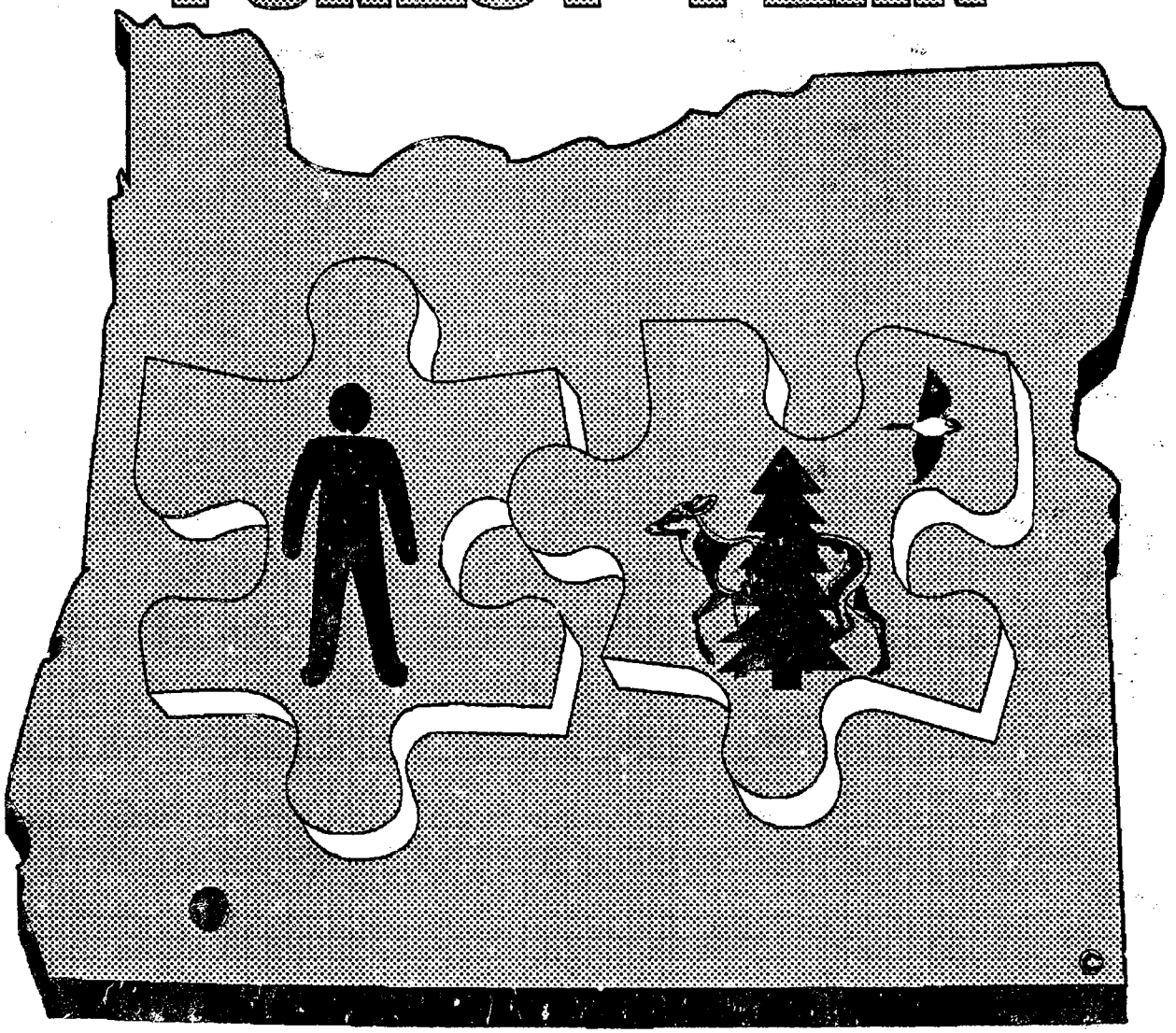
ASHLAND
FORESTPLAN



CITY of ASHLAND

MAY 1992

ACKNOWLEDGMENTS

ECOLOGICALLY SOUND, REALISTIC AND IMPLEMENTABLE. THOSE WERE THE "MARCHING ORDERS" GIVEN US BY THE CITIZENS OF ASHLAND FOR PREPARING THIS PLAN. THEIR ENTHUSIASTIC PARTICIPATION HELPED ACHIEVE THAT OBJECTIVE.

We are especially indebted to the members of the Ashland Watershed Advisory Group who participated in both public meetings and Advisory Group work sessions. Their creativity, constructive criticism and skillful editing was invaluable.

ASHLAND WATERSHED ADVISORY GROUP

Pat Acklin
Claude Curran
Bill Robertson
Mary Smelcer
Tim Brewley
Myra Erwin
Wes Reynolds
Ken Mickleson

Pam Barlow, Project Coordinator for the City, provided information, scheduled meetings, made arrangements and generally helped the process move along.

And finally our congratulations to both the professional and citizen leadership of the City for their vision and fortitude in deciding to prepare this plan.

GOALS AND POLICIES

Ecosystem

PROMOTE BIOLOGICAL DIVERSITY OF TERRESTRIAL AND AQUATIC ECOSYSTEMS.

Policies: (a) Winburn parcel as ecosystem study area in conjunction with Southern Oregon State College. (b) Partnership with Rogue River National Forest and other ownerships.

Vegetation

PLAN AND MANAGE FOREST LAND VEGETATION AND OTHER RESOURCES IN A MANNER THAT EMULATES NATURAL PROCESSES.

Policies: Conduct all logging via helicopter unless analysis indicates otherwise.

Recreation

PLAN AND MANAGE RECREATION USE IN A MANNER THAT COMPLIMENTS OR IS COMPATIBLE WITH OTHER WATERSHED AND FOREST VALUES.

Policies: (a) Manage all public use. (b)Direct use to lower elevation parcels.(c) Limit to day use. (d) Emphasize non-motorized uses. (e) Limit access to Reeder Reservoir. (f) Establish an Ashland Forest-land Citizens Patrol. (g) Use services of Park and Recreation Department for interim management.

Fire

REDUCE FUELS IN A MANNER THAT ENHANCES BIOLOGICAL DIVERSITY AND LONG TERM SOIL PRODUCTIVITY.

Policies: Retain snags in areas important for wildlife and not critical to fire control; use prescribed fire to reduce fuels and emulate ecosystem function.

Fish and Wildlife	IMPROVE THE AQUATIC HABITAT IN ASHLAND CREEK BELOW REEDER RESERVOIR FOR BOTH ANADROMOUS AND RESIDENT FISH. Policies: (a) Obtain technical assistance from the Oregon Department of Fish and Wildlife. (b) Develop agreement with Rogue Flyfisher's for project work. (c) Retain all snags along the stream and tributaries.
Community	UTILIZE THE INTEREST, ENTHUSIASM AND KNOWLEDGE OF ASHLAND RESIDENTS THROUGH COOPERATIVE PROJECTS AND VOLUNTEER ORGANIZATIONS.
Stewardship	PROVIDE THE ORGANIZATIONAL STRUCTURE AND DEFINE THE RESPONSIBILITIES THAT WILL ENSURE CAREFUL PROTECTION AND THOUGHTFUL MANAGEMENT OF THE CITY'S FOREST LANDS AND NATURAL RESOURCES.

IMPLEMENTATION STRATEGIES

This section of the plan outlines strategies for implementing Goals, Policies and Action items effectively and efficiently.

- **CHARTER AN INTER-AGENCY/CITIZEN IMPLEMENTATION TEAM**
- **USE VOLUNTEERS AND ORGANIZED GROUPS TO ACCOMPLISH WORK**
- **USE COOPERATIVE AGREEMENTS AND MEMORANDUMS OF UNDERSTANDING**

EXECUTIVE SUMMARY

Purpose and Need

The City of Ashland owns 795 acres within Ashland Creek, 150 acres in Rocca Creek, and 130 acres in the Hamilton Creek watershed. The lower portions of each of these blocks is within the Urban/Wildland Interface - a critical wild-fire zone.

The community is dependent on the Ashland Watershed for its municipal water supply. This plan focuses on maintaining water quality and quantity, managing vegetation, reducing wildfire fuels, and being compatible with management plans for the adjoining Rogue River National Forest and other properties.

This is the first integrated resource management plan for City's forest lands. The City has recently updated its Comprehensive Management Plan. It contains seven goals applicable to forest lands. This plan incorporates those goals and establishes seven new goals with attendant policies and action items.

Existing Condition

Eight decades of aggressive fire suppression within both the Ashland Creek and Hamilton Creek watersheds has altered "normal" ecosystem processes that feature fire as a major agent of disturbance. The result is a change from an open grown pine/fir forest with a sparse shrub understory, to a dense fir/pine forest with brush fields occupying areas recently visited by high intensity fire. The volume of vegetation (bio-mass) has increased. water production has likely decreased.

During this same period the City has grown and residential areas have entered the heavily vegetated foothills of the Siskiyou Mountains. There has been a corresponding increase in the recreational use of the adjacent forest lands.

This combination of more vegetation, residential occupancy of the interface, and heavy recreation use has increased the risk of fire frequency and severity.

ISSUES, CONCERNS, OPPORTUNITIES

The ICO'S were developed through public meetings, interviews, and interaction with a Planning Advisory Group. The issues are interrealted and complex. Their resolution, and the utilization of opportunities are the basis for this plan's Goals, Policies and Action items.

Ecosystem Health	How to regain and maintain biological diversity and resiliency of the City's forest lands, and the surrounding watershed? This encompasses vegetative management, fuels reduction and old-growth retention.
Recreation Use	How to manage the increasing hiking, mountain biking, horseback riding and sightseeing on City lands?
Stewardship	How should the City organize to manage the resources and uses of its growing inventory of forest lands?
Fire Management	How to further coordinate inter-department, inter-agency fire planning, prevention and suppression activities. How to provide technical assistance to urban/wildland interface residents?
Implementation	How to utilize existing programs, grants and funding sources, and engage citizen in efficient and practical implementation.
Community	An opportunity to build community cohesiveness and effectiveness. Further citizen and visitor knowledge and appreciation of City watershed and forest land values.

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City of Ashland Forest Lands

Prepared By R.J. McCormick & Associates

R. McCormick
J. Hoffman
B. Lichlyter

May, 1992

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CHAPTER 1
INTRODUCTION

OVERVIEW

Ashland is an environmentally conscious community located in the foothills of the Siskiyou Mountains. Citizens primary concerns are the protection of the 14,000 acre watershed at the base of Mt. Ashland, the prevention of loss of life and property in the urban-wildland interface, and the "quality of life" in the community.

...and reflect what most citizens teasure: a community at the base of the Siskiyou Mountains, that works with rather than fights with nature.

Presently there is no forest management plan for 1075 acres owned by the City within and near the watershed. The City desires a plan with the following attributes:

- Maintains the preservation of water quality and quantity as the highest priority for resource management.
- Establishes management practices for all City owned lands outside the City limits.
- The plan be coordinated and compatible with the Rogue River National Forest Land and Resource Management Plan, and other plans of the Ashland Ranger District.
- Establishes management guidance for the private lands within or adjacent to the urban growth boundary - the Urban/Wildland Interface.
- The City specifically requests this plan be based on concepts and practices pioneered by Dr. Jerry Franklin, known generally as "New Forestry".

In addition to including the above attributes. the Plan should also have the following characteristics.

- Public participation and support in the development and implementation of this plan.
- Provide for periodic review and modification, as necessary, when conditions change.

- Be practical, economical, and implementable.

The City has a unique opportunity to be a model for others in providing for both the needs of its people and the environment. As it is aptly stated in its Comprehensive Plan, "... and reflect what most citizen's treasure: a community at the base of the Siskiyou Mountains, that works with rather than fights with nature." It is hoped that this Plan is one small step toward realizing that vision.

Description of Planning Area

The City owns 1,075 acres of forest land. The vicinity map in this chapter shows their location and lists them by parcel number for reference purposes. This document will refer to these lands as forest lands. Seven hundred ninety five acres is within the Ashland watershed, mostly in small parcels adjacent to Ashland Creek. The primary use is the maintenance of water quality. Parcels 1 to 3 are granite pits or water system facilities.

There is an additional 280 acres that the City has recently acquired as part of its long range plans to establish a Siskiyou Mountains recreation park along the urban interface boundary. Its primary use is for open space.

This document also provides guidance to lands comprising the Urban/Wildland Interface, both inside and outside of the city limits. These lands will be referred to as the Interface. The Interface is, as the name implies, a transition zone between the forest lands and the city environment. It contains both the strong influences of human settlement and the natural forest ecosystem.

The Interface is also the critical Wildfire Land Zone along the city limits and the Urban Growth Boundary, as well as an area between Tolman Creek on the South, Wrights Creek on the North, the city limits on the east, and the Rogue River National Forest boundary on the west. See the vicinity map for its location.

Purpose and Need of the Plan

The City wishes to place its 1,075 acres of forest land under a workable regime of protection and management. Officials also want guidelines for dealing with the

development of the Interface, and the associated fire risk.

Other than protection from wildfire, management of forest lands has been passive. This plan establishes a pro-active management theme we believe necessary to accomplish the Action items, carry out the Policies, and attain the Goals it proposes.

The key characteristics of this management theme are:

1. Ecosystem based planning and management - Planning is done within an ecosystem context. All ownerships are involved.

2. Integrated resource management - A holistic approach to developing direction and carrying out management that considers the form, function and interrelationships of both the forest and resource objectives.

3. Integrated administration - An interdisciplinary or management team approach to plan implementation.

The Ashland Comprehensive Plan has well-established goals for the management of lands within the city limits and for the watershed. This Plan adopts those goals that are appropriate for forest lands, and proposes seven new goals.

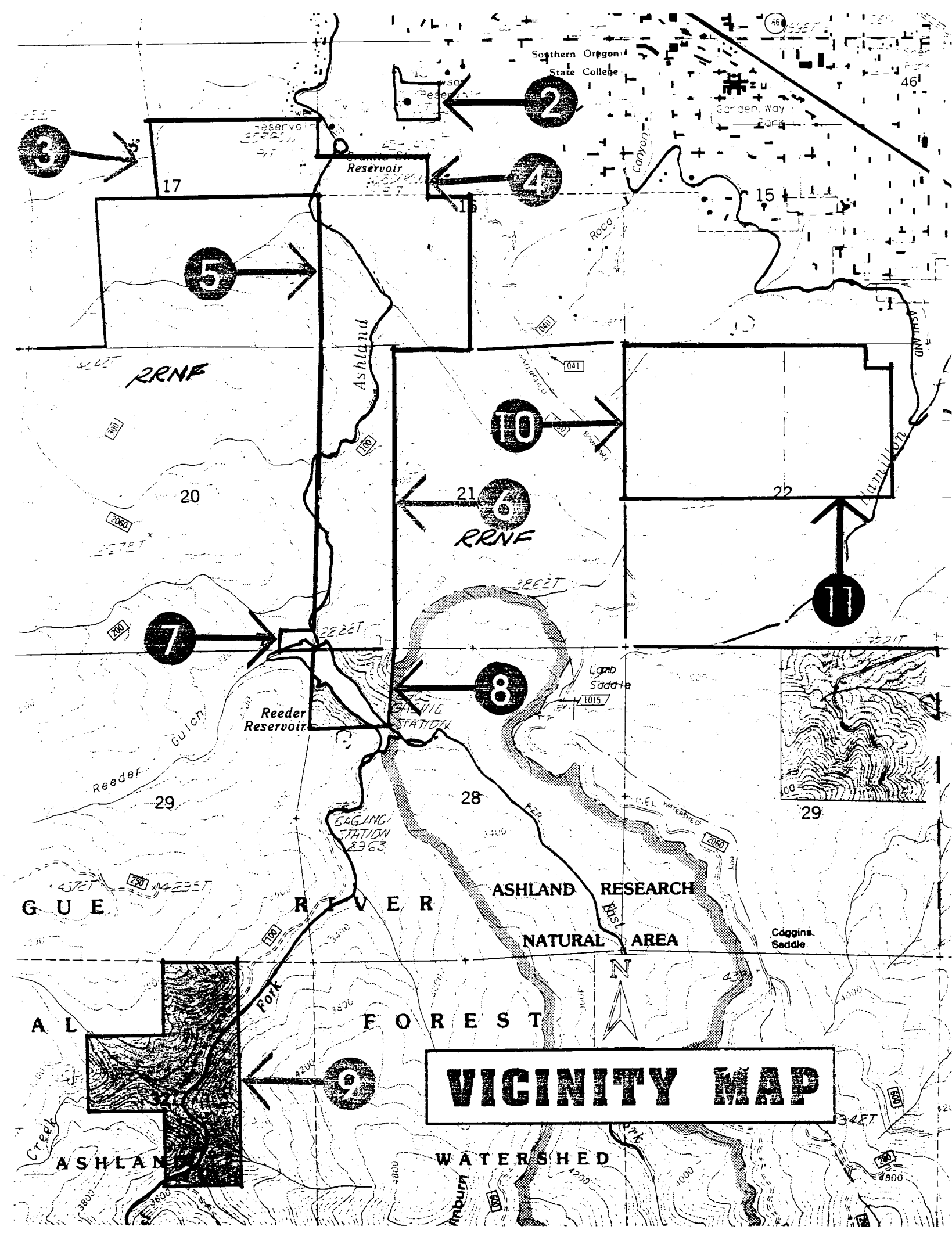
It is essential that common goals be established and integrated ecosystem planning be done.

