

FORTUNE RANGER DISTRICT
KOOTENAI NATIONAL FOREST
1966

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION 1
MISSOULA, MONTANA

FORTINE R. D.

INFO	ACT	FEB 6	1971	INFO	ACT
<u>DR</u>	_____			<u>ENG</u>	_____
<u>SF</u>	_____			<u>TSI</u>	_____
<u>FCO</u>	_____			<u>RNG</u>	_____
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MULTIPLE USE MANAGEMENT GUIDE

FOR NORTHERN REGION

-FSH 2109.21 R1-

FORTY-NINE RANGER DISTRICT MULTIPLE USE PLAN

PREPARATION RECORD

Plan prepared by:

James R. Johnson
District Forest Ranger

January 13, 1967
Date of above signature

FORTY-NINE RANGER DISTRICT MULTIPLE USE PLAN

REVIEW AND APPROVAL RECORD

Supervisor's Office Review and Approval

Reviewed by:

John W. Priddy
Fire Control, Range & Wildlife Management

6/29/67
Date

John D. [unclear]
Timber Management

6-26-67
Date

Elmer J. Galt
Forest Engineer

6-30-67
Date

Clarence H. Mulder
Recreation, Land Use, Watershed Management
and Multiple Use Coordination

June 26, 1967
Date

Approved by:

George A. [unclear]
Forest Supervisor

7-3-67
Date

INTRODUCTION

Introduction

The Fortine Ranger District is located in the northeastern corner of the Kootenai National Forest. The district headquarters is at the Murphy Lake Ranger Station, 16 miles south of Eureka, Montana.

The district has a gross area of 269,993 acres of which 249,322 acres are national forest and 20,671 acres are alienated land.

An additional 63,750 acres are outside the national forest boundary but within the district's fire protection boundary.

The Fortine District is bounded to the north by Canada, the east by the Flathead National Forest and the Stillwater State Forest, and on the west by the Rexford and Warland Districts, and south by the Fisher River District of the Kootenai National Forest.

The district is 38 miles long and at its extreme, 18 miles wide.

The district is accessible to the rest of the state and nation by railroad and highway. The transcontinental Great Northern Railroad traverses the district from south to north, entering at Stryker and leaving at Eureka. U.S. Highway No. 93 approximates this same route, but leaves the railroad at Eureka and enters Canada. State Highway No. 37 provides access from the southwest to Eureka. The historical Old Fort Steele Trail enters the district at Stryker and leaves near Eureka and goes on north to the Fort Steele Monument in British Columbia, Canada. Another old trail used by the Flathead and Kootenai Indians still exists up Grave Creek and Lewis Creek into the North Fork of the Flathead River.

The major drainage in the district is the Tobacco River which is a tributary to the Kootenai River. In addition, Wigwam Creek flows north into Canada and joins the Elk River which is a major tributary of the Kootenai. In the southern portion of the district, Sunday Creek and the Stillwater River are a part of the Flathead River system.

Elevations on the district range from 2,557 feet at Eureka, Montana to 7,930 feet at Poorman Mountain. The topography of the southwest portion of the district is moderate to steep. The mountain tops are rounded from glacial action. The northeastern part of the district has steeper, more precipitous peaks. Glacial action left a complex system of glacial moraines, lakes and irregular drainage systems in the main valley bottom.

The average annual temperature at Fortine, Montana is 41.9° F. Variations have been experienced from a minus 50° F to a high of 105° F.

The average annual precipitation at Fortine is 17.5 inches. During the period from April 1 to September 1, the average rainfall is 9.19 inches. The snow course at Weasel Divide, which has an elevation of 5,500 feet, averages 89.7 inches of snow on April 1. The average water content at the time is 34.3 inches. The growing season usually does not exceed 102 days at the lower elevations. The major commercial timber type is Douglas-fir and western larch. The higher elevations are occupied by stands of lodgepole pine, spruce, western larch and alpine fir. Cedar, hemlock, grand fir, white pine and ponderosa

pine are relatively minor species on the district. Open grass type and mountain meadows are very limited.

The district has a rural population of 731, mostly small ranchers. They are located primarily in the Tobacco River, Fortine Creek and Grave Creek areas. Only a few of the ranches are considered to be economic units and the remainder contribute only a portion of the family income.

The urban population is approximately 600 and is centered in Eureka, Fortine and Stryker. Lumbering, Christmas tree and livestock production are the most important income producers of the area. Lumbering is the most important of the three. Three stud mills are located within the district and two others are within 10 miles. Their combined annual mill capacity is estimated at 80 MM b.m. Additional competition for national forest timber sales comes from the mills at Olney, Whitefish, Columbia Falls, Kalispell and Libby. These mills primarily produce lumber and plywood. The St. Regis mill at Libby, Montana has a very diversified operation. Several of the smaller mills are fast and efficient producers of dimension material. The local mills have developed a fairly high demand for salvage and small sized timber. Christmas tree production is a real important part of the local economy. Most families within and adjacent to the district depend on Christmas trees to supplement their income. The district supplied 23,634 bales (approximately 119,000 trees) on 49 sales in 1965 and 26,234 bales (131,000 trees) in 1966.

Recreation use on the district is increasing significantly each year. Opportunities for outdoor recreation such as fishing, hunting, camping, picnicking and hiking are excellent. As yet, little effort has been made to commercialize on the recreation resource. However, with the advent of the Libby Dam reservoir, recreation business is expected to increase greatly.

In 1965-66 1,200 head of cattle grazed on the district's 14 allotments. All of the 33 permittees are dependent upon national forest range to round out their operations.

Wildlife common to the area are whitetail and mule deer, black bear and moose. Lesser numbers of elk and grizzly bear can be found. In addition to big game, waterfowl, small game animals, ruffed and blue grouse are common. Many miles of streams and numerous lakes provide suitable habitat for fish. At least a dozen trapping permits are issued on the district each year when fur prices are up. Trappers take muskrat, mink and beaver in good numbers.

There is little interest in mining or prospecting on the district. Some oil exploration work has been done by two major oil companies. As yet, no follow-up activity has taken place.

In 1966 special use permits numbered 60. These range from airports to county dumps. It appears, as the population pressures increase, the demand for land occupancy permits will expand. This problem is intensified by the mixed ownership pattern and the many miles of land lines on the district.

Dureka, Montana is the principal community in the area. Its population is approximately 1,200. The boundary between the Fortine and Rexford Districts bisects the town. Medical facilities are inadequate, with the nearest hospital 50 miles away at Whitefish, Montana. Other services such as groceries, clothing and hardware are offered.

