Arson                 | Yes                     | Yes<br>FEMA-2075-FSA |            | 22              | Deschutes County, western fringe of Bend, 3,353 acres  |
| 1990 | Pine Springs Basin |                       | Yes                     |                      |            |                 |  |
| 1991 | Falls              | Recreation            | Yes                     |                      |            |                 | Multnomah County, Columbia Gorge, 1,430 acres          |
| 1992 | Hanes Butte        |                       | Yes                     |                      |            |                 | Deschutes County, LaPine, Central Oregon, 348 acres    |
| 1992 | Sage               | Debris Burning        | Yes                     | Yes<br>FEMA-2081-FSA |            |                 | Deschutes County, Sisters, Central Oregon, 995 acres   |
| 1992 | Round Lake         |                       | Yes                     | Yes<br>FEMA-2082-FSA |            |                 | Klamath County, Keno, 490 acres                        |
| 1992 | Lone Pine          | Children              | Yes                     | Yes<br>FEMA-2083-FSA |            | 3               | Klamath County, 30,320 acres                           |
| 1992 | E. Evans Creek     | Well Drilling         | Yes                     | Yes<br>FEMA-2084-FSA |            | 4               | Jackson County, Rogue River, 10,135 acres              |

| Year | Fire Name                        | Cause         | Conflagration Act Fire? | FEMA Fire?           | Lives Lost | Structures Lost | Comments   |
|------|----------------------------------|---------------|-------------------------|----------------------|------------|-----------------|--|
| 1994 | Smith Canyon                     |               | Yes                     |                      |            |                 | Grass Valley   |
| 1994 | LaClair                          |               | Yes                     |                      |            |                 | Warm Springs   |
| 1994 | Hull Mountain                    | Arson         | Yes                     | Yes<br>FEMA-2112-FSA | 1          | 44              | Jackson County, 8,000 acres  |
| 1994 | Sprignett Butte                  | Arson         | Yes                     |                      |            |                 | Jackson County, Sams Valley, 1,631 acres                                       |
| 1994 | Ironside                         | Lightning     |                         |                      |            |                 | Malheur County, 10,385 acres   |
| 1994 | Boundary                         | Lightning     |                         |                      |            |                 | Umatilla County, 11,081 acres  |
| 1995 | Day Road                         | Children      | Yes                     |                      |            |                 | Deschutes County, LaPine, 62 acres   |
| 1996 | Spring                           | Lightning     |                         |                      |            |                 | Douglas County, 16,500 acres   |
| 1996 | Little Cabin                     | Electrical    | Yes                     |                      |            |                 | Jefferson County, 2,438 acres  |
| 1996 | Smith Rock                       | Metal Cutting | Yes                     |                      |            | 1               | Smith Rock State Park, 500 acres   |
| 1996 | Sloans Ridge                     | Lightning     |                         |                      |            |                 | Grant County, 10,556 acres   |
| 1996 | Simnasho                         |               | Yes                     |                      |            |                 | Warm Springs   |
| 1996 | Summit                           | Lightning     |                         |                      |            |                 | Grant County, 37,842 acres   |
| 1996 | Tower                            | Lightning     |                         |                      |            |                 | Grant County, 48,050 acres   |
| 1996 | Wheeler Point                    | Logging       | Yes                     | Yes<br>FEMA-2187-FSA |            |                 | Wheeler County, Spray, 21,980 acres  |
| 1996 | Wildcat                          | Lightning     | Yes                     |                      |            |                 | Grant County, Prairie City, 10,303 acres                                       |
| 1996 | Skeleton                         | Lightning     | Yes                     | Yes<br>FEMA-2189-FSA |            | 19              | Deschutes County, eastern fringe of Bend, 18,477 acres                         |
| 1996 | Tower Private                    | Lightning     |                         |                      |            |                 | Umatilla County, 50,815 acres  |
| 1996 | Ashwood/<br>Donnybrook           | Unknown       | Yes                     |                      |            |                 | Central Oregon; burned in area of state not protected from fire, 118,000 acres |
| 1998 | Rowena                           | Railroad      | Yes                     |                      |            |                 | Wasco County, The Dalles, 2,208 acres  |
| 1998 | Reith Barnhart/<br>Coombs Canyon | Miscellaneous | Yes                     |                      |            |                 | Umatilla County, Pendleton, 45,000 acres                                       |
| 1999 | McCain Road                      | Miscellaneous | Yes                     |                      |            |                 | North of Prineville, 99 acres  |
| 1999 | Cummings<br>Creek                |               | Yes                     |                      |            |                 | Grant County, West of Mt. Vernon   |