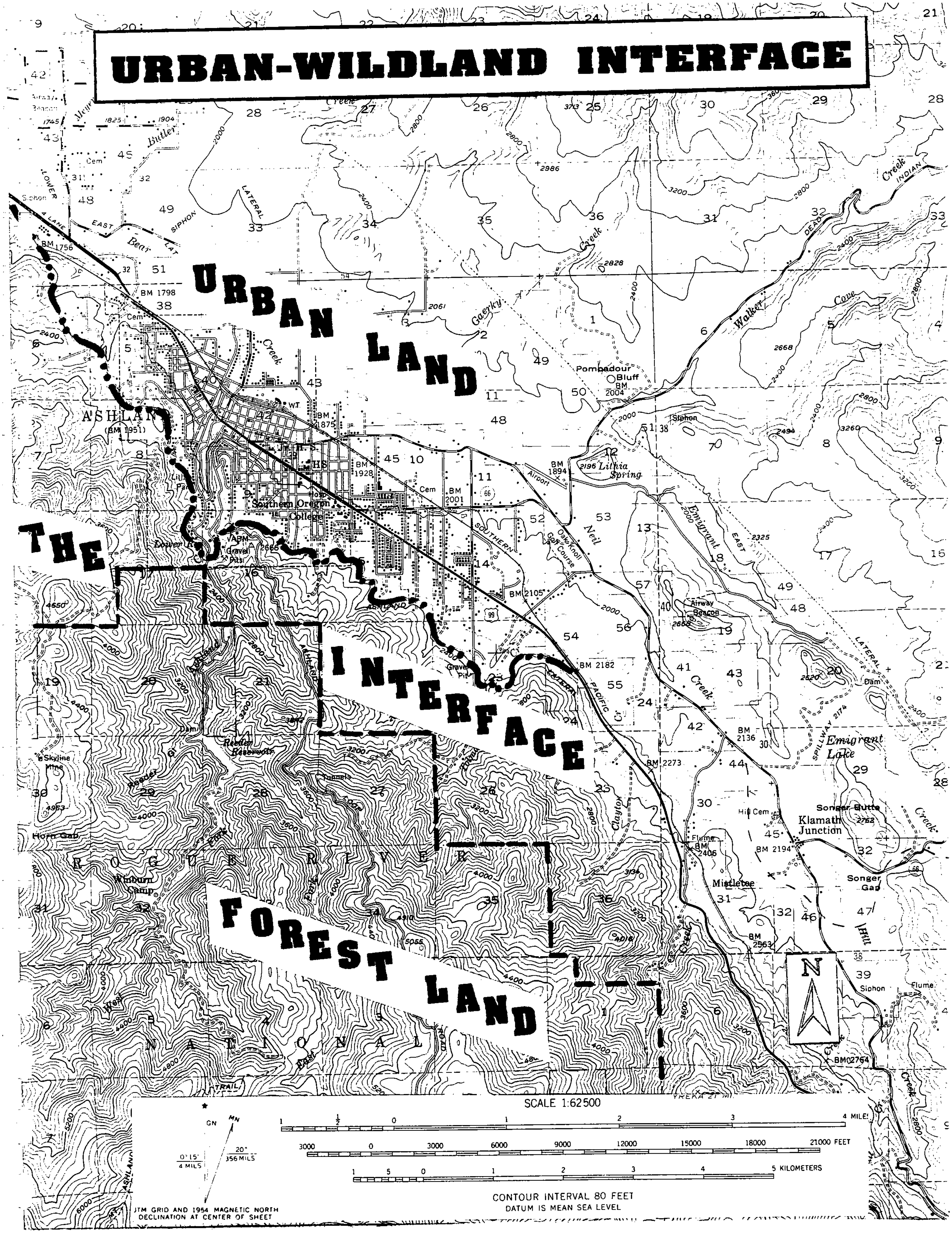
The Rogue River National Forest Land and Resource Management Plan appears to have compatible goals. However, periodic reviews by Ashland Ranger District and City personnel is suggested in order to insure consistency. Ecosystem processes operate independently of ownership boundaries. If the "New Forestry" concepts roposed in this Plan are to be successful, it is essential that common goals be esblished and integrated ecosystem planning be done that involves all land owners within the watershed.

Although this Plan adopts many of the existing City goals, there is a significant departure from past philosophy on **how** both these and the new goals should be attained. <u>In our judgement, created disturbance that emulates natural ecological processes must be reintroduced into the watersheds</u>. This means vegetative manipulation and prescribed fire. If this does not occur, there is a very high risk of catastrophic wild-

fire and a rapid loss of old-growth and other age classes through insects and disease.

Recreation use of these lands has grown to a point where active management is also necessary. This involves providing some minimum facilities, recreation information and appropriate regulation.


Southern Oregon State College
Granite Creek Reservoir
Ashland
RRNF
Reeder Reservoir
Reeder Gulch
Lamb Saddle
ASHLAND RESEARCH NATURAL AREA
Coggins Saddle
FOREST
WATERSHED
VICINITY MAP


URBAN-WILDLAND INTERFACE
URBAN LAND
THE INTERFACE
FOREST LAND
ASHLAND
Southern Oregon College
Pompadour Bluff
Lithia Spring
Emigrant Lake
Klamath Junction
Songer Butte
Songer Gap
Mistletoe
Reeder Reservoir
Skyline Mine
Horn Gap
Winburn Camp
ROGUE RIVER
NATIONAL
N
SCALE 1:62500
4 MILES
21000 FEET
5 KILOMETERS
CONTOUR INTERVAL 80 FEET
DATUM IS MEAN SEA LEVEL
UTM GRID AND 1954 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

CHAPTER

INTRODUCTION
AN HISTORICAL OVERVIEW
RESPONSIBILITIES
FIRE MANAGEMENT

CHAPTER 2
FIRE OVERVIEW

INTRODUCTION

Attainment of the natural resource goals in the City's Comprehensive Plan and this Forest Plan will depend, to a large measure, on preventing large, destructive wildfire. There is also a high potential for the loss of life and property and it will increase as the fuels continue to build up and development proceeds. In addition, the watershed could be severely impacted with serious consequences to the City's domestic water supply. The gravity of the problem cannot be overstated and, although much has been done, there is still much to be accomplished.

The fiercest timber fire that has ever taken place close to Ashland has been raging along the hillsides of Ashland Creek Canyon for the past three days, and its work of destruction was only placed under control last evening.

Ranger W. Kripke
August 26, 1901

AN HISTORICAL OVERVIEW

Ecology plots in the watershed bear witness to the frequent fires in the area. An early narrative of the Siskiyou division of the Crater Forest, which included the watershed, describes the watershed as ... *"large areas of this district are denuded of forest growth and covered with grass or brush."* Frequent fires periodically reduced the fuel and high intensity, stand destroying fire was the exception and not the rule.

The Ashland Forest Reserve, which included most of the Ashland Creek watershed, was established by executive proclamation on September 23, 1893. The first Rangers were hired in 1899 to oversee protection of the reserve. Fire suppression efforts began shortly afterwards. In 1913, Ranger Erickson wrote -

> *"...it is important to give the Ashland watershed special fire protection...Campers are quite numerous in the headwaters of streams, and some of them need careful watching in*

order to see that carelessness is not exercised."

Grazing of sheep and cattle was forbidden along with "light burning" to maintain the grazing lands. Firebreaks were started in 1903. Timber harvesting was also halted.

Despite these efforts, wildfire was not totally excluded and there are historical references to several large fires in, or near, the watershed. A fire history map in this chapter shows their locations if it is known. Although the state-of-the-art for wildfire suppression has advanced dramatically since those early days, the chances of catastrophic wildfire are probably higher today because the decrease in the acreage burned during the last century has created a high fuel buildup. The increased number of people in, or adjacent to, the watershed increases the risk of a fire starting.

RESPONSIBILITIES

The financial, legal, and administrative responsibilities for prevention and suppression of wildfire is divided between three organizations. Each is governed by different laws and regulations.

City Of Ashland

The City is responsible for both structural and wildland fires within the city limits. This dual responsibility requires different skills, equipment, and organizational needs. The fire department does not have strong wildfire suppression capability.

The City does not have any agreements at this time with other wildland fire suppression agencies to utilize their suppression resources if needed. However, conversations are currently underway with the Oregon Department of Forestry on this subject.

Oregon Department Of Forestry

The State is responsible for protecting all private and City land outside the City limits and the National Forest. This responsibility does not include the protection of structures.

The State and the Forest Service have implemented a "Closest Forces Agreement" that provides for certain fire suppression forces to the initial attack of a fire without compensation for the first 24 hours. After that time, the requesting agency will reimburse the other for the cost of these services. It allows the closest suppression forces to attack the fire without regard to ownership.

Jackson County Fire District #5

The district provides structural protection by subscription to individuals outside the city limits and within the district boundary. However, the boundary does not include all of the Interface and not all of the structures within the boundary have subscribed for fire protection.

The district does not have significant wildland fire capability.

Rogue River National Forest

The portion of the watershed in Federal ownership is protected by the Forest Service. As explained above, they share initial attack responsibilities with the State for lands adjacent to the National Forest boundary. This responsibility does not include structural fires although limited action would be taken if there was a clear threat of wildfire to the watershed. The Agency does not have structural firefighting capability.

FIRE MANAGEMENT

Fire management primarily involves two problems: [1] the risk of a fire starting and the prevention activities that can be taken to reduce that risk and [2] the hazards of a fire reaching a certain size and the actions required to keep that from happening. This section discusses the current situation of these two problems.

Fire Prevention

The wildfire agencies in the Rogue Valley have formed the Rogue Valley Fire Prevention Cooperative to imple-

ment and coordinate a fire prevention program throughout the area. It has become a model for other groups throughout the state. Although the number of human caused fires have undoubtedly been reduced, they have not been eliminated and the potential continues to increase.

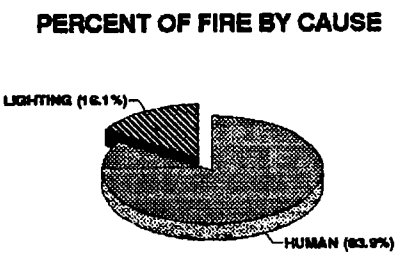


Figure 2

The Interface has undergone steady development over the past several years. The foothills are a favored place to build and live due to the views of the valley, and the vegetation and wildlife of a mountain environment. Approximately 95 individuals or families own 100 tax lots outside the city limits/urban growth boundary. The lots range from 5 to 90 acres in size. They average 10 acres in size and contain approximately 30 structures.

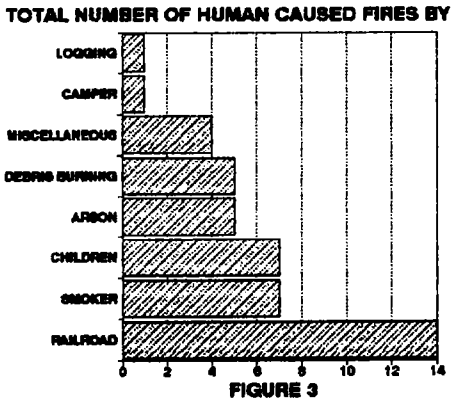


FIGURE 3

In addition, there are 800 dwellings inside of the City limits within the Interface and 1,188 acres of undeveloped land. Of that amount, 468 acres are zoned for development. While the total development cannot accurately be predicted, it is clear that the number of residences in the Interface will be far greater inside the city limits than outside.

...it is clear that the number of residences in the Interface will be far greater inside the city limits than outside.

A fire occurrence analysis of the area outside of the city limits has been completed using State Forestry records.[1] Fifty three fires have occurred since 1967. The following chart illustrates the causes of these fires. Only 7% of the fires were

[1]Rose, Bill Fire Management Officer , Rogue River National Forest, Ashland Ranger District, unpublished data.

The following chart illustrates the causes of these fires. Only 7% of the fires were caused by lightning and most of them occurred in June during the early part of the fire season. They were in the higher elevations and each one burned less than ¼ acre.

The remaining 93% were started by people and most of them [70%] occurred in August and September - the severest part of the fire season. The average fire is also larger than the lightning fires.

A fire analysis has not been done for the Interface inside the city limits. However, it can be concluded that the risk of a fire occurring inside the city limits is much higher than outside because of much higher human activity.

Fire Suppression

The behavior of a fire will determine how difficult it is to control and the potential to reach a large size. It is governed by three major variables : the characteristics of the fuels, the weather conditions, and the type of terrain.

Fuels-

Three characteristics are important to fire behavior. They are -

- **Arrangement of the fuel**

  Fuel that is compacted together and close to the ground, such as duff, does not pose a serious fire problem because sufficient quantities of oxygen necessary for rapid combustion is not available.

  At the other extreme, fuels that exist from the forest floor to the upper canopy pose a very serious threat. These "ladder fuels" can carry a ground fire into the forest canopy and create high intensity, fast moving crown fires. Effective fire suppression under these conditions is impossible.

  Snags are a difficult problem because once ignited they can easily spread fire across fire lines. This problem is greatest on ridge tops and natural fire control lines, such as roads, power line rights-of-way, and cleared areas.

- **Fuel continuity.**

  The more uniform the ground and aerial fuels there are in an area, the faster it will spread. Fire suppression is, in its simplest form, removing fuel from the fire with a fireline. The same results can be attained by interrupting the continuity by shaded fuel breaks, hand piling of fuels in areas prone to fire starts, and along natural fire control lines.

- **Fuel quantity.**

  Small fuels [less than 1/4 inch in diameter] are easy to ignite and will be a major factor in how fast a fire will spread. They are very sensitive to weather conditions and the flammability can change rapidly.

  The larger fuels do not ignite as easily and do not respond as rapidly to weather changes as the smaller fuels. However, they can produce very hot fires that are difficult to control.

An aggressive fire suppression program during the last century has created an abnormally high fuel loading in the watershed. This has dramatically increased the potential for high intensity, stand destroying fires. Fuel is accumulating at a faster rate than it is decomposing and unless modified, will further accentuate the problem.

Fuel is the only factor that humans can alter and the solution to the fire problem must focus on it.

Appendix A describes the amount of fuel in each parcel and assigns a rating of low to extreme. Although a similar process was not done for the private lands in the Interface, similar or higher ratings would probably occur.