Although it is not on the district, the construction of the Libby Dam will cause an increase of pressures on all forest resources. Relocation of the Great Northern Railway will have the biggest impact on the district. During 1968 through 1970 such activities as special use administration, travel influence zone management, traffic regulation, road maintenance and a myriad of unforeseen problems, connected with the Great Northern 7-mile tunnel construction and track relocation, will challenge the abilities of district land managers.

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The Region is unique in the extent and quality of the native fisheries resource; but serious inroads have occurred, particularly on fishing streams, by road construction.

The native cutthroat trout populations are still intact in the less accessible streams and high mountain lakes. Many miles of the smaller, back-country streams can be improved for fishing by development of access, channel improvement, and in some cases by stocking.

An outstanding fishing opportunity is available on the Salmon and Clearwater Rivers with respect to the anadromous Chinook salmon and steelhead runs. Large numbers of these ocean-going fish overcome all natural and man-made obstacles in the lower Snake and Columbia Rivers each year to reach their spawning beds in the upper reaches and tributaries of the Salmon and Clearwater. Although the runs have been reduced considerably or completely destroyed in some instances by the works of man (Snake River run), strong movements are being initiated by both public agencies and private groups to preserve and even restore this valuable natural heritage. Forest Service responsibility is largely involved in the protection of spawning gravels and the control of silt in streams.

3. Upland Game. Upland game bird management is principally concerned with mountain grouse, although sharptail grouse are important in the National Grasslands and in some eastern Forests. Turkey have been introduced successfully on the Custer and Nezperce Forests. Along with mountain grouse, they are particularly sensitive to range and timber management practices.

Management of blue, ruffed, and Franklin grouse habitat is directed at facilitating hunter harvest by planting grass and clover along roads and on other disturbed areas such as skid trails.

Conclusions and Assumptions

1. The Region's fish and wildlife resource is of national importance. Local economy is benefited and is often dependent upon its use.
2. All other resource uses and most management activities have a direct and indirect effect on fish and wildlife habitat.
3. Close cooperation with State Fish and Game Departments and neighboring public land agencies is essential for the proper management of the fish and game resources.

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4. Maintaining a balance between big game numbers and their winter food supply is important to big game management. Divergence from this balance is determined by utilization studies. A tool of management is big game harvest.

5. Maintaining adequate key winter game range in productive condition through direct measures or by resource coordination is the key to management of big game.

6. An adequate road and trail system, properly maintained, is the key to a needed and successful big game harvest.

7. Successful wildlife management programs are dependent upon public support.

8. The protection of rare and endangered wildlife and fish will become increasingly significant on all National Forest lands.

9. Erosion control and other projects involving the use of vegetation are a potential for establishment of desirable wildlife habitat.

10. Habitat management will be tempered by the public's desire for natural environments; and, in some cases, public sentiment will dictate no management practice at all.

11. Stream fisheries are in need of special protective care due to road construction and plans for large water impoundments.

12. Big game, upland game, and fish habitat inventories will have to be completed before adequate coordinated resource development plans can be made.

13. Big game habitat can be restored or increased by prescribed burning or other practices on dedicated areas.

*-226 - Wilderness. The concept of wilderness as a separate resource is relatively new in the Region (having been included in "Recreation" in FSH 2121.4 R1 issued in 1967). FSM 2320 identifies and describes the wilderness resource in some detail. The components of this resource and the management situation in the Region are described below. The language describing the resource is from the Wilderness Act.

1. " . . . the earth and its community of life is untrammelled 1/ by man," (Nature has a free role.) With a few exceptions, this condition prevails in the Region's Wildernesses (includes Primitive-*

1/ Untrammelled - unenmeshed - uncontrolled

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*-Areas as well). These exceptions include such things as the effect on wilderness rivers of downstream impoundments, the reduced role of natural fire, exotic plant diseases such as white pine blister rust and non-native plants including such noxious weeds as goatweed and thistles.

2. "Man, a visitor who does not remain." No one except private landowners have permanent residence within the Region's Wilderness boundaries. The private lands are not really a part of the Wilderness (which is defined as "Federal Lands.") However, there are people who spend large portions of their time within Wilderness. This occupancy is confined largely to the two large Wildernesses, the Selway-Bitterroot and Bob Marshall. They include Ranger Station personnel, lookouts, outfitters, and, in a few cases, miners.

3. ". . . undeveloped Federal land retaining its primeval character and influence." The Region's Wildernesses generally fulfill this criteria. There are some private lands with developments which detract from the wilderness resource. Some of these are being acquired (particularly those in the Selway-Bitterroot Wilderness, under the L&WCFA program). The areas of Wilderness have many acres of "undeveloped lands," where not even a trail exists.

Developments on Federal lands are largely administrative or those of outfitters and guides.

4. "Without permanent improvements or human habitation." The more significant "permanent improvements" in Region 1 Wildernesses consist of the low dams on the east slopes of the Bitterroot Range, some trail bridges, and airfields. "Human habitations," with the exception of a few on private lands, are confined to Forest Service Ranger Stations and guard stations. These are not year-round habitations.

5. "Protected and managed so as to preserve its natural conditions." The production of fish and game and recreational use of these resources has in some cases been given more emphasis than preserving "natural conditions." The same is true of fire control and tree insects and diseases, although section 4(d)(1) of the Act does make provision for these to the extent necessary and desirable.

6. "Generally appears to have been affected primarily by the forces of nature." This condition prevails in a large part of all the Region's Wildernesses. The exceptions are largely covered above under improvements and habitations. Recreation stock use has had an adverse effect in localized areas.-*

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*-7. "The imprint of man's work is substantially unnoticeable." This is very similar to criteria (6) above, and those comments also apply here.

8. "Has outstanding opportunities for solitude or a primitive and unconfined type of recreation." The wilderness resource in the Wildernesses of this Region is generally outstanding insofar as this criteria is concerned. The opportunities for solitude with primitive and unconfined types of recreation are widely available. Typical of such activities are climbing mountains, traversing glaciers, or snow-fields, floating a whitewater river, fishing a mountain lake, or back-packing through vast areas.

9. "Has at least 5,000 acres or is of sufficient size as to make practicable its preservation and use in an unimpaired condition." The Region's Wildernesses are generally outstanding in this respect. The large size minimizes the "edge influence" of activities outside the area and gives large carrying capacity for use of the wilderness resource.

10. "May also contain ecological, geological, or other features of scientific, educational, scenic, or historical value." The Wildernesses of the Region have unusual opportunities to maintain natural biological communities in various life zones or combining several such zones in one area. The Selway-Bitterroot Wilderness is an example of an area combining a wide variety of elevations, cover types, aspects, solids, land forms, and wildlife and fish habitat. It is large enough that the "edge" influence is minimized; that is, the impact of man's activities outside the area touch only a small part on the periphery of the area. This size makes it feasible to allow natural processes (such as fire, insects, increases in large carnivores) to take place without undue adverse impact on lands and people outside the area. With its wide range of elevations and cover types, it contains the total habitat for numerous wildlife species. There are relatively few rights, commitments, and developments to interfere with a policy of letting nature take its course.