| Year | Fire Name                    | Cause      | Conflagration Act Fire? | FEMA Fire?             | Lives Lost | Structures Lost | Comments                                 |
|------|------------------------------|------------|-------------------------|------------------------|------------|-----------------|--|
| 2000 | Jackson                      |            | Yes                     |                        |            |                 | Malheur County, Ontario area             |
| 2000 | Willow Creek                 | Recreation | Yes                     |                        |            |                 | Between lone and Arlington, 27,000 acres |
| 2000 | Antelope                     |            | Yes                     |                        |            |                 |  |
| 2000 | Antioch Road                 | Vehicle    | Yes                     |                        |            | 1               | Jackson County, Rogue River, 376 acres   |
| 2000 | Willow Creek II              |            | Yes                     |                        |            |                 | Umatilla County, Boardman area           |
| 2000 | Hash Rock                    |            | Yes                     |                        |            |                 | Crook County                             |
| 2000 | Jim Creek                    | Lightning  |                         |                        |            |                 | Wallowa County, 56,319 acres             |
| 2000 | Deep Creek                   | Lightning  |                         |                        |            |                 | Wallowa County, 32,967 acres             |
| 2000 | Carrol Creek                 | Lightning  | Yes                     |                        |            |                 | Wallowa County, 3,197 acres              |
| 2000 | Thorn                        | Lightning  | Yes                     |                        |            |                 | Wallowa County, Imnaha, 4,035 acres      |
| 2001 | Two Rivers                   | Wood Chips | Yes                     |                        |            |                 | Umatilla County, 7,011 acres             |
| 2001 | Bridge Creek                 | Lightning  | Yes                     | Yes<br>FEMA-2375-FSA   |            |                 | Umatilla County, Ukiah, 9,230 acres      |
| 2001 | Quartz                       | Lightning  |                         |                        |            |                 | Jackson County                           |
| 2001 | Monument Complex             | Lightning  | Yes                     | Yes<br>FEMA-2380-FSA   |            |                 | Grant County, Monument, 32,352 acres     |
| 2001 | Horse Creek                  | Lightning  | Yes                     |                        |            |                 | Wallowa County, Imnaha, 16,309 acres     |
| 2002 | Eyerly                       | Lightning  | Yes                     | Yes<br>FEMA-2443-FMAGP |            | 37              | Jefferson County, 23,573 acres           |
| 2002 | Winter                       | Lightning  | Yes                     | Yes<br>FEMA-2444-FMAGP |            |                 | Lake County, Summer Lake, 35,779 acres   |
| 2002 | Toolbox                      | Lightning  |                         |                        |            |                 | Lake County, 62,644 acres                |
| 2002 | Silver                       | Lightning  |                         |                        |            |                 | Lake County, 23,907 acres                |
| 2002 | Squires Peak/<br>Wall Creek  | Lightning  | Yes                     | Yes<br>FEMA-2445-FMAGP |            |                 | Jackson County, 3,125 acres              |
| 2002 | Monument Rock                | Lightning  |                         |                        |            |                 | Baker County, 25,000 acres               |
| 2002 | Malheur/<br>Flagtail Complex | Lightning  | Yes                     | Yes<br>FEMA-2448-FMAGP |            |                 | Grant County, 21,641 acres               |
| 2002 | Sheldon Ridge                | Lightning  | Yes                     | Yes<br>FEMA-2452-FMAGP |            |                 | Wasco County, The Dalles, 12,681 acres   |