Of the 3 primary factors influencing fire behavior [topography, weather, fuels], fuels is the only factor that humans can alter and the solution to the fire problem must focus on it.

Weather-

The long, hot summers in Southwestern Oregon create a difficult fire situation. The absence of summer moisture and low air humidity dry the fuels and make them more flammable. The most severe fire weather usually occurs in August and September.

Wind is a major factor in determining fire intensity, direction, and rate of spread. The difference of a few miles per hour in wind speed can make the difference between success and failure in fire suppression. Unfortunately, afternoon winds are common in the Ashland area because of the heating of the valley air and its' movement up the canyon.

Wind also picks up burning material and drops it long distances in front of the fire and is a prime source of ignition of structures if it lands on a shake roof. It also starts spot fires that can negate the value of fuel breaks and natural fire barriers.

The 1959 Ashland fire and the 1973 Hillview fire are classic examples of the affects of weather on fire behavior. They both spread in the same direction due to afternoon winds. During the afternoon, winds on the Ashland fire increased its size by 1,000 acres an hour. Effective fire suppression is impossible during these conditions.

Topography-

Fire generally burns uphill during the day. It is difficult to suppress a high intensity fire until it reaches the ridgetops or other natural barriers. Therefore, a fire that occurs at the lower part of a drainage has a much higher potential to reach a large size than one that starts in the upper portion.

Topographic features are ideal for the rapid spread of a high intensity fire from the Urban/Wildland Interface into the watershed. Unfortunately, the terrain is not suited to the rapid deployment of initial attack forces into, or out of, the canyon bottoms and safety considerations will complicate the suppression efforts. In addition, it would be very difficult to get effective aerial retardant drops into the canyons.

There have been impressive efforts by the Rogue River National Forest and several landowners to construct shaded fuel breaks.[2] They do not require the total removal of the vegetation and retain an open "park-like" appearance. In many cases, they have enhanced the recreational value of the area and promote the biological diversification of the vegetation. Unfortunately, they do not extend across City lands and

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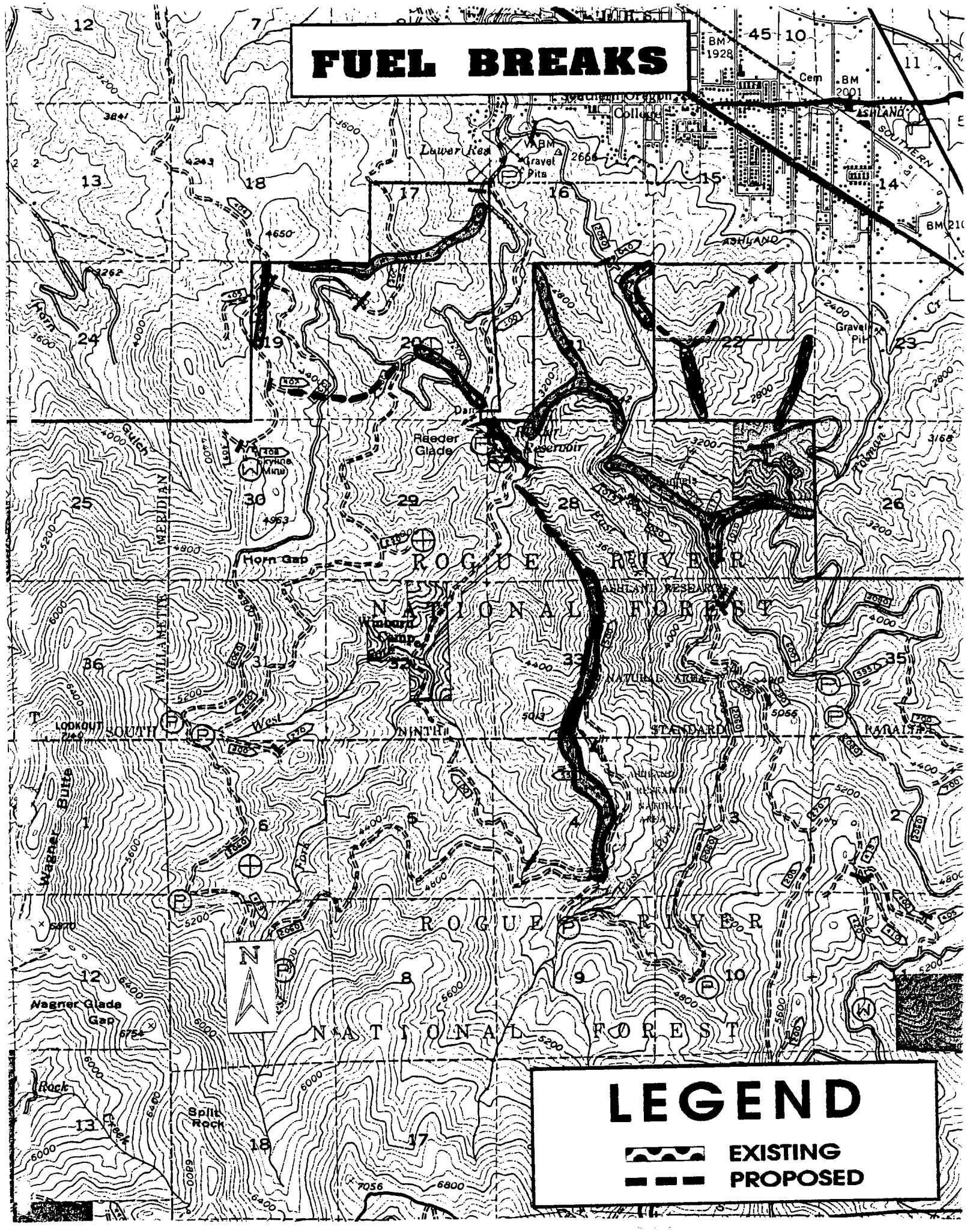
[2]1991 Hamilton Creek Coordinated Resource Management Plan. unpublished document.

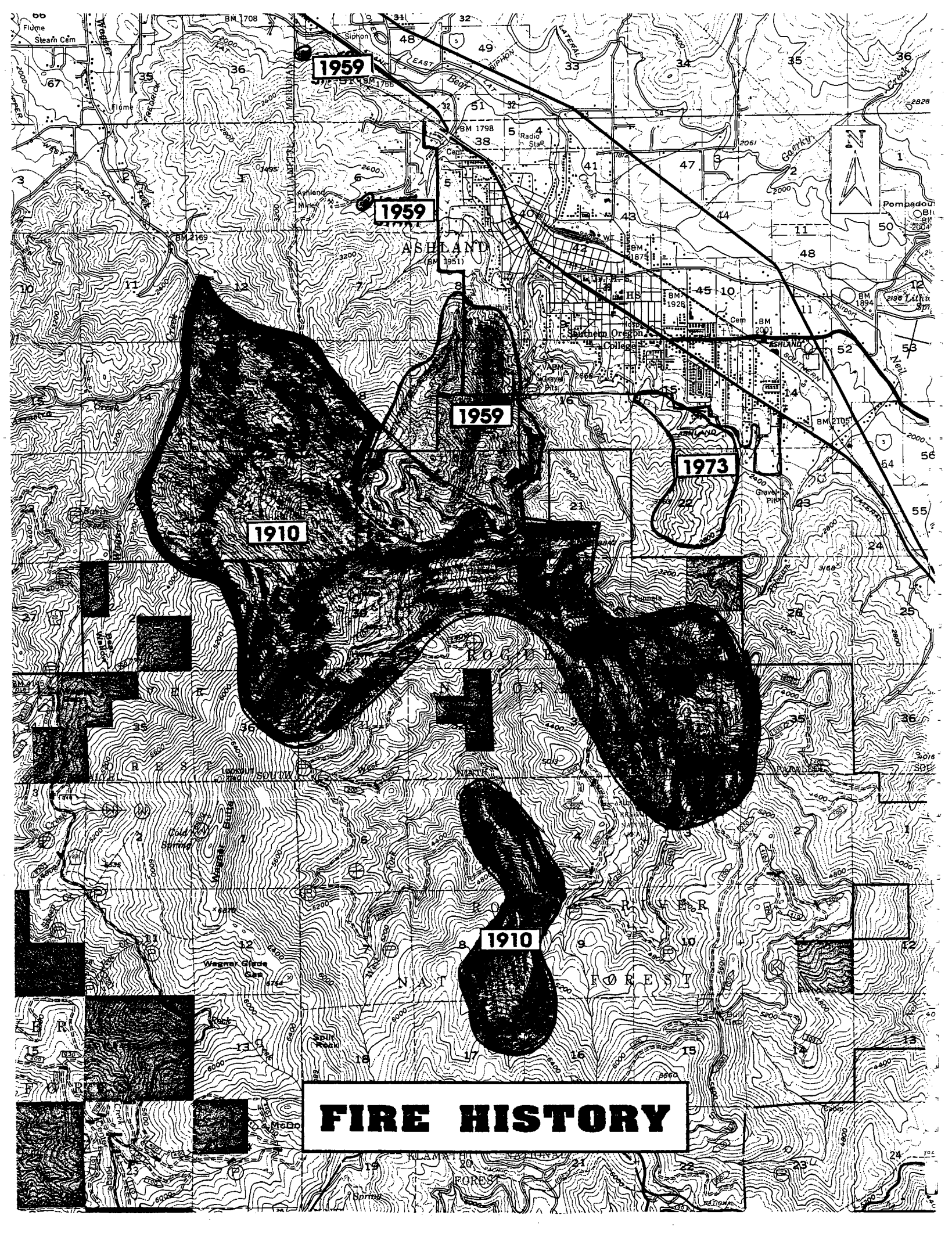
the gaps may be fatal flaws to effective fire suppression efforts. The location of these shaded fuel breaks is shown on the following map.

In summary, the combination of abnormally high buildups of dead and green fuels, the steep and inaccessible topography of the watershed, and long, hot summers create a very difficult fire suppression situation. It is further aggravated by the increasing risk of human- caused fire in the Urban/Wildland Interface. The success of fire management in the Interface is the key to the protection of the Ashland watershed from the catastrophic fire.

Topographic features are ideal for the rapid spread of a high intensity fire from the Urban/Wildland Interface into the Ashland watershed.

Strong, cooperative fire prevention and suppression must be continued. However, the chances of failure are high unless the basic cause of the fire problem is addressed -the need to manage the vegetation by emulating the natural processes of "vegetative thinning by fire" that is an integral part of the ecosystem function.


FUEL BREAKS
Lower Red
Gravel Pits
College
ASHLAND
SOUTHERN
Reeder Glade
Reservoir
Skyline Mine
Horn Gap
ROGUE RIVER
NATIONAL FOREST
ASHLAND RESEARCH NATURAL AREA
Winburn Camp
LOOKOUT
SOUTH
NINTH
STANDARD
WILLAMETTE MERIDIAN
Wagner Butte
Wagner Glade Gap
Split Rock
Rock Creek
LEGEND
EXISTING
PROPOSED


1959
1959
1959
1973
1910
1910
FIRE HISTORY

3 CHAPTER

WATERSHED ECOSYSTEM
VEGETATION
WILDLIFE
FISH
IMPROVEMENTS
GEOLOGY AND SOILS
WATER
RECREATION

CHAPTER 3
RESOURCE CONDITION

WATERSHED ECOSYSTEM

Wildfire plays a dominant disturbance role in the normal functioning ecosystem. Figure 1 is a summary of the agents of disturbance in the long-term ecology plots established by the Rogue River National Forest in the watershed.[3] Generally, fires occurred more frequently in the lower elevations but were of lower intensity and provided "vegetative thinning" that reduced fuel buildup and "thinned" the understory vegetation. Consequently, the forest was more open grown with fewer, healthier trees. Trees of several ages and species often occurred on the same acres. Insects played an endemic role and not an epidemic one in the ecosystem.

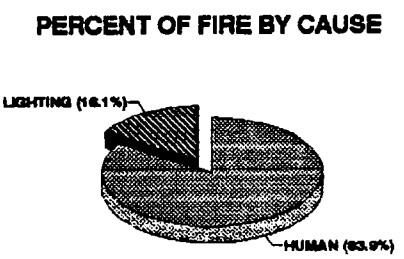


Figure 2

Many of the old-growth trees have been killed and the remainder are at risk.

People have intervened in the ecosystem function by aggressively suppressing wildfire. Paradoxically, the success of these efforts, while protecting short term water quality, has increased the risk of catastrophic wildfire because of the unnatural buildup of both live and dead fuels.

The lack of low intensity "vegetative thinning" fire has also created a forest overstocked with trees that are placing additional demands on the growing environment for limited moisture and soil nutrients. This is reducing the vigor of the forest and insects are attacking the drought weakened trees. Many of the old growth trees have been killed and the remainder are at risk. The problem is further

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[3]Atzet, Thomas, unpublished data, U.S.D.A. Forest Service, Pacific Northwest Region, Siskiyou National Forest.

compounded by the fact that the old growth "replacement" trees must come from overstocked, poorly growing stands where replacement, if it occurs, will be slow and uncertain. Ponderosa pine, sugar pine, and the oaks are slowly being lost and are being replaced by Douglas fir and white fir.

Fire has not played a large role in the riparian zone. Consequently, the vegetation has retained much of its historical "richness" and is in good ecological health. These areas are critical for the maintenance of water quality, wildlife habitat, and functions of both aquatic and terrestrial ecosystems.

Except for the Winburn area, all of the city owned lands are within the Douglas fir plant series - an ecological grouping of similar plant communities. This series is characterized by fire resistant Douglas fir and/or ponderosa pine in the overstory with a wide variety of hardwoods in the understory. The following species indicate site conditions.[4]

Pacific madrone - indicates disturbance.
golden chinquapin - indicates limited soil nutrition.
canyon live oak - indicates shallow soils.
white fir - the best growing sites.

This series is the most resistant to fire effects of those in the watershed. Natural fire occurred about every 25 years and would be a high intensity burn only about 15% of the time. A moderate burn will stimulate seedling germination and the existing younger stands of dense, slow growing Douglas fir probably originated after the 1910 fire, and others of that period, that covered much of the lower elevations in the watershed.

The Winburn area is within the white fir plant association. Ponderosa pine, sugar pine, incense-cedar, and white fir occupy the overstory. This series occurs at a higher elevation than the Douglas fir series and receives more snow and total precipitation and is more productive. Fire occurrence is about every 50 years with the burn intensity similar to the lower elevations. Since white fir is very susceptible to fire, it does not usually occupy a dominant position in the overstory.

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[4]Martinez, P. and Atzet, T. 1991. Vegetation Map for the Ashland Watershed. USDA Forest Service, Pacific Northwest Region, Siskiyou National Forest.

VEGETATION

Forest Lands

The vegetative patterns in the Ashland, Rocca and Hamilton Creek watersheds reflect the long fire history of the area, and occur at random across the landscape. Two age classes are most common. They are -

Old-growth

Ponderosa pine and sugar pine are the predominant old-growth species with some Douglas fir in the lower elevations. It does not occur in large, even-aged stands. Instead, it is scattered over younger Douglas fir, incense cedar, and white fir.

The recent increase in insect activity has eliminated about one-half of the old-growth in some of the stands and created some openings large enough for regeneration to occur. The remainder is not vigorous and is subject to additional insect attack. The remains of past mortality are present on the forest floor and are especially numerous in the Winburn area. The old-growth in some stands was removed by logging about 100 years ago.

It appears that there is less old-growth than there was a century ago. Its replacement is uncertain under the vegetative management practices of recent history. An old growth component is important to the functioning of this ecosystem.

Immature and Mature

Younger stands of predominantly Douglas fir occur under a scattered old-growth overstory. Incidental amounts of incense cedar and white fir are present but there is an absence of ponderosa pine, sugar pine and oak. Several species of hardwoods also occur if the site is not completely occupied by conifers. Pacific madrone is the most common hardwood.