Assumptions

1. Predicted increases in population, income, and leisure time will result in much greater demands on the Region's Wildernesses for a variety of activities.

2. In order to protect the wilderness resource, priority must be given to those public uses for which the Wilderness System is established.-*

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*-3. The importance of Wilderness as an ecologic benchmark will increase with time.

4. Attractive areas, especially those that are small, or attractive features, such as alpine lakes which are near the boundary of larger areas, will require careful and imaginative management to protect their wilderness resource.

5. Public education about the wilderness resource and the measures necessary to maintain it is of utmost importance if wilderness values are to be sustained for the future.

6. One of the most "unnatural" effects on much of the Northern Region's Wildernesses will continue to be our highly effective fire control.

7. A part of the public support for Wilderness classification stems from a desire for recreation in a somewhat natural setting.

8. Back country recreation areas, established under Secretary's Regulations or multiple-use plans, can complement the Wilderness System and help alleviate the pressure from heavy recreation use of Wildernesses that now exists in numerous places and can be anticipated in many more.

230 - LAND USES

231 - Land Occupancies. Land occupancies which, in this case, are physical structures and which take up space on the National Forest, are usually identified within two main categories: (1) Those occupancies used by the public, such as camp and picnic areas, and (2) those improvements usually authorized by permit for the sole benefit of a limited number of specified individuals. Forest Service improvements, such as administrative sites, lookouts, and telephone lines, are also considered here. The Forest transportation system (roads, trails, and airfields) is an exception to the above and will be discussed in the transportation system.-*

(continued on next printed page)

HIGH AREA ZONE

HIGH AREA ZONE

HA-1 - HIGH AREA ZONE

I. Description

The high area zone comprises a very limited portion of the district's area. The topography is rugged and the soils are shallow and relatively unstable. Vegetative cover is limited to alpine and subalpine types. Elevations extend to over 7,500 feet and snow depth normally exceeds ten feet on the ridges and in the high basins. The only district improvement within the zone is Stahl Peak Lookout. This zone contains two areas which are separated by Grave Creek. The first and largest is located west of Grave Creek around Ksanka Peak. The other area is east of Grave Creek around Krag Peak, Deep Mountain, Mt. Petery, Mt. Locke and Krinklehorn.

II. Management Situation

Manage zone primarily for recreational use in the form of hiking, scenery viewing, outdoor photography, etc. Maintain watershed environment.

A. Resources

1. Recreation

Hunting and hiking are the primary recreational interests in this zone. Some of the most stirring viewpoints on the district are within it.

At the present there is very little pressure for recreational use. As interest in outdoor recreation increases it is anticipated that future use will expand.

2. Range

There are no domestic grazing opportunities. Soil is unstable. Native forage is generally undesirable for domestic animals. The only grazing use contemplated will be by wildlife - deer, elk and perhaps mountain goat or sheep after surveys to determine feasibility of introducing the latter have been completed and approved.

3. Timber

Values and volumes of the timber in this zone are very limited. The predominant species are alpine fir, whitebark pine, and alpine larch. Merchantable size timber is practically nonexistent; therefore, no timber harvest will be planned in this zone.

4. Water

The deep snow in the high basins produces an abundant amount of pure water. This is the most important resource in the zone. Maintain, or if possible, improve the watershed potential.

5. Wildlife

The zone provides only summer range for large numbers of mule deer and a very limited number of elk. There is little opportunity for improving habitat or forage in this zone at the present. Future plans should perhaps provide for determining condition and trend. Grizzly and black bear are common and mountain sheep have been seen. Small game includes grouse, marten, and various rodents. Hunting pressure is light because of adverse weather during hunting season.

B. Land Uses

1. Land Occupancies

No land occupancies are present and none are expected within the near future.

2. Minerals - Gas And Oil

There has been exploration work in the zone. One mining claim went to patent but no development work has been done for several years. It appears that further exploration work is impractical under the present economy.

C. Management Activities And Services

1. Transportation

This zone does not have a developed road system, but access is secured from the adjacent general forest zone. Low standard trails are prevalent throughout the zone. An improved trail system is needed for full development of the area.

2. Landownership Adjustment

All land within this zone is in public ownership.

3. Fire Control

Fire occurrence and risk are very light.

4. Forest Insect And Disease Control

An endemic infestation of bark beetles is present in the alpine fir. This appears to be light and presents no particular problems from losses or build up. Blister rust is present in the whitebark pine. No control measures are anticipated.

III. Problems And Decisions

A. Conflicts

1. Problem

As recreation use increases sanitation facilities will be needed to avoid pollution and damage to the watershed.

Decision

Primitive sanitation facilities will be planned and constructed as needed.

2. Problem

An adequately improved trail system is needed to provide access. Existing trails are worn and generally on location so steep that erosion is a continuing problem.

Decision

- a. Improvement of existing trails is the high priority job and should be done just as soon as financing permits. This will require careful reconnaissance and relocation of existing trails as well as the installation of erosion control structures and related work.
- b. New trails will be located and constructed to obtain full use of the area after improvement of existing trails and as the demand for outdoor recreation increases.

3. Problem

Overgrazing of scanty forage by trail pack animals.

Decision

Require trail and camping parties to pack in hay and feed. Install signs at take off points which explain requirements for camping.

B. Opportunities

1. Opportunity

Protect, maintain and improve the existing watershed which is virtually undisturbed by man except for a few miles of trail.

Decision

- a. Other resources will be managed and enjoyed only to the extent that they are compatible with watershed management.
- b. When other uses cannot be correlated with watershed management, they will be modified or eliminated.

2. Opportunity

Vista points can be located, constructed, signed and maintained to point out the different peaks in Glacier National Park.

Decision

- a. Scenic points will be planned and constructed as needed to meet the anticipated increase in recreational use.

b. As recreational use increases in this zone, action should be taken to provide end of road sanitary facilities and other minor developments which might include: hitching racks, loading ramps and garbage cans.

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GENERAL FOREST ZONE 1

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GF-1 - GENERAL FOREST ZONE

I. Description

This zone extends throughout the entire district. It includes 86% of the district land area and extends from the Canadian Border on the north to Martin Divide, Elk Mountain and Stenerson Mountain on the south. From east to west it extends from the Whitefish Mountain Range and Stillwater River to Pinkham Ridge. The general aspect is east-west. Three-fourths of the zone is drained by the Tobacco River which is formed by Grave Creek flowing in from the northeast and Fortine Creek from the south. Major tributaries to Fortine Creek are Swamp and Edna Creeks. The southeastern corner of the zone is drained by Sunday Creek and the Stillwater River. The extreme northern part of the zone is drained by Wigwam Creek.