| Year | Fire Name               | Cause        | Conflagration Act Fire? | FEMA Fire?             | Lives Lost | Structures Lost | Comments   |
|------|-------------------------|--------------|-------------------------|------------------------|------------|-----------------|--|
| 2002 | Roberts Creek           | Lightning    |                         |                        |            |                 | Grant County, 13,479 acres   |
| 2002 | East Antelope           | Power line   |                         |                        |            |                 | Jackson County   |
| 2002 | Florence/Biscuit        | Lightning    | Yes                     | Yes<br>FEMA-2453-FMAGP |            | 13              | Curry and Josephine counties, Southern Coast Range, 500,000 acres  |
| 2002 | Timbered Rock           | Lightning    | Yes                     | Yes<br>FEMA-2454-FMAGP |            |                 | Jackson County, 27,111 acres   |
| 2002 | Cache Mt.               | Lightning    | Yes                     | Yes<br>FEMA-2455-FMAGP |            | 2               | Deschutes County, Black Butte Ranch, 4,200 acres   |
| 2003 | Davis                   | Human Caused |                         |                        |            |                 | Central Oregon near La Pine, 16,000 acres  |
| 2003 | Lightning Creek Complex | Lightning    |                         |                        |            | 1               | Wallowa County, Hells Canyon and Wallowa-Wittman in NE Oregon, 16,028 acres                                |
| 2003 | Booth                   | Lightning    | Yes                     | Yes<br>FEMA-2493-FMAGP |            | 13              | Central Oregon Cascades, 90,800 acres (acreage also includes the Bear Butte fire, i.e., the "B&B Complex") |
| 2003 | Herman Creek            | Power line   | Yes                     | Yes<br>FEMA-2495-FMAGP |            | 3               | Columbia River Gorge, Cascade Locks, 300 acres   |
| 2003 | Cove Road               | Lightning    |                         | Yes<br>FEMA-2496-FMAGP |            |                 | Jackson County, three miles east of Ashland, 700 acres   |

### Appendix F-3: Structural Fire Protection Department Responses Beyond Their Boundaries

The following information summarizes for the years 1996 to 2002 fires that were burning outside of areas that have structural protection, but nevertheless received a structural fire response, often under a 24-hour mutual aid agreement with a wildland protection agency. This data is furnished from the Oregon All Incident Reporting System (10-27-03).

#### Year 1996

| District of Incident          | Count      |
|-------------------------------|------------|
| Unprotected                   | 134        |
| Oregon Dept. of Forestry      | 16         |
| US Forest Service             | 17         |
| Forest Protection Association | 6          |
| <b>TOTAL</b>                  | <b>173</b> |

#### Year 1997

| District of Incident          | Count      |
|-------------------------------|------------|
| Unprotected                   | 95         |
| Oregon Dept. of Forestry      | 19         |
| US Forest Service             | 11         |
| Forest Protection Association | 1          |
| Other                         | 4          |
| <b>TOTAL</b>                  | <b>130</b> |

#### Year 1998

| District of Incident          | Count      |
|-------------------------------|------------|
| Unprotected                   | 75         |
| Oregon Dept. of Forestry      | 12         |
| US Forest Service             | 18         |
| Forest Protection Association | 4          |
| Other                         | 20         |
| <b>TOTAL</b>                  | <b>129</b> |

#### Year 1999

| District of Incident          | Count      |
|-------------------------------|------------|
| Unprotected                   | 89         |
| Oregon Dept. of Forestry      | 27         |
| US Forest Service             | 18         |
| Forest Protection Association | 3          |
| Other                         | 22         |
| <b>TOTAL</b>                  | <b>159</b> |

#### Year 2000

| District of Incident          | Count      |
|-------------------------------|------------|
| Unprotected                   | 61         |
| Coos Forest Protection        | 2          |
| Bureau of Land Management     | 1          |
| Oregon Dept. of Forestry      | 36         |
| US Forest Service             | 9          |
| Forest Protection Association | 6          |
| Other                         | 32         |
| <b>TOTAL</b>                  | <b>147</b> |

#### Year 2001

| District of Incident          | Count      |
|-------------------------------|------------|
| Unprotected                   | 58         |
| Coos Forest Protection        | 2          |
| Bureau of Land Management     | 10         |
| Oregon Dept. of Forestry      | 78         |
| US Forest Service             | 9          |
| Forest Protection Association | 3          |
| Other                         | 21         |
| <b>TOTAL</b>                  | <b>181</b> |

#### Year 2002

| District of Incident          | Count      |
|-------------------------------|------------|
| Unprotected                   | 64         |
| Coos Forest Protection        | 4          |
| Bureau of Land Management     | 13         |
| Special contract              | 2          |
| Oregon Dept. of Forestry      | 81         |
| US Forest Service             | 20         |
| Forest Protection Association | 16         |
| Other                         | 33         |
| <b>TOTAL</b>                  | <b>233</b> |

## Appendix F-4: Previous Reports Recommendations – NHMP Action Items Cross-Reference Matrix

The Federal Emergency Management Agency (FEMA) provided funding to Oregon in 1987 and 1990 through the Fire Suppression Assistance (FSA)<sup>10</sup> Program to assist the state in fighting a large number of lightning-caused fires across southwest Oregon during 1987 and the Awbrey Hall Fire in 1990. One of the requirements FEMA placed on the state along with the funding was that we examine these fire events and develop recommendations for reducing losses from future similar interface fires. These efforts resulted in the November 1988 *An Action Plan for Protecting Rural/Forest Lands from Wildfire* and the August 1991 *Awbrey Hall Fire Appendix*.