The stands usually have a high amount of biomass. Individual trees exhibit poor growth rates and crown ratios. The lack of tree vigor will delay the time until they have old-growth characteristics and the existing old-growth may be depleted before this occurs.

Some of the stands are large enough to commercially thin. It should be done by helicopter but the areas are too small and scattered to make it economically

feasible. However, this could change if the Forest Service were to have a commercial thinning program on their lands. Unfortunately, the most overstocked stands are presently too small for commercial thinning. Precommercial thinning would create intolerable slash problems unless it was disposed of by chipping, burning, or other methods.

Shrubs

The 1959 Ashland fire created dense stands of manzanita and other post-fire shrubs in the lower areas. The brush is very dense and decadent with large amounts of dead material. The site faces to the south and is hot and dry making reforestation difficult and expensive.

The Interface

The Interface has a long history of frequent fires and the resulting vegetation illustrates this legacy.

Old-Growth

There is very little old-growth. Its absence is probably due to old logging activity as much as the fire history.

Mature and Immature

Dense stands of pole-size Douglas fir occurs on the North facing slopes and canyon bottoms. The hotter, dryer South facing slopes usually have scattered ponderosa pine and Douglas fir with moderate to heavy amounts of manzanita beneath them.

Shrubs

Manzanita and other post-fire shrub species are very common in this area. The 1973 Hillview fire created very dense stands of hardwood "brush" with few tree seedlings beneath it. Older "old-growth" manzanita testify to earlier fires.

Appendix A contains a description of the vegetation for each parcel.

There are no known Threatened and Endangered plant species on City owned lands.

WILDLIFE

A 1974 survey of the Ashland Research Natural Area conducted by Stephan P. Cross, Professor of Biology, Southern Oregon State University, listed 56 species of mammals, 103 bird species, and 27 species of reptiles and amphibians. Not all of these species are to be found on City lands, but it does provide an idea of the wide variety of mammals, birds, reptiles and amphibians found in the area. The riparian habitats along Ashland Creek are particularly rich in species diversity.

The riparian habitats along Ashland Creek are paricularly rich in species diversity.

There are several species on the "sensitive" list prepared by the Forest Service, USDA. These are not yet classified as threatened or endangered under the Endangered Species Act of 1973, but in the judgement of the Forest Service population viability is a concern, and requires special management consideration. Currently on the list is the red legged frog and Townsends western big eared bat. There is an indication the sensitive list may soon be expanded to include the tailed frog, pileated woodpecker, pine marten and ringtailed cat. All of these existing and proposed sensitive species are known to inhabit the Ashland watershed. Their presence within other City parcels has not been documented.

The most significant species, now listed as threatened (with extinction) is the northern spotted owl. The entire watershed has been designated a Habitat Conservation Area (HCA) by the Rogue River National Forest. The Forest Service Owl Management Plan Record of Decision was published in early March, but further court activity seems likely. The Fish and Wildlife Service Owl Recovery Plan, as required by the Endangered Species Act, is due in final form by July 1992. In addition, the Fish and Wildlife Service has a team defining and developing critical habitat areas.

This HCA is one of the most important on the Rogue River National Forest as it provides a part of the link between the Cascade Mountains and Siskiyou Mountain populations of spotted owls.[5]

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[5] Interview with Greg Clevenger, Resources Staff Officer, Rogue River National Forest. 2/13/92.

In the midst of all this agency activity, Congress is working on various legislative offerings intended to protect old growth and owls, and define forest management sideboards in owl habitat. There is no way to forecast how these parallel planning and legislative efforts might ultimately be resolved.

Under the state Forest Practices Act, forest management activities on private land can be permitted within owl habitat, and near nesting sites if a proper plan is prepared that protects the habitat and the owls, and is approved by the State. Presently it appears that sanitation - salvage logging (similar to that done in 1991), commercial thinning and fuels treatment would likely be approved if the objective was to protect and perpetuate owl habitat.[6]

There are two nesting pair of spotted owls near the Winburn parcel and it is likely this is part of their home territory for hunting.

There are from 6 to 9 breeding pairs of owls in the National Forest portion of the watershed. Although none are nesting on City properties, there are two nesting pair near the Winburn parcel, and it is likely this parcel is part of their "home territory" for hunting.[7]

The implications of this for City lands within the watershed are not clear, and may not be until either the Fish and Wildlife Service Recovery Plan is completed, or Federal legislation is enacted.

FISH

Ashland Creek is an important tributary to Bear Creek. Bear Creek is considered a sensitive aquatic habitat by the Oregon Department of Fish and Wildlife, and historically an important spawning tributary to the Rogue River for fall run Chinook and Coho salmon. sea run cutthroat trout, and summer and winter steelhead.

Ashland Creek, from the confluence with Bear Creek, to Reeder Reservoir, supports a small summer steelhead run, a January - May winter steelhead, and November -

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[6]Interview with Tuck Koreiva, Oregon Department of Forestry. 2/12/92

[7]Interview with Wildlife Biologist Fred Way, Ashland Ranger District. Rogue River National Forest, 2/ /92

December Coho salmon run if water levels are adequate. Ashland Creek contains about 5½ miles of spawning and smolt rearing area. There is also a resident rainbow trout population from the dam to the confluence. Native cutthroat trout are apparently no longer present in this reach.[8]

Stream flows in Ashland Creek are usually adequate for fish production. Temperatures are within limits for spawning and rearing. Riparian vegetation and shade - important to keeping water temperature low - are good. Structural habitat (pools, gravel, and hiding cover) is only fair, however. According to the Oregon Department of Fish and Wildlife (ODF&W) there are opportunities for structural habitat improvement projects.

The Rogue Fly Fishers have "adopted" the Bear Creek system and have initiated many cooperative projects to improve fisheries habitat and water quality. The ODF&W receives many requests from service clubs, high schools and others to cooperate and participate in fisheries and stream improvement projects.

Sediment is a major concern and often a deterrent to good habitat conditions in both Ashland and Bear Creeks. In the past, artificial surges of sediment from sluicing Reeder Reservoir has had detrimental effects on fisheries spawning habitat, invertebrate food sources, water temperatures and ultimately fish numbers.

The advent of a Memorandum of Understanding between the City, County and State agencies, executed on April 12, 1988, seems to have done a lot to mitigate adverse impacts of sluicing operations. The key points of this agreement are:

- Reeder Reservoir may be sluiced every third year, if needed,and an adequate snowpack exists to refill it.
- Limit any single sluicing event to 6,000 cubic yards, to occur during the high water periods of February through March.

[8]Interview with Jerry MacLeod, Fisheries Biologist, Oregon Department of Fish and Wildlife, 2/7/92

- Install a diversion structure at the mouth of Ashland Creek to trap sediments, and prevent upstream passage of fish preceding a sluicing event. This structure has been completed.

- City of Ashland will monitor the results.

This process was implemented in 1986 and was successful in trapping the majority of sediments produced by the sluicing event. The reservoir has not been sluiced since 1986.

Approximately ¾ of a mile of the West Fork of Ashland Creek flows through the Winburn parcel.

The Forest Service conducted stream surveys of both the East and West forks in 1969-1970, and again in 1990. The following table is a summary of conditions found in the West Fork:

West Fork of Ashland Creek

	July 23, 1969	September 17, 1990
Water Temperature	58 degrees F	55 degrees F.
Stream Flow	8-9 CFS	3.3 CFS
Fish Species	Cutthroat	Cutthroat
Pool/Riffle ratio	10% pools	3% pools, 11% glides
Large Wood Material	unknown	153 pieces/mile

The West Fork supports a pure strain of cutthroat trout. Habitat conditions are fair to good. Large woody material exceeds the desired amount of 100 pieces per mile, but this is not necessarily a problem. Pool to riffle ratio is low. Riparian vegetation is in good condition, providing ample shade, although more conifer vegetation would be desirable. This survey made the following management recommendations:

- Retain the woody material presently in the system.

- Increase the pool to riffle ratio via blasting holes in the bedrock. An ideal ratio would

approach 40/60 - 40% of the stream length should be pools and the remaining 60% should be riffles.

- Increase instream scour elements with tree length logs and boulder elements. Also increase cover elements for spawning adults.

IMPROVEMENTS

Roads in the forest lands -

There are approximately four miles of road on City lands for the primary purpose of providing access to the filtration plant and Reeder Reservoir. The road is closed by gate, and not open to public travel.

The roads are single lane, have sharp curves, and are often steep. Alignment "fits the ground" and there was not excessive earth movement in construction. Much of the main access road is within or adjacent to the riparian zone along Ashland Creek and Reeder Reservoir. In a few instances, raw fill slopes are within a few feet of the reservoir shoreline. The road is not surfaced and its close proximity to water makes it a prime source of sediment into Ashland Creek. The lack of sufficient culverts and infrequent maintenance compounds the problem.

The road is not surfaced and its close proximity to water makes it a prime souce of sediment into Ashland Creek.

The upper half of the road from the reservoir to Winburn camp is impassable. There is a section on very steep side slopes where material has rolled into the road from the unstable cut bank. If not removed very carefully, it would end up in the West Fork of Ashland Creek. Some erosion is still occurring in the wheel tracks.

Roads in the interface-

There are a wide variety of road conditions ranging to wide paved roads on gentle grades to unimproved one-way dirt roads with no provisions for turning around. It would be difficult to rapidly get fire fighting equipment into some areas or to evacuate people.

The dirt roads are on highly erosive granitic soils and often have steep grades. They are a significant source of erosion.

Trails in the interface-

There is a user established trail system within parcels 10 and 11 adjoining private lands. They generally utilize old logging spurs and firelines. Some sections have erosion problems, some are poorly located, and some lead into private property. They are heavily used by local residents.

Rock Pits-

The granite pit next to the Ashland Loop Road has several acres of exposed soil with no provisions for drainage. The uncontrolled water has created large gullies and the eroded material is being dumped directly into Ashland Creek.

The pit is also an eyesore and detracts from the scenic values of the area.

The granite quarry in parcel 5 has not been used as a quarry for several years and vegetation is slowly reclaiming the site. It appears to be used as a construction dump site and there are large piles of material partially covered with plastic. Asphalt appears to be mixed in with this material.

The road leading to the site does not have any drainage with a gully over a foot deep running part of its length.

GEOLOGY AND SOILS

The area is within the Klamath Mountain geologic province. Intrusive igneous rocks formed about 150 million years ago during the Jurassic Age. Uplifting exposed these granite like rocks with quartz diorite being the most common. They are deeply weathered and partially to fully decomposed. Granitic soils are developed from this geology and they have the following characteristics:

> They are coarse textured and do not bind together very well. When the protecting duff layer is removed, the exposed soil particles can be easily moved by water and have a high potential for sheet erosion and mass soil failures. Road construction disturbs large volumes of soil and is a primary course of

erosion. The lack of proper road maintenance aggravates the situation.

The combination of shallow soil with a coarse texture does not retain water and they are generally "droughty". There is also a lack of organic material and these two factors produce a soil with low to moderate productivity. Revegetation of denuded areas can be slow and uncertain.

Chapter IV of the City Comprehensive Plan contains an excellent write-up of the geology and soil of the area. The reader is referred to it for additional detailed information.

WATER

The community is very dependent upon a fire and erosion prone watershed for its domestic water. While some additional water is available from the Talent Irrigation District during the summer, it is not an adequate substitute source of water if a catastrophic event occurs in the watershed.

Water quality and quantity is very important to the community. A "hands off" management approach has, at least in the short-term, produced high quality water. While it is more difficult to measure, quantity has probably been reduced because of the additional water demands of the vegetative biomass. A reduction in the amount of vegetation should increase water yield while reducing the fire hazard.

Ashland Creek has a steep gradient. Natural erosion causes accumulations of decomposed granite to be "stored" in the stream bed, and periodically flushed down the drainage by high intensity storms.[9] This affects water quality to downstream users as well as domestic use. Bear Creek is also impacted.

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[9]Rolle, S. et. al. 1987 Origins and Characteristics of Sedimentation in Reeder Reservoir, USDA Forest Service. Pacific Northwest Region, Rogue River National Forest.

RECREATION

Forest Lands

The primary access road to the water treatment plant and Reeder Reservoir is closed year around to public entry by locked gates.

The posture of the City has been one of discouraging public use of the watershed. The watershed is closed, when fire conditions warrant, to both vehicle and foot traffic under a Memorandum of Understanding with the City and via an order of the Forest Supervisor, Rogue River National Forest.

During the winter the Ashland Loop road is partially closed to vehicle use on weather and road conditions. This is to prevent rutting of the road system and erosion. The section from town to Four Corners is left open. Hiking and biking into the watershed is permitted during this period.

The Forest Service considers both the fire season and winter partial closures to be generally effective in achieving the objective of protecting the watershed. Cooperative and joint administration of the closures by the Forest Service and the City is the key to continued success.

Considerable public use of the watershed occurs year around. For example, there is a well-used hiking and mountain bike trail from the Crowsan Hill reservoir that generally follows the main north-south ridge paralleling the Ashland Loop Road. Locals call it the "Alice in Wonderland" trail for the feeling it evokes as it meanders beneath a dense stand of manzanita and madrone.

The Forest Service maintains a trail head parking lot for the Ashland Loop Nature Trail. From this parking lot a user established, unnamed trail winds downhill and ends at the upper end of Reeder Reservoir. Another user established trail, the "Toothpick" trail leaves the Loop Road near the same parking lot and proceeds easterly along an old water ditch through the Epstein property and intersecting the Tolman Creek Road in Section 29.

The old maintenance roads and trails along the various water ditches just above the City are also well used by

residents for hiking, walking the dog, and relaxing strolls.

The Forest at Ashland's Doorstep", [10] a study of visitation to the Ashland Creek watershed completed in 1986 set forth these major findings:

- The watershed is visited by a significant portion of Ashland residents (41% of total residents interviewed.)
- The area plays an important role in providing for Ashland residents' recreation needs.
- There is little information readily available on the area's sensitivity.
- Visitation will increase even if nothing is done...unmanaged use of the area could result in overuse and increased fire risk.

In summary, there is substantial year around public use of various trails and roads adjoining and within the watershed. Hiking and mountain biking are the predominant uses. There have been instances of seasonal occupancies on both the National Forest and City owned land, ranging from overnight camping to longer term abodes -usually consisting of pole and plastic tent structures.

Interface

There is an extensive trail system within parcel 10 that local residents use for mountain biking. hiking. horseback and occasional motorcycle riding. Visitors access this system through the Ordsen- Todd Woods parcel and private lands.

This "user developed" system of trails follows old logging spurs and firelines. As such they are not always located and designed to accommodate the kind and level of use they are experiencing, and will be difficult to maintain.

Some trails are steep, most are without water-bars or other erosion prevention measures. There is no parking.