The valley bottoms vary from eight miles to less than 100 feet in width. In the upper part of the zone the valleys are narrow and steep with steep side slopes. The lower section of each drainage is characterized by wide valleys, gentle side slopes and glacial deposited soils.

Major timber types are western larch and Douglas-fir up to 5,000 feet and primarily Engelmann spruce and alpine fir above this elevation. Stands of 61-100 year old lodgepole pine resulting from past fires make up approximately 15% of the timber type. The Stryker fire of 1926,

fires in Edna Creek in 1931 and 1936, and the Wigwam fire of 1934 burned a total of 26,300 acres of national forest lands. These areas are now densely stocked stands of larch and lodgepole pine. The Fortine block contains 238,859 acres of commercial timber land and is divided into 56 compartments. A number of small meadows supplemented by recent clearcuts scattered throughout the zone provide summer range for domestic livestock.

Soil on the zone has a glacial origin, and is composed of argillite, quartzite, sandstone and limestone. The Rocky Mountain trench completely traverses the district from Eureka to Stryker. The resulting deposits are typically glacial laid clay, silt, sand, gravel and cobble.

The higher slopes are mainly sandstone bedrock with limited overlaying soil development. The soils vary from Gray Wooded to brown Podzolic. Productivity appears to be entirely dependent upon available moisture. Most of the soils in the General Forest Zone are only moderately erosive but care must be exercised to prevent undue disturbances in some areas. Mineral deposits are not known to exist in economically operable quantities.

Big game species present in the zone include good populations of white tail deer, mule deer, and black bear. Elk, moose and grizzly bear are present in lesser numbers. Other wild-

Life include beaver, marten, mink, lynx, bobcat, cougar, wolverine, river otter, and four species of grouse. Golden eagles, bald eagles, wild turkey and migratory waterfowl are also encountered.

II. Management Situation

A. Resources

1. Recreation

Hunting, fishing and hiking are the primary recreational interests in the General Forest Zone. Nature lovers and occasional campers take advantage of existing roads and trails to commune with the natural beauties of the area. Near the flatland lakes area, people camp outside of the Water and Travel Influence Zone and drive to the lakes during the day light hours for fishing, boating, and picnicking. Around this area there are several old homesteads and cleared areas which are accessible by Christmas tree roads and are discovered as good camping sites by travelers.

It is anticipated that when the Libby Dam and the relocation of the railroad is undertaken the recreational use of the General Forest Zone will increase. Trails and roads travelling through the zone and leading to concentrated recreational use areas need to be improved and maintained to allow access into these areas. The Chain-of-Lakes Road beginning in

the vicinity of Barnaby Lake and traversing the major lake perimeters to tie-in with the Thirsty Lake Road is ready for construction at the time of this writing. It will be the first step in providing suitable access into the flatland lakes.

2. Range

There are 13 grazing allotments in the General Forest Zone. The "on-off" grazing capacity for all allotments is about 1800 head of cattle annually. Twenty permittees use these allotments. About five or six of them can claim their ranch and livestock operations to be economic units. Generally speaking, the remainder of the permittees depend upon sideline employment in order to make a satisfactory living. In addition to the 13 allotments, there are 14 pasture permits which have been fenced by the permittees to provide for more controlled grazing.

All of the range is transitory in nature. In order to obtain sustained forage yield, well planned land management practices are required. The combined effects of timber cutting, road construction, and grazing in an area modifies ecological succession and results in sustained forage production. The areas producing forage will change, but the forage yield can be expected to continue roughly in the same amount.

Allotment boundaries as drawn originally included much private land. In the early days and with the existing open range law, this was acceptable.

As a consequence, all except one allotment are under "on and off" provision. Some of the allotments have a very low percentage of Forest Service ownership. Under today's pressure on land use and the future outlook these high percentages of "off", or private lands, are unacceptable. Fencing of the private ownership within the allotments is just beginning. The future will see much more of this. State legislation will need to change the "Open Range Law" before the landowner will have a legal defense against cattle trespass.

The allotment boundaries must be adjusted in the near future to exclude as much private land as possible and to establish more practical units. This can be done on most allotments without seriously reducing the stocking rate and creating an economic impact on the permittees. New cuttings and roads have opened some new grazing opportunities.

Some private landowners whose property lies within or borders on allotments own and run stock on their lands. Most of these owners do not hold a Forest Service grazing permit.

The high degree of variability and the dynamic nature of the forage make accurate and meaningful estimates of carrying capacity, and range condition and trend difficult to achieve. Available and foreseeable financing limit the amount of sampling that can be conducted. Very little meaningful analysis work has been done in the past. The future of grazing will depend upon accurate analysis so that we know what we have, how we are using it, and its relation to other resources. The objectives are to provide forage for domestic stock on a sustained basis. While realizing that a perfectly harmonious situation among resources and uses may never truly exist, we will still attempt to achieve this situation by being realistic and basing our decisions on measured data and facts rather than by personal opinion as has been done in past years. "Carefully computed carrying capacity of the land will dictate the number of domestic stock that shall graze upon it!"

3. Timber

The district's planned allowable cut based on the 1966 Timber Management Plan for the Kootenai Working Circle is 31.5 MM board feet of regulated sawtimber cut and about 1.5 MM of unregulated 5 to 9-inch diameter material. The General Forest Zone contains approximately 98% of this volume. The original allowable annual cut,

based on the 1955-1965 Timber Management Plan, was 25.0 MM. The average annual cut for the 5 year period from 1955 through 1960 was 28 MM. This increase of cutting beyond the allowable cut resulted from the harvest of spruce bark beetle infested and killed timber during the 50's. Logging took place in every major drainage in the northeastern one-fourth of the zone. Cutting over the last 5 years (1961 through 1966) has been commensurate with the last 10 year's harvest plan allowance of 25 MM per year. Objectives are to

sustain and improve the yield of timber and timber products through application of improved harvesting and regeneration practices.

The condition of the sawtimber stands is generally very good over most of the zone. Productivity surveys indicate that satisfactory reproduction is establishing on all of the older cutting units. In the cutover spruce type new reproduction is found to be predominantly alpine fir. It is expected that Engelmann spruce will fill in as stand growth progresses. The burn areas around Stryker, Edna Creek and Wigwam Creek are almost entirely overstocked with larch and lodgepole sapling and pole size reproduction. In nearly all cases retardation of growth is apparent and in too many instances these young stands exhibit incipient stages of stagnation. These areas have received prime consideration in the district thinning programs; however, present financing does not permit sufficient thinning to insure the salvation of these stands.