Below and on the pages that follow, we have summarized the recommendations contained in these action plans, and cross-referenced the recommendations between the two documents. We have reported on the status of each recommendation. In cases for which the recommendation has not been fully implemented and the state desires to carry the recommended action forward into this chapter of the state *Natural Hazards Mitigation Plan* (NHMP), we have cross-referenced the old recommendation to the new proposed action. In cases for which the recommendation was implemented and its success is noted in this chapter, that too is cross-referenced below.

| FSA Report Source     | Recommendation Number | Recommendation Summary   | Cross-Reference Nov. 1988 Action Plan | Cross-Reference Aug. 1991 Appendix | Status   | NHMP Action Reference       | NHMP Success Reference             |
|-----------------------|-----------------------|--|---------------------------------------|------------------------------------|--|-----------------------------|------------------------------------|
| Nov. 1988 Action Plan | <b>ODF-1</b>          | Identify/publish boundaries of interface lands at high risk  |                                       | <b>ODF-1</b>                       | A project in 1993 produced a draft map, but funding was not available for final; interface lands now being mapped as a component of SB 360; additional mapping being done via the National Fire Plan | <b>F-ST-5</b> <sup>11</sup> |                                    |
| Nov. 1988 Action Plan | <b>ODF-2</b>          | Clarify policy/statute: protecting forest resources is second only to saving lives for ODF resources               |                                       |                                    | Completed in 1989 by the Oregon Legislature  |                             |                                    |
| Nov. 1988 Action Plan | <b>ODF-3</b>          | Maintain multidisciplinary group to lead a public education effort   |                                       |                                    | Effort evolved into FireFree and Firewise  | <b>F-ST-3</b>               | <b>F-HMS-4-5-6-7</b> <sup>12</sup> |
| Nov. 1988 Action Plan | <b>ODF-4</b>          | Training to improve coordination between resource and structural firefighting agencies, especially rural districts |                                       | <b>SFM-2</b>                       | Completed  |                             |                                    |
| Nov. 1988 Action Plan | <b>SFM-5</b>          | Adopt construction code changes for dwellings/structures in interface  |                                       | <b>SFM-5</b>                       | Completed in 1993 as a component of the Wildfire Hazard Zone process   |                             | <b>F-HMS-1</b>                     |
| Nov. 1988 Action Plan | <b>SFM-6</b>          | Local governments to implement <i>Uniform Fire Code</i> changes of SFM-5 above                                     |                                       | <b>SFM-5</b>                       | Ongoing: county and other local governments continue to adopt Wildfire Hazard Zones  | <b>F-ST-9</b>               |                                    |

<sup>10</sup> Fire Suppression Assistance is now known as the Fire Management Assistance Grant Program (FMAGP).

<sup>11</sup> F-ST-5 = fire chapter, short term, #5

<sup>12</sup> F-HMS-4-5-6-7 = fire chapter, hazard mitigation success, #4, #5, #6, and #7