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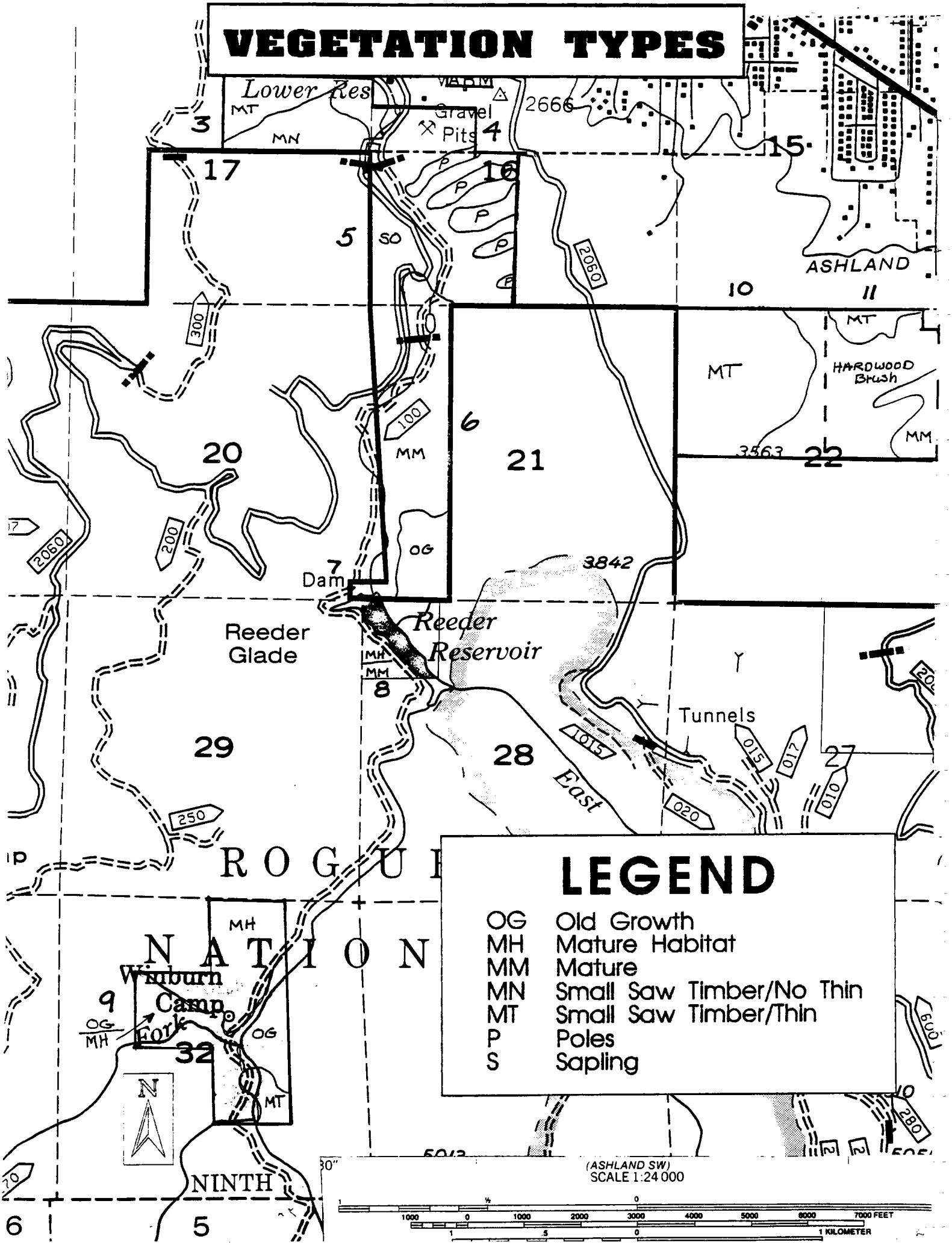
[10] Hess, Jurgen A. 1986 The Forest at Ashland's Doorstep. Clemson University, Department of Park, Recreation, and Tourism Management, 50 pages

rest rooms, signing and other use information available. Some of the trails are accessed by trespassing over private property.

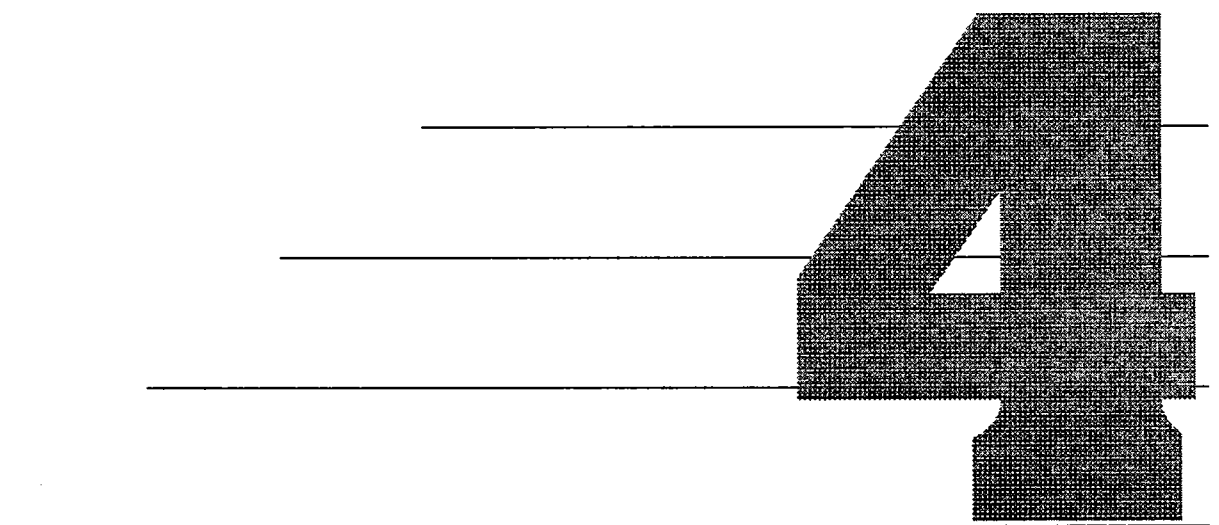
This area of recreation use is also a critical wildfire zone. Careful planning of recreation facilities and use, combined with appropriate management and regulation is essential in order to mitigate the increased fire risk.

VEGETATION TYPES



LEGEND

OG	Old Growth
MH	Mature Habitat
MM	Mature
MN	Small Saw Timber/No Thin
MT	Small Saw Timber/Thin
P	Poles
S	Sapling



CHAPTER

OVERVIEW
URBANIZATION AND THE INTERFACE
ADMINISTRATIVE
ECONOMIC CONSIDERATIONS

CHAPTER 4
SOCIAL POLITICAL CONDITION

OVERVIEW

The Ashland community, both inside and outside of the city limits, is environmentally aware and citizens share a similar environmental ethic. Some of these shared views include-

- Preservation of the scenic beauty and mountain backdrop to the City.
- Protection of the watershed from catastrophic wild fire, especially from the Interface.
- Protection of residents and property from wildfire.

These strongly held values are reflected in citizen interactions with City, County, and federal government, and demonstrated in the City of Ashland Comprehensive Plan and City ordinances. Individuals are actively involved as volunteers for a wide variety of projects. They are willing to " do as they say."

The health of Ashland Creek and the watershed is of paramount concern to residents.

Many of the residents know each other, and share a mutual concern about wildfire, preservation of scenic beauty, wildlife, and other amenities that attracted them to this area. Except for the people living in the Hamilton Creek area, there is no formal organization or association of people residing in the Interface.

The health of Ashland Creek and the watershed is of paramount concern to residents for environmental and economic reasons. They are aware that a continuous, dependable supply of clean, cold water is a key factor to the continued well being of the community, and in many ways the barometer of their environmental stewardship.

Generally, the community supports management within the watershed that is specifically designed to:

- Reduce fire hazard and risk.
- Preserve water quality and quantity

- Permit a level of public day use consistent with fire protection and water quality protection.

There is a plethora of existing plans, goals, decisions, direction and data for the forestland and the Interface that are designed to maintain and enhance the community's environmental ethic. A summary of existing directions can be found in Appendix B.

URBANIZATION AND THE INTERFACE

The area of land called the Urban\Wildland Interface is difficult to precisely delineate.

Generally it is the transition zone between the City and the forest lands to the west. It's bounded by Tolman Creek on the South, Wrights Creek on the North, the city limits on the east and the National Forest Boundary on the west.

The Interface is an 800 pound gorilla with a match.

Claude Curran

Within the City's Urban Growth Boundary (UBG) there are approximately 1,188 acres of undeveloped land, of which 468 acres are zoned for potential development. With the exception of areas near Wrights Creek and Crowsan road, all of these 468 acres are projected to be needed for future urban growth.[11]

Within the Jackson County portion of the Interface there are approximately 100 tax lots ranging in size from 5 to 90 acres, with one ownership of 900 acres. There is currently an estimated 30 structures scattered among these parcels.

City Planning

The City's Goal: *"It is the City of Ashlands' goal to maintain a compact urban form and to include an adequate supply of vacant land in the City so as not to hinder the natural market forces within the City. and to ensure an orderly and sequential development of land in the city limits."*[12]

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[11] Ashland Comprehensive Plan, Chapter 12

[12] Ibid.

The City's policy is to maintain undeveloped lands within city limits and the UGB in a rural state until annexed by the City.

Jackson County Planning

The Jackson County goal regarding future development is *"Preservation of open space, forest lands and agricultural areas and maintenance of the over all rural character of the county."*[13]

The County's area within the Interface is zoned either Forest Resource, Woodland Resource or Open Space Reserve. The policy is to permit minor home occupation as an accessory use, provided that such use does not adversely affect forest resource management activities, or constitute a fire hazard.

There are opportunities for other uses, such as churches, campgrounds and guest ranches, to name a few. They must meet certain conditions, and are termed "Conditional Uses".

Minimum parcel size for dwellings is 160 acres in Forest Reserve, and 20 acres in Woodland Resource.

In addition, the County has designated the Ashland Watershed as an Area of Special Concern: *"The County shall, to the extent of its legal authority, provide for the protection of the Ashland Municipal Watershed from uses that could impact quality of water and increase erosion."*[14]

The County has a special policy regarding wildfire: *"county land use actions shall be based upon a determination of acceptable risk of wildfire hazards, and such hazards shall be reduce through positive county action in terms of guiding development and improving fire protection services."*

> *"a) discourage intensive development outside of rural fire protection districts through zoning until fire service can be provided, or until such development can be made fire safe."*

City-County Coordination

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[13] Jackson County Comprehensive Plan, 1989

[14] Jackson County Land Development Ordinances, 1984

Development along (both inside and outside) the City's UGB is subject to a joint management agreement between the City and the County where both jurisdictions will be able to comment on the effect of land use decisions, while the County retains the final authority.

Summary

Current planning by both the City and the County permit continued, but careful development of lands within the Interface. There is, then, the potential for significant additional residential and other forms of development in this Critical Fire Zone.

Through existing City and County Planning, citizens have processes available to influence both how much, and in what manner development occurs in the Interface.

It is beyond the purpose and scope of this planning process to pass judgement on how much, if any, additional development is prudent and necessary. It is appropriate to point out the obvious - that additional development will increase the risk of wildfire.

Further urbanization of the Interface will be decided on a case by case basis, as parcels are either proposed for annexation to the City, or residential and conditional development is proposed in lands zoned by the County.

This Forest Management Plan does recommend policies and action items, in addition to those already contained in City/County plans and ordinances, designed to decrease the odds of catastrophic fire starting from within the Interface.

ADMINISTRATIVE

Organization

Ashland has an elected, five-member Parks and Recreation Commission which administers all lands owned by the City of Ashland that have been dedicated for park or open space purposes. This commission was created by City Charter and is empowered to levy taxes for park maintenance and improvements from an annual budget. While they use the levy to maintain lands, the Parks and Recreation Commission has no authority to purchase or acquire new land. This must be

accomplished by the City Council, and the lands then dedicated to the Parks Commission by mutual agreement.[15]

The City has recently acquired the Superior property [parcel 10] and the Brevit property [parcel 11] for open space as part of the Siskiyou Mountain Park plan. These lands have not been dedicated to the Parks Commission at this time.

The City administration is currently responsible for the management of all City owned lands outside of the city limits. This responsibility appears to be fragmented throughout the organization and there is no one, except for the City administrator, assigned the total responsibility for the management of these lands. Further, integrated resource input in decision making is often lacking. The organization also lacks the necessary natural resource skills for forest management. However, these skills are abundant in the community with other government agencies, institutions and citizens.

The 1929 Cooperative Agreement between the City of Ashland and the Department of Agriculture, Forest Service provides for the management of the watershed for it's water values. It is essentially an Agreement of Principles with no requirements for cooperative planning efforts or sharing of natural resource skills. Requirements for coordinated fire closures is lacking.

ECONOMIC CONSIDERATIONS

City Lands

The timber resource on the parcels have economic value. The greatest value is in the old-growth trees in the Winburn area. However, the implied constraints in existing and proposed natural resource goals would preclude their harvesting for many years. The exception is salvaging the dead and dying trees. There are also scattered, commercial size timber stands that should be thinned as soon as possible to improve their growing condition. The economic returns on these stands will be minimal with costs roughly equaling the revenues. While there are long term economic values that can be realized for the management of the

[15]Ashland Comprehensive Plan, Chapter VIII, 1991

forestland, the economic returns from timber harvest in the next 5 years will be negligible.

A conservative estimate to complete the projects listed in Appendix A is $80,000. It does not include overhead or other indirect costs or any volunteer involvement.

Private Land in the Interface

Fuel management on private land within the interface, both inside and outside of the city limits, is the key to an effective fire management program for the Ashland watershed. Although the city must lead by example, the completion of fire hazard reduction projects on their land will not be sufficient to substantially reduce the risk of catastrophic fire.

Some financial assistance to the private landowner for forest improvement projects may be available from the Agricultural Stabilization and Conservation Service. The following is a summary of three programs that are available. The landowner should contact the ASCS for additional information. They are located at 1109 Ellen Ave. in Medford. The phone number is 776-4270.

- **Stewardship Incentives Program [SIP]**

Eligibility - Non-industrial private landowners with at least 5 acres and not more than 1000 acres can participate in the program. The policy is to apply this program to forestland with existing tree cover or other rural lands suitable to the conversion to program practices.

Purpose - The purpose of the program is to assist private landowners meet a variety of economic, environmental, and social benefits. The integration of all resource values are to be considered in developing a long-term management plan.

Practices - A long-term Stewardship Plan must be developed by a resource professional and certified by the local service forester of the Oregon Department of Forestry before cost-sharing funds will be approved for any on-the-ground activities. A wide range of resource projects are considered for funding.

- **Agricultural Conservation Program [ACP]**

Eligibility - Any individual, group, association or corporation may be eligible and is no ownership size

restrictions. The land must be suitable for forestation or improved forest management.

Purpose - Forestry practices are used as a conservation measure to maintain long-term soil productivity and water quality.

Practices - Cost-sharing for help with tree planting and timber stand improvement is provided. Although timber production is a consideration, the primary purpose of the forest management activities is for general soil and water conservation purposes.

- **Forest Incentives Program [FIP]**

Eligibility - Any landowner is eligible provided they are not regularly engaged in manufacturing forest products. The land must be capable of producing marketable timber crops and meeting minimum productivity standards. There is a maximum of 1,000 acres that can qualify for the program.

Purpose - The goal of this program is to increase timber production on the more productive privately owned forest lands.

Practices - Reforestation and timber stand improvement practices that increase the timber productivity are eligible.

CHAPTER 5

THE ICO'S ISSUES AND CONCERNS OPPORTUNITIES

CHAPTER 5
ISSUES, CONCERNS, & OPPORTUNITIES

OVERVIEW

A major step in the development of this Plan has been the identification of Issues, Concerns, and Opportunities. These "ICO's" are related to the protection and management of the City lands within and near the Ashland watershed, and the management of the Urban-Wildland Interface fronting the watershed.

The "ICO's" were developed through meetings with the Ashland Planning Advisory Group, the public, and individuals. The consultants also applied their own knowledge and experience. These are a consolidation of the original set of "ICO's".

The resolution of key issues and concerns, and the utilization of opportunities are the basis for the plan's management recommendations, guidelines, and action plan items.

ISSUES AND CONCERNS

Ecosystem Health

How do we regain and maintain the biologically diversity and resiliency of City's forest lands, within the context of the larger watershed managed by the Forest Service, U.S.D.A.?

- including soil protection
- including retention of an old growth component
- including production of high quality water

Discussion - This issue is the result of the long term, successful exclusion of fire from the watershed. It is a fundamental issue that underlies other pressing problems that are symptomatic of this issue; e.g., threat of catastrophic fire. A more complete discussion of this phenomenon can be found in the "Existing Conditions", chapter 3.