The Fortine-Eureka area is the largest producer of wild Christmas trees in the region. A major portion of the local economy is dependent on the Christmas tree industry. Since 1952 the annual cut of Christmas trees has averaged 19,455 bales. 1966 was a record year for the Christmas tree harvest - 26,234 bales were

taken from district sales. There is probably as much or more activity in harvesting wild Christmas trees in this area as anywhere in the United States. A tremendous opportunity exists for the multiple use management of Christmas trees with respect to all other resources. Possibilities have not been fully explored at this time; however, an increasing amount of preliminary thinking and planning is being done which should beneficially affect management in years to come.

4. Water

Water is an important resource on the district and its management dependent upon all other resources. Water is plentiful and of good quality in the drainage heads. All streams and water sources within the zone will be protected.

Locally important water users dependent upon national forest watersheds are the towns of Eureka and Fortine and the Glen Lake irrigation district. Domestic need for water is minor at the present but is anticipated to increase as the population increases. The heavy clearcutting during the spruce bark beetle program has resulted in excessive runoff and erosion problems in Wigwag, Foundation, Drip, Bluesky, Stahl, Williams and Grave Creeks. Most of the problem resulted from windthrown trees or cull logs that formed jams in

the streams. These jams backed up the water until excessive pressures burst through to send a tremendous wall of water down stream scouring the channels and causing severe erosion damage to the drainage.

Studies in the form of stream gages and turbidity samples have been undertaken to determine the impact of land use on quality water production. Objectives are to retain and improve the abundant supply of high quality water now present.

5. Wildlife

White tailed deer, mule deer and black bear are the most numerous big game in the zone. Also in huntable numbers, but of less importance, as far as hunting is concerned, are moose, elk, and grizzly bear. At present there appears to be little conflict between these game species.

It is popular local belief that deer have overused their winter range. However, browse measurements indicate a normal amount of use over the past 10 years, indicating deer use is commensurate with stabilizing forest environment. The large burns of 1926-1936, which provided an abnormal amount of winter forage for what subsequently came to be an "irruption" of deer, have regenerated their stands to a stage which is now shading out desirable browse species to the

extent that large deer populations are not concentrated in any one area. Probably 80% of the hunters who pursue the gray whitetail are real hunters. Therefore, the kill of does and fawns is high as is the number of bucks remaining from season to season. Minority groups in the area are continually attempting to promote the stocking and propagation of elk. This is not natural elk habitat and if the establishment of elk in large numbers were successful, the whitetail deer habitat would ultimately be ruined.

The wildlife objectives for the Fortine District are:

1. To maintain the favorable whitetail-mule deer habitat through accepted multiple use management methods.
2. To permit elk management on a "small herd" basis only.
3. To improve waterfowl habitat by providing nesting grounds, food and cover.
4. To keep current with big and small game status annually and periodically so that trends may be easily determined and modifications in management may be effectively implemented as required.
5. To survey fishable streams and inventory needs to improve fish habitat.
6. To coordinate all proposed wildlife plans and projects with the State Fish and Game Department and other cooperating agencies.

U. Land Uses

1. Land Occupancies

The predominance of the district's land use permits are located in this zone. These include uses for

right-of-ways, water transmission, pasture, hay cutting, power and telephone lines, television translator stations, airports, and other miscellaneous uses. With the advent of the Libby Dam, the railroad relocation, and the increase in population, it is anticipated that pressures for additional land occupancies will increase.

2. Minerals - Gas and Oil

Little prospecting and no mining is presently taking place on the Fortine District. In 1959 and again in 1961 oil companies have conducted oil exploration work in the Grave Creek drainage. Results of this investigation have not been divulged.

The zone's one active mine is in the Deen Creek drainage and is still in the prospecting stage.

C. Management Activities and Services

1. Transportation

The district has a well developed transportation system. The Great Northern Railroad and U.S. Highway #93 traverses the district from north to south.

Relocation of the railroad from Stryker up Fortine Creek will somewhat complicate access to the southeast one-fourth of the zone because of the limited number of crossings. The existing track into Eureka will be left as a spur to provide service to that community.

The county has constructed and maintains a suitable road system to serve the needs of the rural population. The forest transportation system in general is well developed with primary roads into almost all drainages. Access into the Flatland lakes area is limited to very poor substandard roads. The Chain-of-Lakes Road is planned to provide access into this area. Right-of-ways will be needed to provide lateral access off of this Chain-of-Lakes Road.

The 1965 Transportation Development Plan shows the following district roads:

Primitive	174 miles
Graded and drained	235 miles
Road with soil and aggregate surface	<u>71 miles</u>
Total	480 miles

The maintenance responsibility is as follows:

Forest Service	96 miles
County or State	90 miles
User maintenance	<u>294 miles</u>
Total	480 miles

Many of the roads are in good condition. However, there is insufficient funds to do the maintenance job adequately. Also the above tables show 174 miles of existing roads that do not have adequate drainage.

Erosion is a continually recurring problem on these primitive roads.

In addition to the road system the district has 204 miles of trails. Most of these are below standard. Erosion is causing some problems particularly in the northern part of the zone. New trail construction is at a standstill. When trail work programmed in the Cabinet area near Libby is completed, funds for improving trails in this area may become available.

2. Landownership Adjustment

There are approximately 20,600 acres in the General Forest Zone in private ownership. Most of this land is intermingled with national forest land in the main valley bottom. There are 340 miles of property lines between national forest and private lands; of which 200 miles are not adequately surveyed and marked. There are 393 property controlling corners within the zone; the majority of which have been properly monumented.

Timber harvest on private land has a definite effect on the management of national forest land. In some cases excessive runoff from private land causes stream channel damage on national forest land. Adjustment to improve ownership patterns by exchange is desirable in some areas in the valley bottom. Approximately 100 acres have been withdrawn from the zone for other

uses such as campgrounds, administrative sites, snow courses, etc.

Securing right-of-ways have cause some delays in work programs particularly timber sales. No increase in problems are anticipated.

3. Fire Control

The Fortine District has a moderate fire hazard and a moderate fire risk. The average annual fire occurrence for the past five years (1961 to 1965) is 14.4 fires, 5.2 were man-caused. In 1965 the fire occurrence was 9 of which 6 were man-caused. The average annual burned area for the 1961 to 1965 period was 15 acres.

The total population for the Fortine District is 1,331 of which over 55% are rural residents. Contributing to the fire risk of the district are 45 industrial operations, 28 miles of railroad, many miles of powerline and State Highway No. 93.

Since large scale logging started on the district slash disposal has been kept current. This has resulted in treatment of over 1,200 acres per year usually done in conjunction with site preparation.