| <b>FSA Report Source</b> | <b>Recommendation Number</b> | <b>Recommendation Summary</b>   | <b>Cross-Reference Nov. 1988 Action Plan</b> | <b>Cross-Reference Aug. 1991 Appendix</b> | <b>Status</b>   | <b>NHMP Action Reference</b>          | <b>NHMP Success Reference</b> |
|--------------------------|------------------------------|---|--|---|---|---------------------------------------|-------------------------------|
| Nov. 1988 Action Plan    | <b>DLCD-7</b>                | Amend statewide planning goals or adopt rules for siting of structures/developments on forest/resource lands  |  | <b>ODF-3<br/>DLCD-1</b>                   | Completed in 1994   |                                       | <b>F-HMS-3</b>                |
| Nov. 1988 Action Plan    | <b>EMD-8</b>                 | Declaration process to reflect legal method of activating state resources                                     |  |   | Completed including training and other guidance to local governments  |                                       |                               |
| Nov. 1988 Action Plan    | <b>EMD-9</b>                 | Enhance local-state coordination of resources by developing MOUs  |  |   | MOUs not pursued; ODF and RFPDs did establish 24-hour mutual aid agreements   |                                       |                               |
| Nov. 1988 Action Plan    | <b>EMD-10</b>                | Assist SFM to provide training and coordination on state fire net   |  | <b>SFM-2</b>                              | Completed, mostly by SFM  |                                       |                               |
| Nov. 1988 Action Plan    | <b>TF<sup>13</sup>-11</b>    | Legislation to clarify and expand authority, reduce conflicts and vulnerability in interface areas            |  |   | Effort failed; however, a similar product resulted from passage of Senate Bill 360 in 1997  | <b>F-ST-4<br/>F-LT-1<sup>14</sup></b> | <b>F-HMS-2</b>                |
| Nov. 1988 Action Plan    | <b>TF-12</b>                 | Legislation to require that all structures in high risk areas have adequate protection                        |  |   | Partly successful; provisions for certain new structures were adopted by the Oregon Legislature in 1993                           | <b>F-ST-9<br/>F-LT-2</b>              | <b>F-HMS-1</b>                |
| Nov. 1988 Action Plan    | <b>TF-13</b>                 | Identify sources of legal, technical, and financial assistance to develop new rural fire protection districts |  |   | Completed   |                                       |                               |
| Nov. 1988 Action Plan    | <b>TF-14</b>                 | Incentives/penalties to encourage maintenance of fire safe home sites   |  |   | Effort failed, however, a similar product resulted from Senate Bill 360 in 1997   | <b>F-ST-4<br/>F-LT-1</b>              | <b>F-HMS-2</b>                |
| Nov. 1988 Action Plan    | <b>TF-15</b>                 | Allocate the resources needed to do the planning necessary to resolve interface problem                       |  |   | Effort failed, however, a similar product resulted from passage of Senate Bill 360 in 1997  | <b>F-ST-4<br/>F-LT-1</b>              | <b>F-HMS-2</b>                |
| Nov. 1988 Action Plan    | <b>TF-16</b>                 | Work with insurance industry to promote premium incentives for protecting property                            |  | <b>ODF-2</b>                              | Effort failed: until recently, insurance industry has had little interest in issue and in giving premium incentives <sup>15</sup> |                                       |                               |
| Nov. 1988 Action Plan    | <b>TF-17</b>                 | Adopt building codes for fire safety in new structures to abate risk to and from adjacent forest lands        |  | <b>SFM-4</b>                              | Completed   |                                       |                               |
| Nov. 1988 Action Plan    | <b>ALL-18</b>                | All fire agencies to review/amend policies as necessary to assure consistency with responsibilities           |  |   | Completed   |                                       |                               |
| Nov. 1988 Action Plan    | <b>ALL-19</b>                | Larger portion of fire budgets for prevention; evaluate and select most productive programs                   |  |   | Considered but not pursued  |                                       |                               |
| Nov. 1988 Action Plan    | <b>ALL-20</b>                | Support fire safety curriculum for schools  |  |   | Completed: in 1996, OSFM, ODF, Dept of Ed., others developed a new edition of the Fire Safety Skills curriculum                   |                                       |                               |

<sup>13</sup> TF = task force

<sup>14</sup> F-LT-1 = fire chapter, long term, #1

<sup>15</sup> Over time, the insurance industry should embrace SB 360 and require that their customers comply with its standards in order to become or remain insured.