Recreation Use:

How should the City manage the growing recreational use - hiking, horseback riding, mountain biking - of City forested lands?

Discussion - In the interest of protecting water quality, and reducing fire risk, the City has limited public access to their lands. Through cooperation with the Forest Service, portions of the watershed is closed during periods of high fire danger, and during wet periods when road damage could occur.

The City has recently acquired 280 acres of forest land in the Hamilton Creek and Rocca Creek watersheds. Although formally privately owned, these lands have a history of public recreation use.

City lands both within and outside the Ashland Creek watershed are experiencing hiking, biking and other forms of daytime recreation use. Use appears to be increasing as the community grows in population. The City is faced with managing this use to provide outdoor experiences wanted by residents, and regulating the use to protect watershed and other resource values from wildfire, erosion and illegal activities.

Land Management Organization

How should the City organize to manage the resources and uses of the growing inventory of wildland and forested acres under its stewardship?

Discussion - The City's organizational structure does not reflect its growing role and responsibility in managing forest lands. Responsibilities need to be clarified.

Implementation

What programs and funding sources are there to implement the Plan's recommendations, management guidelines,and action plan?

Discussion - The public is concerned that a good plan might be developed without any practical way to fund and implement it. There is a strong interest in a

practical, "hands on" plan that citizens can help implement.

Fire Suppression Coordination

How can the City and citizens achieve further coordination of City, County, and State fire suppression organizations, and get on-site technical help to Urban-Wildland Interface dwellers?

Discussion- People who own land or have residences within the Urban/Wildland Interface, due to an educational effort by fire agencies, understand they do not have structural fire protection. They accept this dilemma, but point out that transcending their immediate problem is the need for the best in fire emergency coordination and preparation by existing fire agencies. They correctly point out that a major conflagration will affect all in Ashland, not just Interface dwellers.

OPPORTUNITIES

What can citizens do to:

- *Achieve a greater sense of community, more networking, productive relationships, and new friendships during the planning and implementation process?*

- *What can the City and citizens do to further peoples - children and adults alike -knowledge, understanding and support of the importance and sensitivity of the City lands and watershed, and their protection and management?*

Discussion- As Pogo said "We find ourselves surrounded by insurmountable opportunities." This planning process, and particularly plan implementation, will afford citizens a chance to become strongly involved in management of City forest lands and the watershed. The energy and interest demonstrated at the public meetings can be directed toward positive results during implementation.

6

CHAPTER

IMPLEMENTATION STRATEGY
DESIRED FUTURE CONDITIONS
NEW GOALS AND POLICIES
ROLES AND RESPONSIBILITIES

CHAPTER 6
MANAGEMENT DIRECTION

INTRODUCTION

Chapter III and IV describe the historical and current condition of the natural resources on City lands outside of the city limits. It is the basis for determining how well the City's Comprehensive Plan is being achieved and what barriers prevent its implementation.

Chapter V evaluates the conditions described in Chapters III and IV, and together with concerns voiced by the general public,describes the problems that need to be resolved in this document. It must be emphasized that our limited understanding of biological processes, as affected by human history and management over the past century is very incomplete yet forms our clues for future management. Consequently, the proposed direction should be reviewed periodically as new information becomes available and this document changed as necessary.

This chapter provides guidance in resolving the problems described in Chapter IV. It contains a general description of a Desired Future Condition - a vision for the next century. The goals and policies described in this document and the City's Comprehensive Plan indicate **what** [goals] needs to be achieved and **how** [policies] it will be accomplished. The Action Items describe **when and where** things need to be done.

IMPLEMENTATION STRATEGY

The following actions are key to the implementation of the Plans' goals, policies, and action items.

- A "Board of Directors" representing the community and affected government agencies should be appointed by the City Council to resolve pressing natural resource issues that are beyond the scope of this Plan. Specifically, three additional project-level resource plans are needed to resolve the community's concerns. They are -

    1. A Fire Management Plan for the Interface including lands within the city limits.

2. A Recreation Plan for the Interface, including some Rogue River National Forest lands, that utilizes the recreational potential in ways that are consistent with fire management and other resource goals.

3. An Ecosystem Management Plan for the Ashland watershed. Biological diversity goals cannot be attained for City lands until adjacent lands are considered and common goals established and implemented for all ownerships.

- Develop a strong community volunteer program to assist in the implementation of this Plan. Two efforts should be especially effective.

  1. A volunteer "Good Host" citizen patrol would establish a positive City presence with recreationists, and improve the quality of the recreation experience while achieving compliance with resource restrictions.

  2. An "Adopt a Forest" program where community organizations would complete natural resource projects on a given area would greatly reduce the cost of implementing this Plan and provide a sense of "ownership".

- Amend the Cooperative Agreement with the Forest Service to provide for use of Forest Service resource specialists on City projects on a reimbursable basis.

DESIRED FUTURE CONDITION

Forestland

The Rogue River National Forest Land and Resource Management Plan describes a future condition for the watershed as follows:

> *"The landscape will achieve a near natural condition over time, with the exception of roads, fuel breaks and developments required to manage the watershed".*

This description provides a good starting place for articulating a desired future condition for the City's forestland. It is assumed in this chapter that parcel 10 [the Superior property] and parcel 11 [the Brevit

property] is part of the Interface and is not included in this section.

Desired Future Condition

Ecologically sound processes will continue to be the primary focus affecting the watershed. The City parcels will have a natural appearance to the casual observer.

An increase in some vegetative management activities (tree salvage, thinning, fuels reduction) will be apparent to the close or knowledgeable observer.

In order to emulate the historical role of fire in the ecosystem, a carefully applied program of tree salvage, thinning and prescribed fire will be introduced. Wildfire and judicious amounts of planned "stand renewable" harvesting will provide for natural regeneration. As a result a more diverse vegetative pattern will gradually re-emerge. The landscape will appear as more of a mosaic of vegetative species, ages, sizes and openings.

The vigor of the remaining old-growth will increase. The next generation old growth will be identified and is thriving.

Water quantity will increase as the amount of live vegetation is reduced. Although natural processes will continue to deposit sediment in the streams, water quality will be high and have a positive affect on Bear Creek.

Shaded fuel breaks will cross some of the City's parcels as part of a larger system of fuel breaks constructed on National Forest lands. The vegetation within the fuel breaks will contribute to the biological diversity and recreation opportunities of the area.

Forest fuels will steadily decreased in volume and continuity as dying trees have been salvaged, dense stands thinned, a system of fuel breaks completed, and prescribed (broadcast) burning and other fuel disposal projects completed.

Streamside (riparian) areas will retain their ecological integrity. Habitat improvement projects below the reservoir have increased both anadromous and rainbow trout spawning success and numbers.

The soils resource will be protected and long-term productivity maintained. Project activities will be carefully executed to minimize soil erosion and compaction.

Recreationists will use the roads and trails in areas open to public use, and be aware of the closures on other portions of the watershed. Forestland parcels will become an integral and important part of the system of parks and natural areas at the community's back door.

An assertive fire prevention and education program will be in place and recreation development and use strongly reflect responsiveness to fire and soil erosion issues.

The City's management of its forestland becomes a model of state-of-the-art ecosystem protection and management. These lands provide a significant contribution to the community's "quality of life".

Interface

Desired Future Condition

Homeowners will have formed an Ashland Interface Homeowners Association and accept the responsibility to reduce the wildfire risk in their area on both developed and undeveloped parcels.

Measures will have been taken to ensure adequate structural and wildfire suppression capabilities through a variety of means including zoning, education, cooperative agreements, and suppression contracts. Fire suppression agencies will develop into an integrated, well-rehearsed organization to deal with both structural and wild fire prevention and suppression.

Past accumulations of vegetation (fuels) will be reduced to or below natural amounts. This will be thoroughly planned and carefully accomplished in order to maintain a diversity of vegetative species, provide wildlife habitat, and minimize soil erosion.

General citizen awareness of fire prevention and suppression needs will be high.

New development and construction will be done with fire prevention and suppression a high priority consideration.

NEW GOALS AND POLICIES

GOAL: UTILIZE THE INTEREST, ENTHUSIASM AND KNOWLEDGE OF ASHLAND RESIDENTS THROUGH COOPERATIVE PROJECTS AND VOLUNTEER ORGANIZATIONS.

Policy

A. Acquire the organizational capability to develop and maintain strong community volunteer efforts in programs such as "Adopt a Forest", a community "Good Host" patrol on City owned lands, etc.

GOAL: PROVIDE THE ORGANIZATIONAL STRUCTURE AND DEFINE THE RESPONSIBILITIES THAT WILL ENSURE CAREFUL PROTECTION AND THOUGHTFUL MANAGEMENT OF THE CITY'S Forestland AND NATURAL RESOURCES.

Policy

A. Have the necessary natural resource management skills within the City administration to provide for the integration and coordination of resource issues on City lands.

GOAL: PROMOTE BIOLOGICAL DIVERSITY OF TERRESTRIAL AND AQUATIC ECOSYSTEMS.

Policy

A. Establish a partnership with the Rogue River National Forest to develop and implement specific criteria to attain the biological diversity goals for the Ashland watershed.

B. Designate the Winburn parcel as an ecosystem study and interpretative area in partnership with Southern Oregon State College. Access to be authorized by written permit.

C. Monitor critical components of the ecosystem for changes in condition.

D. Encourage the use of City lands as an "ecosystem learning center" by Southern Oregon State College, the local school system, and interested local organizations.

E. Retain existing old-growth as long as possible and manage younger trees in a manner that they will become the "replacement" old-growth as rapidly as feasible.

GOAL: PLAN AND MANAGE WILDLAND VEGETATION AND OTHER RESOURCES IN A MANNER THAT EMULATES NATURAL PROCESSES.

Policy

A. Use prescribed fire and timber harvesting in a way that emulates natural ecosystem disturbances of various intensities.

B. All logging activity will be done by helicopter or horses unless an evaluation by hydrologists and soil scientists indicates that unacceptable erosion will not occur.

GOAL: REDUCE THE FUELS IN A MANNER THAT ENHANCES BIOLOGICAL DIVERSITY AND LONG-TERM SOIL PRODUCTIVITY.

Policy.

A. Retain 4 to 7 snags and/or large down logs per acre on sites outside of natural wildfire control lines.

B. Encourage the reduction of the fire hazard on undeveloped land within the city limits.

C. The City shall work with the Oregon Department of Forestry, interested landowners, and other government agencies to develop and implement a comprehensive fire management plan for the Urban/Wildland Interface.

D. Strengthen the capabilities to suppress wild fires within the city limits by contracting with the Oregon Department of Forestry for wildfire suppression.

GOAL: TO PLAN AND MANAGE RECREATION USE IN A MANNER THAT IS COMPATIBLE WITH PRIMARY WATERSHED VALUES AND GOALS.

Policy

A. Invite and encourage public use where it can be managed. Be clear on what uses are prohibited, and what lands are closed to the public, and the reasons thereto.

B. Limit recreation use to day use only. Emphasize non-motorized uses such as hiking, mountain biking, horseback riding and interpretation.

C. Direct recreation use to the lower elevation properties, specifically parcels 3, 4, and 5 if/where fire risk can be managed.

D. Continue to limit public access in the immediate vicinity of Reeder Reservoir,[parcels 6, 7, 8] and the Winburn area [parcel 9].

E. Establish a community volunteer "Good Host" program to provide a high profile presence on City forested lands in the watershed where needed to ensure acceptable public use.

F. Develop a Memorandum of Understanding with the Parks and Recreation Department to manage recreation improvements the administer recreation use until these lands are dedicated to the department by the City Council.

G. Ensure integration of fire, soil erosion, and other watershed issues in developing and managing recreation use.

GOAL: IMPROVE THE AQUATIC HABITAT IN ASHLAND CREEK BELOW REEDER RESERVOIR FOR BOTH ANADROMOUS AND RESIDENT FISH.

Policy

A. Obtain the assistance of the Oregon Department of Fish and Wildlife and/or the U.S.D.A. Forest Service for the selection, design and technical oversight of the installation of fisheries habitat improvement projects.

B. Develop a cooperative agreement with the Rogue Flyfishers organization to construct projects under a volunteer arrangement.

C. Reintroduce native cutthroat trout in Ashland creek from Reeder reservoir to Lithia Park.

D. Retain most snags in the riparian zone to provide for the aquatic diversity of Ashland Creek.

ROLES AND RESPONSIBILITIES

The following is a summary of the organizational roles and responsibilities for implementing this Plan.

Ashland Mayor And City Council

UNDERTAKE THE NECESSARY ADMINISTRATIVE ACTIONS REQUIRED SUCH AS ZONING, ORDINANCES, ETC. TO IMPLEMENT PLAN GOALS AND POLICIES.

APPOINT AN ASHLAND FOREST PLAN BOARD OF DIRECTORS TO FACILITATE AND COORDINATE INTERAGENCY PLANNING.

Membership should include the following members -

- A member of the City Council or City Management Team.
- Faculty of Southern Oregon State College.
- District Ranger of the Ashland Ranger District.
- Parks and Recreation Department.
- Citizens in the community and the Interface.

INITIATE AN ORGANIZATIONAL REVIEW OF THE CITY ADMINISTRATION TO DETERMINE HOW TO IMPROVE THE EFFECTIVENESS IN RESOLVING NATURAL RESOURCE ISSUES.

FORMAL ADAPTION OR MODIFICATION OF THIS PLAN.

City Administration Management Team

COMPLETE THE PROJECTS LISTED IN APPENDIX A.

DEVELOP COOPERATIVE AGREEMENTS WITH OTHER GOVERNMENT AGENCIES.

- Revise the 1929 Cooperative Agreement with the U.S.D.A., Forest Service to provide for the use of Forest Service resource specialists on City projects on a cost reimbursable basis. Strengthen coordination requirements for decisions that affect both organizations.
- Develop an agreement with the Oregon Department of Forestry to provide assistance in wildfire suppression within the City limits.
- Develop an agreement with the Oregon Department of Fish and Wildlife to provide for technical assistance in fish enhancement projects in Ashland Creek below Reeder Reservoir. The agreement would provide for accomplishment of the projects by the Rogue Flyfishers organization.
- Complete an agreement with Southern Oregon State College to implement the Winburn Ecological Study Plan that was developed under the guidance of the "Board of Directors."

INCORPORATE ASHLAND FOREST PLAN GOALS AND POLICIES INTO THE CITY COMPREHENSIVE PLAN.

Ashland Forest Plan Board Of Directors

PROVIDE INTEGRATED, INTERDISCIPLINARY DIRECTION AND OVERSIGHT TO PLANNING TEAMS PREPARING THE FOLLOWING PLANS.

Interface Fire Management Plan -

Membership of this planning team should include -

- Representatives from the Oregon Department of Forestry, Jackson County Fire District #5, Ashland Ranger District, the City Fire Department, and the Parks and Recreation Department.
- Property owners within the Interface both inside and outside of the city limits.

Attributes of the plan would be -

- Developing standards for the amount of acceptable fuels on undeveloped land.
- The analysis of existing fuel conditions and the necessary project actions to reduce them to established standards.
- A comprehensive integrated fire suppression plan.
- Compatibility with other resource plans for the area.
- An emergency fire evacuation plan for people living in the Interface.
- Methods to strengthen information and education efforts on fire, coordination of fire plan implementation efforts, and the necessary enforcement practices.
- Recommendations on the necessary administrative actions for implementation of the plan.

Recreation Management Plan -

Membership of this planning team should include -

- Representatives of the Ashland Ranger District, Parks and Recreation Department, and the City administration.
- Members of local recreation user groups.

The attributes of this plan should include, as a minimum-

- Minimum impact to private land.
- Provides for a variety of uses while minimizing conflicts between user groups.
- Compatibility with all natural resource goals for the area.

Ecosystem Management Plan for the Ashland Watershed.