An intensive thinning program has added approximately 500 acres of slash per year to the fire risk for the past five years. These areas are concentrated in

the burned over areas in Wigwam and Edna Creeks and the Stryker burn. It is anticipated and hoped that this program will increase as timber management becomes more intensified.

The construction of Libby Dam with its ensuing influx of people will increase the district's fire risk tremendously during the next 5 years. An additional impact of significant importance will be the clearing and construction of the new railroad line. When completed this will increase the total miles of track on the district to approximately 42.

4. Forest Insect and Disease Control

The 1942-1958 spruce bark beetle epidemic resulted in depletion of the spruce stands. This epidemic appears to have now run its course. Continuing losses in Douglas-fir result from minor attacks by the Douglas-fir bark beetle. Losses are usually in the form of individual trees and scattered groups. At the present, control practices consist of logging the merchantable infested areas.

The district has very limited stands of white pine. White pine blister rust is common. No control measures have been undertaken other than timber harvest.

Old growth and young stands of larch are relatively

free of dwarf mistletoe. Only 6-8% of the larch stands on the district are infected.

Christmas tree blight is common in many of the young Douglas-fir stands at lower elevations. It causes fluctuation in the annual Christmas tree harvest.

The objectives are to continue observation and analysis of insect and disease conditions so that control action may be initiated when conditions require.

III. Problems and Decisions

A. Conflicts

1. Problem

Camping outside of developed areas is increasing.

Decision

Develop new areas to provide only for increases in use as funds are available. In the meantime provide minimum sanitation facilities for areas receiving heaviest use.

2. Problem

Maintenance and signing of roads and trails which provide access across the General Forest Zone to recreation areas.

Decision

Provide for maintenance and signing of roads and trails on a yearly basis. List trails and roads that are designated for recreation use. Acquire right-of-ways necessary to maintain existing roads

and construct and maintain new laterals off the Chain-of-Lakes Road in the flatland lakes area.

3. Problem

Determine when range is ready to graze in the spring.
Determine when proper use has been reached. There are no acceptable transitory range guidelines for use. These must be developed during the next few years so that proper management may be planned and executed.

Decision

- a. Obtain data and assist in the development of local range readiness guides to insure proper development of forage prior to grazing season.
- b. Develop local proper use standards to achieve true proper use management on transitory range.
- c. Develop an adequate sampling system to define proper use and range condition and trend, considering available and foreseeable financing and the variability of the forage resource.

4. Problem

Adjustment of allotment boundaries and carrying capacity.

Decision

- a. Continue to adjust allotment boundaries to exclude as much private land and blocks of unused national forest land as possible in conjunction with preparation of new allotment plans.
- b. Do not increase the grazing obligation until accurate

carrying capacity can be determined based on the results of Decision Number 3.

- c. As possible, issue permits to applicants whose base ranch is within or borders on the allotment.

5. Problem

Provide and maintain adequate range improvements to achieve proper livestock distribution and forage utilization.

Decision

- a. Program range developments to provide mechanical aids and improvements to achieve better distribution. Utilize the annual review of allotment plans with permittees to set priorities on developments and formulate the necessary agreements.
- b. Encourage permittee participation in construction and maintenance of new improvements. As a minimum, provide materials and have permittees do the construction.
- c. Range permittees will be required to salt cattle away from water sources to prevent concentrations of stock at such places. Salt stations will be moved frequently by permittee to prevent soil damage.
- d. Continually emphasize importance of permittee's cooperation in following plans to maintain range in top condition and allow maximum number of cattle on land.

6. Problem

Timber cutting on private lands and especially the clearcutting of bark beetle infested spruce stands has, in several drainages, caused damage to watersheds. Stream channels have been filled by sediment reducing their capacity to carry spring runoff.

Decision

- a. The effect of timber harvest on the quantity and quality of water production will be considered prior to each timber sale within the zone.
- b. Limit cutting on land in a drainage to a percentage that would not adversely affect the ecological environment of the drainage. Take all precautions possible to minimize damage to lands and water-courses either within or adjacent to the drainage.
- c. With respect to harvesting timber, regardless of the cutting method used, carefully consider all mechanical and ecological factors which will influence site condition subsequent to harvest. This includes but is not limited to: size of area, slope, aspect, soil type, structure, depth and placement, position of area on slope or in drainage, regeneration of area, shape of cutting unit, fire control and site preparation.
- d. On all timber sales, properly constructed erosion barriers will be installed currently on skid

trails and spur roads except where other approved methods are employed. Use forest guidelines to secure operator compliance in all situations.

- e. Remove all logging debris from stream channels prior to fall freeze-up.
- f. Plan roads and drainage systems into areas considering later cutting and development.
- g. Channel changes and machine work in stream beds will be based on decisions of hydrologic studies and approved by the Forest Supervisor.
- h. Grass seeding and fertilizing will be employed where needed on timber sale roads to insure stabilization of cut and fill slopes.
- i. Exclude tractor skidding and road building at natural topographic breaks; and also for a distance of not less than 66 feet from live streams except at crossings where temporary protection or drainage structures are required.
- j. On steep slopes soil stability will be considered prior to timber sale planning.
- k. Reforestation projects will consider impacts upon wildlife habitat.
- l. Clearcut areas will be designed to blend in and conform with topographical features so that a natural effect will be "seen" after logging.

7. Problem

Land occupancies are taking out more and more land

for a particular use. This tends to remove publicly owned land from multiple use.

Decision

- a. Where possible, confine cross country utilities to the same or existing rights-of-way to reduce the impact on other resources.
- b. Land occupancy permits will not be issued where conflicts will develop between planned or existing recreational improvements or needs.

8. Problem

Fire hazard and risk will increase during the relocation of the railroad and as the district's thinning program increases.

Decision

- a. Increase prevention measures as needed to contact an increasing number of national forest users and to closely patrol the high risk and high investment areas.
- b. Maintain slash disposal activities to keep current (within 1-1½ years) with timber sales and thinning programs.

9. Problem

Locate, construct, improve, and maintain roads and trails and provide for maximum soil and water protection.

Decision

- a. Soil surveys and mapping should be completed as soon as adequate guidelines, financing and a qualified soils man is available.
- b. Plans for roads and trails will provide for soil and water protection through location, design, prompt revegetation and similar prevention and remedial measures.
- c. Where possible roads will be designed to fit the topography to prevent excessive soil disturbance. Location of roads will always consider breaks or rolls in grade as an erosion prevention measure.

10. Problem

Land exchange may cause an impact on multiple use management.

Decision

- a. Before considering land exchange the impact on all resources will be determined.
- b. Potential recreation sites should be withdrawn from other uses.