| <b>FSA Report Source</b> | <b>Recommendation Number</b> | <b>Recommendation Summary</b>  | <b>Cross-Reference Nov. 1988 Action Plan</b> | <b>Cross-Reference Aug. 1991 Appendix</b> | <b>Status</b>  | <b>NHMP Action Reference</b> | <b>NHMP Success Reference</b> |
|--------------------------|------------------------------|--|--|---|--|------------------------------|-------------------------------|
| Aug. 1991 Appendix       | <b>ODF-1</b>                 | Within protection district boundaries, map wildfire hazard zones where homes are likely to be built              | <b>ODF-1</b>                                 |   | Interface lands now being mapped as a component of SB 360 and additional mapping being done via the National Fire Plan   | <b>F-ST-5</b>                |                               |
| Aug. 1991 Appendix       | <b>ODF-2</b>                 | Work with insurance industry to increase knowledge of problem, costs, incentives: conduct three workshops        | <b>TF-16</b>                                 |   | Completed: insurance industry representatives were invited to participate in a series of Firewise Community Workshops conducted around the state; however, industry participation was poor   |                              |                               |
| Aug. 1991 Appendix       | <b>ODF-3</b>                 | Legislation to shift some interface suppression costs to counties which have failed to properly implement Goal 7 |  |   | Not pursued  |                              |                               |
| Aug. 1991 Appendix       | <b>ODF-4</b>                 | Clarify conditions for which Oregon National Guard are in military pay status versus being paid by ODF           |  |   | Completed  |                              |                               |
| Aug. 1991 Appendix       | <b>SFM-1</b>                 | Assure adequate "up front" money available to quickly reimburse under Conflagration Act                          |  |   | Effort to establish separate Conflagration Act "up front" mobilization fund failed; funding remains case-by-case from the State Emergency Fund; currently, mobilization bills are paid from OSP General Funds, followed by spending limitation increase request to the Legislative Emergency Board |                              |                               |
| Aug. 1991 Appendix       | <b>SFM-2</b>                 | Train rural fire districts on Conflagration Act, what to expect, procedures for reimbursement                    | <b>ODF-4<br/>EMD-10</b>                      |   | Completed  |                              |                               |
| Aug. 1991 Appendix       | <b>SFM-3</b>                 | Develop/train logistics teams to assist local jurisdictions with Conflagration Act "move-up"                     |  |   | Completed with <i>Fire Service Mobilization Plan</i> changes and establishment of OSFM structural overhead teams   |                              |                               |
| Aug. 1991 Appendix       | <b>SFM-4</b>                 | Achieve targeted building code modifications to mitigate interface fire hazards                                  | <b>TF-17</b>                                 |   | Completed  |                              |                               |
| Aug. 1991 Appendix       | <b>SFM-5</b>                 | Modify <i>Uniform Fire Code</i> for consistent system to identify building locations/addresses in hazard areas   | <b>SFM-5<br/>SFM-6</b>                       |   | Completed  |                              | <b>F-HMS-1</b>                |

| <b>FSA Report Source</b> | <b>Recommendation Number</b> | <b>Recommendation Summary</b>  | <b>Cross-Reference Nov. 1988 Action Plan</b> | <b>Cross-Reference Aug. 1991 Appendix</b> | <b>Status</b>   | <b>NHMP Action Reference</b> | <b>NHMP Success Reference</b> |
|--------------------------|------------------------------|--|--|---|---|------------------------------|-------------------------------|
| Aug. 1991 Appendix       | <b>EMD-1</b>                 | Adopt administrative rule that requires each county develop/maintain EOP   |  |   | Completed; all county EOPs must be current within five years; requirement also exists in ORS 401.305  |                              |                               |
| Aug. 1991 Appendix       | <b>EMD-2</b>                 | Encourage interagency disaster exercises biannually in high risk counties: develop prioritized list with ODF and SFM |  |   | Interagency disaster exercises are conducted annually in essentially every county in Oregon   |                              |                               |
| Aug. 1991 Appendix       | <b>EMD-3</b>                 | Encourage adoption of ICS: ensure ICS training available   |  |   | Completed and ongoing   |                              |                               |
| Aug. 1991 Appendix       | <b>EMD-4</b>                 | Legislation that would allow administrator to act in Governor's absence to make emergency declaration                |  |   | Completed   |                              |                               |
| Aug. 1991 Appendix       | <b>DLCD-1</b>                | Better implementation of fire siting standards for structures and road design standards via Goal 4                   | <b>DLCD-7</b>                                |   | DLCD does not have the expertise nor resources to implement, but might participate in such an effort with others leading; this is currently unfunded-unscheduled at DLCD  |                              |                               |
| Aug. 1991 Appendix       | <b>DLCD-2</b>                | Develop model wildfire hazard mitigation ordinance   |  |   | DLCD does not have the expertise about fire prevention/suppression, nor the resources to take the lead on this, but will provide technical assistance to ODF, e.g., DLCD could take the lead in assisting local jurisdictions to adopt ordinances; a model is not needed in SB 360 counties because the standards and requirements of the Bill serve as a model; this is currently unfunded-unscheduled at DLCD |                              |                               |
| Aug. 1991 Appendix       | <b>DLCD-3</b>                | Review Goal 7 for possible goal amendment and/or rule adoption   |  |   | Completed in 2002   |                              | <b>F-HMS-3</b>                |