Membership of this planning team should include -

- Dr. Thomas Atzet, Area Ecologist, Siskiyou National Forest.
- Faculty from Southern Oregon State College, Ashland Ranger District resource specialists, and citizens with a background in ecology.

The plan should have the following attributes -

- Define the standards and guidelines to be used in determining the biological diversity of the watershed.
- Evaluate the current biological conditions in the watershed against the standards and guidelines for diversity and determine what changes need to be made.
- A Winburn Ecosystem Study Plan for implementation by Southern Oregon State College.
- An evaluation of the need to collect new data or initiate research programs to improve ecosystem management planning including New Forestry techniques.

- A monitoring plan to measure ecological changes over time and the need to change the direction in this Plan.

- Project proposals for consideration and evaluation by the appropriate land manager.

PROVIDE OVERSIGHT ON THE IMPLEMENTATION OF THIS PLAN.

AFFECTS OF IMPLEMENTATION

This section provides brief forecasts of some of the more significant environmental and social consequences of implementing the plan. This acknowledges that both positive and adverse consequences are possible. It is usually possible to mitigate adverse consequences.

The forecasts are organized around each of the seven new goals proposed in the plan.

Ecosystem -

This approach to management will require a greater degree of coordination with adjacent landowners. The end result should be a greater awareness of interactions within the ecosystem, and eventually greater plant and animal diversity.

Vegetation Management -

Priodic logging activity, the majority by helicopter, may cause some residents concern from both a philosophical and physical standpoint (trucks, aircraft). Fuelwood would be made available on City lands, benefitting those who have woodstoves, but running counter to the effort to reduce woodsmoke in the valley. Alternative markets for fuelwood may be found.

Recreation Management -

An increase in the number of people using City lands near the Interface will increase fire risk. There will be a cost to providing facilities and management. Illegal occupancies (long term camps) will decrease.

More outdoor recreation opportunities will be provided. Knowledge about the watershed and other City lands will increase.

Fuel Reduction -

The risk of smoke intrusions into the valley and over the city will increase. Fire suppression opportunities will be improved. The risk of catastrophic wildfire will be reduced.

Aquatic Habitat Improvement -

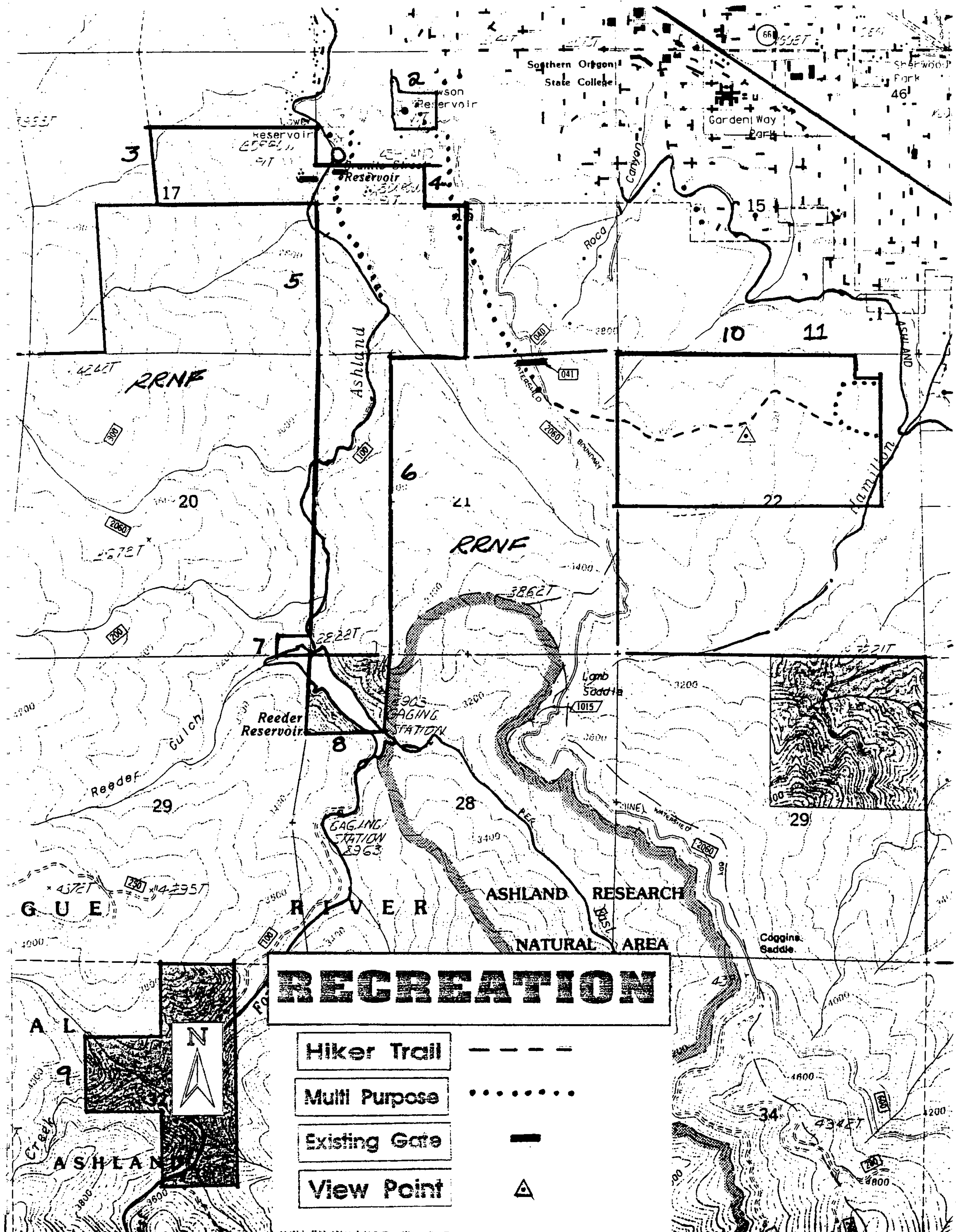
The number of resident trout and anadromous fish will increase. The enjoyment of seeing fish in Ashland Creek and ponds will be an added attraction. Fishing pressure may increase.

Cooperative Community Projects -

The City liability question will need to be resolved. Training and supervision of volunteer groups will be required. Knowledgeable and committed residents could accomplish a great deal of beneficial work.

Stewardship

The City will take on greater responsibilities for forest land management, which will require time, energy and funds. Improved integration of resource decision making and creative problem solving would be the desirable result.


RECREATION
Hiker Trail
Multi Purpose
Existing Gate
View Point
N
Southern Oregon State College
Garden Way Park
Sherwood Park
Lower Reservoir
Granite Street Reservoir
Reservoir
Canyon
Roca
Ashland
Hamilton
RRNF
RRNF
Lamb Saddle
Reeder Reservoir
Reeder Gulch
GAGING STATION
GAGING STATION
ASHLAND RESEARCH NATURAL AREA
Coggins Saddle
GUE RIVER
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ASHLAND
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APPENDIX A

INTRODUCTION

The following is a parcel by parcel description, and a listing of projects to be completed. The parcel numbers correspond to the map in this appendix. The projects highlited in a light shade of gray in the tables are high priority and should be completed within the next 12 months.

Parcel 1

DESCRIPTION

This 5 acre parcel is the site for a new 500,000 gallon water storage tank. The vegetation is thick manzanita, about 5 feet tall. Attached to the manzanita from the top to the ground are thick lichens. This parcel is located in a critical spot, west of Ashland. The summer afternoon winds are northwesterly in this area. Slope are low to moderate steepness. Fuel loading is estimated to be 25 to 41 tons per acre.

PRESCRIPTION AND PROJECT NEEDS

FUELS - Reduce the volume of fuel by cutting the manzanita in irregular shaped openings to retain a natural appearance. Use tractors on gentle slope, hand cutting and piling on steeper slopes. Cover the piles and burn in the winter. Cut brush sprouts annually.

VEGETATION - Plant about 250 ponderosa pine per acre in a random spacing to provide a natural appearance. Sow grass seed on erosion susceptible slopes one year after the trees have been planted.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Fuel reduction	3	$350	$1,050
Tree planting	3	$350	$1,050
Grass seeding	1	$75	$75
	TOTAL		$2,175

Parcel 2

DESCRIPTION

This 5 acre parcel has a 2.2 million gallon reservoir and a pump station. It is bisected by a city street. There is a user established mountain bike trail across the area, which is referred to as "Alice-In-Wonderland" trail. It climbs the ridge parallel to the Loop Road. Slope varies from low to moderate steepness.

The area holds a thick stand of manzanita 7 to 9 feet tall with a few scattered conifers. Fuel loading is estimated between 25 to 41 tons per acre. The fuel rating is moderate.

PRESCRIPTION AND PROJECT NEEDS

FUELS- Fall the remaining snags. Reduce the amount of fuel by hand piling and burning the manzanita in a natural shaped openings. Selectively cut the manzanita along the trail to reduce the risk of human caused fire. Prune the dead branches from the existing trees.

RECREATION - Place waterbars along the "Alice-In-Wonderland" trail.

VEGETATION - Cut the shrubs from around the scattered trees to reduce moisture competition. Plant about 250 ponderosa pine per acre in a random spacing in openings.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Hand pile and burn brush	4	$350	$1,400
Plant ponderosa pine	4	$300	$1,200
Place waterbars on trail	.25	$400	$100
	TOTAL		$2,700

Parcel 3

DESCRIPTION

This 80 acres is steep, with an east aspect. It is a mixture of conifers, hardwoods and shrubs species. The ponderosa pine and Douglas fir are in poor condition and mortality appears to be accelerating. This area burned in the 1959 fire. The amount of fuel is estimated to be 32 to 51 tons per acre with a moderate to high rating. The site contains an active granite quarry with active erosion within and below the site.

PRESCRIPTION AND PROJECT NEEDS

FUELS - Break up the continuity of the fuel by hand cutting, piling, and burning patches of brush.

VEGETATION - Conduct a helicopter sanitation-salvage operation of the dead and dying pine and fir in connection with the next Forest Service timber sale in the watershed.

Plant about 300 ponderosa pine on a random basis in areas where the brush was removed.

SOILS - The granite quarry:

Close and restore the upper-half of the quarry to as near a natural condition as possible by -

- Constructing a mid-slope water diversion ditch to channel the runoff into a natural drainage adjacent to the quarry. Large rock should be placed in the ditch to prevent scouring.

- Stabilizing the exposed soil using a straw mulch held in place by "chicken wire" and long wire "staples" driven into the ground. The mulch will also help retain the soil moisture.

- Planting ponderosa pine on a 6 x 6 foot spacing where conditions permit. Plant manzanita or other drought resistant native shrub species on a small scale to determine its' effectiveness in erosion control.

Mitigate the adverse affects of the lower half of the quarry on water quality and the visual impacts by -

- Planting ponderosa pine along the lower edge of the quarry to screen it from sight.

- Stabilizing the gullies in the quarry and below the access road by constructing small check dams or other structures as recommended by the Soil Conservation Service.

- Shaping the waste dump site to natural contours and to divert runoff. Sow grass seed to help stabilize the slopes.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Close top half of quarry	2	$1000	$2,000
Restoration on lower half of quarry.	1	$2500	$2,500
Hand pile and burn brush	10	$400	$4,000
Plant ponderosa pine	11	$300	$3,300
Sow grass seed	2	$350	$700
	TOTAL		$12,500

Parcel 4

DESCRIPTION

This 20 acre site contains an inactive granite quarry situated on two levels. The lower level has construction debris stored on it.

There is an 80 to 100 year old Douglas Fir stand in the small basin behind the upper granite pit. It was

sanitation-salvage logged in 1990. The residual stand is relatively healthy.

The area is bisected by at three roads, one of which is now used as a mountain bike and hiking trail that proceeds into parcel 5 and parallels the road up Ashland Creek. Slopes are of gentle to moderately steep. Through this parcel is the main access road to Reeder Reservoir. Fuel loading is estimated at 25 to 51 tons per acre with a rating of moderate.

PRESCRIPTION AND PROJECT NEEDS

VEGETATION - Conduct a sanitation salvage and/or commercial thinning in 1995. The moderate terrain would permit a horse logging operation if a helicopter is not an option.

SOILS - Close the access road with water bars and excavate a drainage ditch along the road. Push the construction debris against the vertical face on the lower level and shape to natural contours.

Plant a mixture of about 60% ponderosa pine and 40% Douglas fir on a 6 x 6 foot spacing in areas that do not have natural revegetation occurring.

RECREATION - Manage the "Pipeline" trail as a combination hiker and mountain bike trail.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Planting	2	$275	$550
Close access road	1	$900	$900
Reshape pit	1	$350	$350
	TOTAL		$1.800

Parcel 5

DESCRIPTION

This 160 acre parcel is bisected by Ashland Creek and the access road to Reeder Reservoir. A mountain bike trail parallels the road and intersects it about a half mile above the gate. The road is a main access to the watershed by vehicle, foot or mountain bike.

Some of the area has heavy concentrations of natural fuels. The debris from the salvage logging is heavy but is in small pockets and not continuous throughout the area. The amount of fuel throughout the area is rated as moderate to high with 85 to 136 tons per acre.

The parcel is mostly covered with conifers in fair condition. The area was part of the 1990 sanitation-salvage helicopter logging operation. The creek bottom (riparian area) is mostly comprised of hardwoods, with some conifers and shrubs.

PRESCRIPTION AND PROJECT NEEDS

FUELS - Hand pile and burn the heavy concentrations of logging slash and prescribe burn. Work with the Forest Service to develop a site specific burning prescription and for technical advice during implementation. Cover the existing slash piles along the road with plastic and burn in the winter to reduce air quality problems.

Construct a shaded fuel break to tie into the completed Forest Service one.

VEGETATION - Conduct additional sanitation-salvage and/or commercial thinning timber sales in 1995, preferably in conjunction with the Forest Service.

FISHERIES - In cooperation with the Oregon Department of Fish and Wildlife and the Rogue Flyfishers organization construct in-stream habitat improvement projects. Examples are log weirs, pool construction and side channel smolt rearing areas.

RECREATION - Move the access control gate to a location just above the intersection of the Pipeline trail.

SOILS - The road to the reservoir is steep in places and not surfaced except for the parking lot at the water plant. Stabilize the inside ditch to provide drainage, repair breaches in the out-slope berm, and surface the steeper parts of the road with rock.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Hand pile and burn	10	$375	$3,750
Prescribe burn	20	$150	$3,000
Road maintenance	2	$1500	$3,000
Construct shaded fuel break	5	$500	$2,500
	TOTAL		$12,250

Parcels 6 and 7

DESCRIPTION

Douglas fir about 90 to 100 years old dominate this 165 acre area with hardwoods and shrubs in the openings. A few old-growth are scattered throughout the area. Hardwoods are found along the creek. Shrubs species are found throughout, but mostly along the creek, rock outcroppings, and the draws.

Some large woody material remains on the ground but is not abundant. The southern half of this area was burned in the 1910 fire. The fuel rating is moderate with an estimated 59 to 85 tons per acre.

The access road is not surfaced and contributing sediment to Ashland Creek. In addition, several drainage culverts are plugged and adding to the problem. There are also some spur roads below the reservoir that are eroding.

PRESCRIPTION AND PROJECT NEEDS

FUELS - Burn the existing brush piles.

VEGETATION - Same as parcel 5

FISHERIES - Same as parcel 5

SOILS - Same as parcel 5. In addition, close the spur road below the dam by constructing water bars, seeding grass and planting trees. Road culverts on the access road should also be cleaned and additional ones installed as needed to improve road drainage.