B. Opportunities

1. Opportunity

Better utilize the timber resource on national forest land.

Decision

- a. Continue to encourage the development of a local

market for the utilization of material smaller than 9 inches.

- b. Promote more intensive Christmas tree management on poor sawtimber sites. Work with local Christmas Tree Association in laying groundwork for improving cultural methods of management and to provide for a larger cut of quality trees on smaller sale areas.

2. Opportunity

Check the spread of dwarf mistletoe in western larch stands.

Decision

Aggressive action will be taken to prevent spread of dwarf mistletoe to uncontaminated stands. This may be done by logging or whatever other means are acceptable.

3. Opportunity

Reserve the right to produce forest products not in conflict with the purpose of land occupancies such as utility right-of-ways.

Decision

Prevent the use of soil sterilants on utility right-of-ways. This would permit the growth of Christmas trees for management and harvest and provide browse for wildlife.

4. Opportunity

Stimulate recreational use and interest by establishing vista points.

Decision

Develop and enhance vista points within the zone.

(Meadow Creek, Pincham Ridge, Jumbo Creek Road, along Travel Influence Zones - Grave Creek, Fortine Creek and Chain-of-Lakes roads).

GENERAL FOREST ZONE 2

GENERAL FOREST ZONE 2

GF-2 - DEEP CREEK AND ST. CLAIR CREEK MUNICIPAL WATERSHEDS

(Water supply for Fortine and Eureka, Montana.)

I. Management Situation

Both the Deep Creek and the St. Clair Creek Watersheds are located on the west slope of the Whitefish Mountains. Elevations extend from 3,000 feet to over 7,300 feet. Both drainages are typical of the parent General Forest Zone.

Salvage of spruce killed by bark beetles was undertaken in the Deep Creek drainage in 1958. There was 7,623 M board feet of timber removed in one sale. Several small sales have been sold in the lower portion of the watershed. Due to the nature of the topography these have had little influence on the water resource. This lower section is also within the Grave Creek Grazing Allotment and used by cattle. A watershed plan for the Deep Creek drainage was prepared in 1958.

The St. Clair Creek drainage has not been logged and there are no improvements on national forest land other than Trail No. 88. The drainage is similar in many respects to Deep Creek. One exception is that the lower more gentle portion of the drainage is in private ownership. Some losses in the timber stand are resulting from Douglas-fir bark beetle activity.

No watershed plan has been made for the St. Clair Watershed.

II. Problems and Decisions

A. Conflicts

1. Problem

Recreation developments in the unit could be detrimental to the production of pure high quality water.

Decision

No recreation developments will be made within the unit for the present. With increasing pressure for recreation use in this area, other considerations may be made.

2. Problem

Correlate timber harvest with watershed management emphasizing the latter.

Decision

- a. Inform water users of the unit on policies and plans for the watersheds.
- b. A watershed management plan for St. Clair Creek will be prepared prior to initial timber harvesting if this watershed remains as the source of Eureka's water.
- c. No logging camps or mill sets will be allowed within the unit.
- d. Give full consideration to the amount of area cut at any one time in this unit. Refer to detailed functional plans before planning sales.

- e. Region 1 marking guides will be modified to the degree and manner necessary to avoid or eliminate water pollution.
- f. Road and skid trail construction shall be limited to the driest part of the year. Skidding distances and number of trails will be specified to avoid excessive soil disturbance.
- g. The timber sale contracts will specify the logging season for the area. Logging will not be permitted when weather and soil conditions are unfavorable to good land management.
- h. Scarification for seedbed preparation may be used to secure regeneration. Debris resulting from scarification shall be windrowed on the contour.
- i. Erosion control measures will be kept current with each activity. Seeding of scalped areas, cuts and fills will be prescribed and accomplished as needed.
- j. Maintain turbidity and flow records before, during, and after, logging.
- k. Slash disposal programs will be kept current to prevent excessive insect and fire hazards.
- l. Slash will be utilized where necessary to prevent soil movement.

3. Problem

Land occupancies could cause pollution of water resource.

Decision

No special uses for habitation will be issued.

4. Problem

Develop adequate transportation system for the unit and avoid polluting the water supply.

Decision

- a. All system roads will be located and designed prior to construction. Location will be based on a thorough study of the soil type and geological formations. This analysis and prescription to be made by qualified foresters or soil specialists.
- b. Locations for spur and jammer roads will be approved by the sales officer prior to construction. The number of and distance between roads and skid trails will be specified clearly in all contracts.
- c. Where it is desirable to provide a filtration strip clearing debris will be windrowed at the lower edge of the fill slope.
- d. Seeding will be used on all cut and fill slopes where practical to facilitate stabilization of the soil.
- e. Culverts shall follow the natural surface grade. Where this is impractical, down spouts or rip-rap aprons will be provided which will extend

beyond the toe of the fill. Culvert heads and outfalls will be riprapped or otherwise protected from erosion damage -- a contract requirement.

- f. Spur and jammer roads will utilize outsloping and cross drains where required. Such cross drains will be staked and constructed as instructions and contract requires.
- g. Major climbing roads necessary to develop the drainage will be constructed to at least an SL-12 standard with all necessary drainage. Sustained road grades should not exceed 8% except for short pitches. Other roads will be constructed to fit the topography and generally with the contour. Locate and construct spur roads to take off the main haul road on a level grade. The same applies to skid trails where feasible.
- h. Limit the grade and number of skid trails in downhill logging -- especially in areas known to have erosive soils.

B. Opportunities

1. Opportunity

To protect, maintain, and improve the watershed through proper management.

Decision

The management of all other resources will be modified or eliminated to protect and improve the watershed.

GENERAL FOREST ZONE 3

GENERAL FOREST ZONE 3

CF-3 - BIG GAME WINTER RANGE

I. Management Situation

This unit includes that portion of the zone which has critical significance on the big game populations of the district.

It is considered even more important because the major portion of the critical winter range is in private ownership. On the private land little or no effort is extended to improve or maintain the wildlife habitat.

Much of the unit is grazed by cattle, in some instances overuse is apparent and conflicts with big game management. The overuse occurs primarily on private land in the Tobacco Valley.

Ten year Christmas tree sales have been made on most national forest land within the unit boundaries. Second growth Douglas-fir and larch stands are common. Much of the national forest land within the unit is classified in the low site index class because stands are stagnated. Actually the site class should be rated at least medium in half of the area. Good sawlog production is limited to the moist sites in the draws and north slopes or benches. The ridgetops and south and west slopes which make up the poorer half seem to be better suited to Christmas tree production. There is an excellent opportunity here to study the situation in this area and come up with some new management prescriptions which would feature "combined-purpose" management of Christmas trees, sawtimber and wildlife.