RECREATION - Exclude recreation use from this parcel.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Burn hand piles	2	$125	$250
Prescribe burn	10	$150	$1,500
Road maintenance	3	$1500	$4,500
	TOTAL		$6,250

Parcel 8

DESCRIPTION

This 40 acre parcel contains most of Reeder Reservoir. It supports scattered old growth ponderosa pine and Douglas fir are dying out, and are being replaced by fire intolerant species. The canopy is closed for the most part, with moderate amounts of large woody material on the ground. The slopes are moderate. This area was also burned in the 1910 fire. The fuel rating is moderate to high with 70 to 90 tons per acre.

A road system surrounds the reservoir just above full pool level. Fill slopes on the road are eroding and depositing decomposed granite soils into the reservoir.

Areas just above the road were heavily salvage of dead and dying conifers in 1990. There are accumulations of slash that need to be treated.

PRESCRIPTION AND PROJECT NEEDS

FUELS - Hand pile and burn the scattered accumulations of slash. Prescribe burn the area periodically with the technical assistance of the Forest Service.

Construct a shaded fuel break to tie into the existing Forest Service one.

VEGETATION - Conduct a sanitation-salvage and/or commercial thinning logging operation using helicopters before 1995.

Plant alder cuttings along shoreline to stabilize fill slopes on the road and to minimize shoreline erosion.

SOILS - Study the feasibility of either paving, or relocation of the road along the reservoir outside of the riparian area.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Hand pile and burn fuels	3	$375	$1,125
Plant alder cuttings	1	$350	$350
Construct fuel break	4	$500	$2,000
	TOTAL		$3,475

Parcel 9

DESCRIPTION

The Winburn parcel is accessed by a poor road that has been partially blocked by small bank sluffs and rocks. There is no drainage on the road and water is running in the wheel tracks and creating erosion.

The area is the most productive and has the highest volume of conifers of any of the City's parcels with substantial amounts of old growth. It was sanitation-salvage logged in 1990 and logging debris is scattered over most of the area. There are some hardwoods, mainly along the streams. The Winburn cabin site is a small grass meadow which is being invaded by conifers. This parcel has not been recently burned and lies between the two large fires of 1910.

The steep draws are full of logging slash. Recent logging has caused the fuel loading to double with an estimated 168 to 268 tons per acre. The fuel rating is high to extreme.

PRESCRIPTION AND PROJECT NEEDS

FUELS - Hand pile and burn the heavy concentrations of logging slash, especially in the steep, narrow draws. After this is accomplished, request the Forest Service or the Oregon Department of Forestry to develop a prescribed burning prescription and provide technical advice on it's implementation.

VEGETATION - Conduct a sanitation-salvage and/or commercial thinning harvest using helicopters in 1995.

SOILS - Stabilize the access road, and install water bars periodically along its length. Convert it from a road to a trail. Construct a small turn around and parking area near the juncture with the main road at the reservoir.

RECREATION - Designate this as an Ecosystem Study Area in conjunction with Southern Oregon State College. Permit academic groups and scientists access through permits issued by SOSC.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Handpile and burn slash	8	$425	$3,400
Prescribe burn	10	$200	$2,000
Close access road	3	$400	$1,200
	TOTAL		$6,600

Parcel 10

DESCRIPTION

This 160 acre parcel was acquired in 1990 following a heavy selective harvest with a helicopter by the Superior Lumber Company. Most of the larger trees were removed. The residual stand is composed of 6" to 12" diameter Douglas fir in poor growing condition. There are some large hardwoods scattered through out. The southeast corner was burned in the 1973 Hillview fire and is covered by shrubs 6 to 7 feet tall.

The slopes vary from low to moderate steepness.

There was no disposal of the logging debris and the amount of fuel has doubled over previous levels to an estimated 168 to 268 tons per acre. The fuel rating is high to extreme. The risk of a human caused fire is high because of the high recreational use of the area.

There are two roads and one trail across the area. Local residents actively use the old logging spurs for hiking, mountain biking and occasional firewood collection. The area is also very visible from the community. There is no deeded public access to the parcel.

PRESCRIPTION AND PROJECT NEEDS

FUELS - The recent logging has created a serious fuels situation. Due to the parcels critical fire location and high recreation use, a high degree of slash disposal must be accomplished as soon as possible.

In general, the heavy concentrations must be hand piled and burned and followed by a prescribed burn to further reduce the amount of fuel and to create a seedbed for natural regeneration or interplanting of the open areas.

Construct a shaded fuel break to connect the Forest Service shaded fuel break and the Epstein one together.

VEGETATION - Evaluate the timber stand for a commercial thin in about 10 years. If deeded access is gained to the property, consider a pre-commercial thin fuel wood sale along the existing logging spurs.

RECREATION - Designate the two logging spurs as hiking trails and correct alignment and grade on portions to minimize soil erosion. Tie this system to the trail system in the adjoining parcel 11 (see map). Acquire and easement for an extension of Pinecrest and provide a trailhead parking area. Develop a sign plan and signs (and/or a brochure) explaining uses permitted, fire safety, and location of private lands.

Acquire a public easement on the extension of Timberline Terrace road to the bottom of parcel 10, tying to the old logging spur.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Pile and burn logging slash	15	$450	$6,750
Prescribe burn	25	$200	$5,000
Construct fuel break	2	$500	$1,000
	TOTAL		$12,750

Parcel 11

DESCRIPTION

This 120 acre parcel was acquired in 1992 primarily for open space as set forth in the City Comprehensive Plan. Most of the area was burned in the 1973 Hillview fire. There are two stands of Ponderosa Pine/Douglas fir

trees, one in the Northern (bottom) edge of the property, and another near Hamilton Creek on the east side of the property.

These stands were apparently salvage logged following the fire. Generally the logging was well done, in that skid roads and logging spurs have been waterbarred, and the residual stand of pine and fir is relatively thrifty. Much of the balance of the parcel is covered with a dense stand of Whiteleaf Manzanita and Pacific Madrone.

Soils are of granitic origin, and highly erosive. Slopes in the area of the existing tree stands are relatively gentle and the upper reaches of the parcel get progressively steeper.

Hikers, mountain bikers and horseback riders use the logging spurs and fireline trail extensively. The parcel adjoins the Southern Oregon Land Conservancy (Ordson-Todd woodland) parcel, which has it's own public trail system along Hamilton Creek. These trails are heavily used by local residents, and tie to the system in parcel 11. There is public access to the property via an easement off the end of Park Street.

PRESCRIPTION AND PROJECT NEEDS

FUELS - Selectively thin and create a mosaic of openings in the dense brush fields to break up the fuel continuity and promote wildlife diversity while protecting slopes from erosion. Use a small tractor in the lower, gentle slopes and hand piling and burning on the steeper terrain.

Prune the dead branches on the ponderosa pine to reduce fuels. Do not prune any Douglas fir because of the potential for "sun scald" on the trunk of the trees.

Build a shaded fuel break along the existing fireline trail on the main Northeast to Southwest ridge system.

VEGETATION - Conduct periodic sanitation-salvage harvests in the existing two tree stands, the first one in about 5 years depending on tree health and vigor.

Plant ponderosa pine and sugar pine on a random spacing on the cleared openings and in the fuel break to maintain a natural appearance. Interplant with Douglas fir on the better growing sites.

Cut brush around the existing trees to reduce moisture competition and to maintain the vigor of the stands.

SOILS - Repair any failed waterbars on the existing logging spur system, and generally put these spurs "to bed" if not designated as part of the trail system.

Correct the grade and alignment of the "Fireline" trail to eliminate erosion problems.

RECREATION - Designate a principal multi-purpose trail from the end of a Park Street trailhead to a junction with the Hamilton Creek system. Designate a hiker\ horseback only trail proceeding on to the parcel 10 system. Close and obliterate all other trails on the parcel (See Map).

Feature the large granite rock outcroppings along the Fireline trail as a destination viewpoint.

Coordinate trail planning and signing with the Hamilton Creek Coordinated Resource Management Plan and adjacent SOLG property.

Establish an "Ashland Forestland Volunteer Patrol" in cooperation with local private landowners and the Forest Service. Their role would be to act as "hosts" for the City, dispense fire prevention, recreation opportunity, and general resource management information, and encourage good outdoor behavior and manners.

ESTIMATED PROJECT COSTS

TYPE OF WORK	NO. ACRES	COST/ACRE	TOTAL COST
Site preparation	20	$200	$4,000
Fuel reduction	10	$375	$3,750
Planting	25	$275	$6,875
Erosion control	3	$100	$300
Construct recreation trails	2	$700	$1,400
	TOTAL		$16,325

APPENDIX B

This appendix lists the various plans or other documents that have been or are about to be completed, and pertain to the forest lands or the Interface.

A. USDA - City of Ashland Cooperative Agreement - 1929

> Before...cutting of timber...full consideration will be given to any requirements the City of Ashland may desire to impose as necessary for the safeguarding of the water supply. ...full consideration shall be given to the preservation of the volume and purity of the City water supply.

B. JACKSON COUNTY COMPREHENSIVE PLAN

> See Chapter 4 for a discussion of the relationship of this plan to the Forest Plan.

C. COMPREHENSIVE PLAN - CITY OF ASHLAND

This section lists the pertinent existing goals and policies in the Ashland Comprehensive Plan.

GOAL: TO MAINTAIN A CITIZEN INVOLVEMENT PROGRAM THAT ENSURES THE OPPORTUNITY FOR CITIZENS TO BE INVOLVED IN ALL PHASES OF THE PLANNING PROCESS.

> Policy
>
> 4. The City shall sponsor informal workshops during the development of significant elements of the Plan or implementing ordinances, so that complex issues may be better understood by the public.

GOAL: TO GUARANTEE THAT THERE IS AN ADEQUATE SUPPLY OF GRANITE AVAILABLE FOR USE IN AND AROUND THE CITY OF ASHLAND, WHILE ENSURING THAT THE INCOMPATIBLE EFFECTS OF MINING ARE SUFFICIENTLY MITIGATED.

> Policy
>
> 4. Ensure that all the existing private and public quarries are reclaimed and revegetated after mining activities are completed.

GOAL: HAVE SOUND SOIL CONSERVATION AND EROSION CONTROL PRACTICES IN AND AROUND ASHLAND.

Policy

6. Prevent development and land management practices which result in rapid runoff and accelerated erosion.

GOAL: REDUCE THE IMPACT OF URBANIZATION AND OTHER LAND USES ON THE QUALITY OF WATER IN AND AROUND ASHLAND IN ORDER TO ENSURE THAT THE CITY WATER SUPPLY IS OF THE HIGHEST POSSIBLE QUALITY AND IS DRAWN FROM DEPENDABLE SOURCES.

Policy

14. Encourage public awareness of problems of the Ashland watershed and their causes.

17. Cooperate with agencies, firms and citizens' groups in improving water quality and the condition of the watershed.

GOAL: PROTECT THE QUALITY OF RIPARIAN RESOURCE LANDS, AND PRESERVE THEIR WILDLIFE HABITATS.

Policy

19. Encourage more public access to waterways, but define what public activities can take place. Ensure that such access does not result in water and visual pollution.

GOAL: PRESERVE FOREST AREAS WITHIN AND AROUND THE CITY FOR THEIR VISUAL, ENVIRONMENTAL, WILDLIFE HABITAT, AND WATER QUALITY VALUES.

37. Emphasize the preservation of forest vegetation to the extent feasible as forested areas of the City are converted to urban uses.

GOAL: TO PRESERVE EXISTING WILDLIFE HABITATS AND NATURAL AREAS WITHIN THE CITY WHEREVER POSSIBLE.

Policy

39. Encourage educational programs documenting the value of Ashland's environmental resources and current trends in their quality.

40. As a means to provide habitat, implement an open space program that will 1) ensure open space, 2) protect scenic and natural resources for future

generations and 3) promote a healthy and visually attractive environment in harmony with the natural landscape.

GOAL: PROTECT LIFE, PROPERTY AND ENVIRONMENTAL RESOURCES IN ASHLAND'S URBAN/WILDLAND INTERFACE AREA FROM THE DEVASTATING EFFECTS OF WILDFIRE. LESSEN THE POSSIBILITY OF WILDFIRE SPREADING TO THE ASHLAND WATERSHED FROM THE URBAN/WILDLAND INTERFACE AREA.

Policy

43. Require installation and maintenance of a 40 foot fuel break around each dwelling unit or structure.

46. Require more than one ingress/egress route or road widths wide enough to accommodate incoming fire apparatus and evacuating residents simultaneously in an emergency situation.

50. Install all new electrical distribution circuits in the Urban/Wildland Interface underground if technically feasible.

C. Rogue River National Forest Plan, 1990

Standards and Guidelines (4-265)

-Provide water for domestic supply, restrict land management activities to watershed protection and maintenance.

-Resolve conflicts in favor of the watershed resource.

-No construction of new recreation sites.

-Rehabilitate areas receiving damage from recreation use.

-Manage fuels in a manner not in conflict with watershed resource values.

-No scheduled, regular timber harvest. Limit harvest to that necessary to provide watershed protection or enhance water quality, and salvage catastrophic events such as fire, blowdown, insects, and disease.

-Allow commercial fuelwood contracts for fuel reduction.

-Use prescribed fire to obtain desired fuel loadings.

-Construct and maintain fuel breaks.

D. ASHLAND WATERSHED PERSPECTIVES, USDA FOREST SERVICE, 1990

Findings:

-Ponderosa pine (seral) vegetation in this part of interior southwest Oregon is dependent, as typified in the natural environment, upon periodic, low intensity fire to perpetuate and predominate (Atzet, Hall, Franklin). Presently the majority of the Ashland Creek watershed...below 4,800 feet elevation has a dense multilayered canopy brought about by fire exclusion. This dense vegetation is under moisture stress due to competition for limited water...

-The greatest threat today is wild fire ignitions outside of the watershed at lower elevations.

Objectives:

-Use prescribed fire to set back or eliminate the shade tolerant understory vegetation encroaching on the ponderosa pine vegetation, and reduce and eliminate the rapidly accumulating dead and down forest debris that is significantly contributing to the fire hazard...

-Construct shaded fuel breaks at strategic locations.

-Manually cut, pile and burn vegetation at selected sites.

E. FIRE MANAGEMENT PLAN FOR THE ASHLAND WATERSHED, RRNF, 1981,1985

-Develop fuel breaks at strategic locations and key ridges.
-Treat existing slash concentrations, remove or reduce fuels along roadside strips and other high hazard areas.

-Prescribed burning.

JACKSON COUNTY CURRENT ZONING

Jackson County has zoned the areas just beyond the city limits as either Woodland Resource or Forest Resource, and in a few small areas, Exclusive Farm Use (Jackson County Comprehensive Plan, Chapters 210, 212, 218, and 280). In each case restrictive fire safety requirements and guidelines apply as most of the area has been designated a "hazardous wildfire area" (280.10). The following requirements apply:

A. Maintain a 100 foot fuelbreak.
B. Class A or B fire retardant roof coverings.
C. Wood shakes prohibited.
D. Other standards and conditions the county deems necessary, such as automatic fire sprinkler systems, 50,000 pound bridge access, emergency water storage facilities.

CITY OF ASHLAND CURRENT ZONING

The City's Ordinance 18.62.090 outlines extensive development standards for wildfire lands. In summary, it requires:

1. Development of a detailed fire prevention and control plan by subdividers, to be reviewed by the Fire Chief, and to include vegetation mapping, location of fuel breaks, and emergency vehicle access.

2. Construction standards which include class B or better non-wood roofing materials, primary and secondary fuel breaks, control measures, spark arrester caps or screens, underground electrical distribution circuits where technically feasible.

In recent months a number of separate but overlapping planning efforts involving the Interface have been undertaken, and are either finished or proceeding more or less concurrently:

- The Jackson County Comprehensive Plan

- City of Ashland Comprehensive Plan

- Rogue River National Forest, Ashland Ranger District, Interface Integrated Resource Management Plan

- Hamilton Creek Coordinated Resource Plan, led by the Soil Conservation Service

- Lithia Park Forest Plan, Parks and Recreation Department.

- City of Ashland Forest Plan