II. Management Decisions

A. Conflicts

i. Problem

Correlate domestic grazing with big game management.

Decision

- a. Complete range analysis of allotments within the unit by end of fiscal year 1968. (Target date is F.Y. 1969).
- b. Complete browse survey and analysis (Thirteen Foot Browse Survey) of big game winter range by end of fiscal year 1969 if financing remains available.
- c. Complete administrative studies on Ant Flat Winter Area and the Vredenburg Browse Fertilization Study.
- d. Continue, and increase as needed, browse utilization studies to stay current on range condition and trend.
- e. Adjust cattle use to avoid conflict with big game use.
- f. Discourage predator control.
- g. Cooperate with the Montana Fish and Game Department in their efforts to maintain big game, upland game, and fish habitat. Be guided by multiple use management concepts when considering changes and proposals connected with wildlife management.

2. Problem

Access and management are complicated because of the high percent of private land in the unit.

Decision

- a. Acquire right-of-ways needed to develop and maintain a good access road system in the unit. This will not only improve management access but also will encourage hunting on the unit.
- b. When possible, secure critical big game range through exchange procedures. See current land exchange and adjustment plan.
- c. Give full consideration to the impact on big game habitat before considering land for exchange.

B. Opportunities

1. Opportunity

Manage the timber resource to favor and improve the wildlife habitat.

Decision

- a. All proposed wildlife management projects will be based upon practical and knowledgeable plans, backed up by adequate observation and research.
- b. Timber harvesting in the unit will be manipulated to give the largest "edge" effect within economic and silvicultural limitations.
- c. Small natural openings will not be planted with sawtimber species.

- d. Special effort will be made through timber, Christmas tree and other forest land treatment, to preserve and increase browse species where reasonably possible.
- e. Timber stand improvement projects will be planned and programmed to have as much favorable impact on wildlife habitat as possible.
- f. Fire will be considered for an ecological tool in developing and maintaining browse areas.
- g. All requirements of wildlife will be considered to obtain optimum wildlife environment — food, cover, breeding areas, access for hunting, predators, etc.

2. Problem

Obtaining highest and best use (uses) of dry, low site index areas which are not supporting good volumes of sawtimber.

Decision

- a. Examine, analyze, and map low site index areas within the unit.
- b. Determine best management prescriptions for this type of area with respect to multiple use and use by local industry.

GENERAL FOREST ZONE 4

GENERAL FOREST ZONE 4

GF-4 - HIGH AREA

I. Management Situation

This unit includes approximately 25,000 acres of steep rocky slopes and ridgetops in the northeastern one-fourth of the zone extending from Patrick Ridge to the Canadian Border. Elevations are generally above 6,000 feet but drop to 5,000 feet on some of the real steep slopes in the Grave Creek drainage. Access is very limited and road location and construction would be very difficult because of the thin shallow soils. Timber stands are chiefly low vigor Douglas-fir, Engelmann spruce, and alpine fir. Volumes of merchantable timber per acre are very light over most of this unit. At present this area is economically ^{or ecologically} unsuitable for logging.

II. Management Decisions

A. Conflicts

1. Problem

Economically develop and maintain a road system into the unit without causing excessive soil movement and damage to the watershed.

Decision

Same as problem number 5, GF-2.

2. Problem

Harvest timber on the steep rocky slopes without damaging the watershed.

Decision

The watershed is the most important resource in the unit. Timber management plans will be modified if necessary to protect the thin soils on the steep slopes of the unit for watershed purposes.

WATER INFLUENCE ZONE

WI-1 - WATER INFLUENCE ZONE

I. Description

The Water Influence Zone is comprised of relatively small areas around the district's lakes and a narrow strip adjacent to the more important streams.

Lakes which are included in this zone are: Dickey, Murphy, Big and Little Therriault, Franks, Timber, Long, Rock, Lost, Alkali, Thirsty, Martin, Weasel, Rattlebone, Blue, and Sunday Lakes.

Recreation use is presently significant in all of these lake areas and is expected to increase.

Major streams, that support fish or contribute significantly to the overland flow of water on the district, are included in this zone. They are Grave, Wigwan, Fortine and Sunday Creeks. Most of the stream channels are narrow and steep in the upper areas and begin to widen and meander as they approach the valley bottoms.

II. Management Situation

A. Resources

1. Recreation

At the present, improved recreational areas exist at Big and Little Therriault Lakes, and Rock Lake. Plans have been prepared for improvements at Frank Lake and Alkali Lake.

Public pressure has increased each year for use of these sites for picnicking, camping, swimming, boating and fishing.

There are no recreation improvements on the streams in this zone at present.

Fishing pressure is increasing in the flatland lakes area and along Fortine and Grove Creeks. Most of the lakes and streams are accessible by roads. However, many of the roads are substandard, particularly in the flatland lakes area. Sanitation facilities (minor development) will be needed as recreation pressure increases on lakes and streams.

The objective is to manage this zone primarily for recreational use with emphasis on enhancement of aesthetic values. Also plans for recreational development will be considered.

2. Range

Many of the lakes in the flatland lakes area are heavily used by cattle. In many cases, they constitute direct competition with recreational uses.

Some damage has resulted from concentration of cattle in the stream zone. This is mostly in the form of trampling.

Objectives will be to coordinate grazing with recreational use by application of special management practices.

3. Timber

In many cases, old logging went directly to the lake shore. The sites are now occupied by second growth stands with a scattered veteran overstory. Present timber sale plans will require a modified logging method along red lined streams.

Objectives in timber management within this zone will be to harvest timber only with the idea of preserving or enhancing aesthetic values and appearances.

4. Water

As covered in GF-1.

5. Wildlife

Most of the lakes in this zone are good fish producers. The streams are also capable of good fish production provided habitat work is initiated to improve stream environment. Much remains to be accomplished in this direction. However, embryonic efforts are underway at this time.

The zone also offers the best waterfowl habitat on the district. Some conflict is found between cattle use and waterfowl nesting. Fencing to improve habitat, nesting and feeding areas should nearly eliminate this problem.

One area on Alkali Lake and one pothole northwest of Alkali Lake have been fenced to exclude grazing

and improve the nesting areas. Other areas on the lakes are planned for a similar treatment.

There were 61 nesting boxes for Wood Ducks and Golden-eyes set out in 1964. These are being used. More work of this nature is planned.

Many of the streams contain excessive numbers of small trout. This stunting is primarily a result of lack of food which is related to the productivity of the streams. Considerable habitat improvement is possible on all the streams to effect the remedy of a poor situation.

D. Forest Land Uses

1. Land Occupancies

There have been no special use permits issued in the zone. Objectives are to discourage occupancy permits.

2. Minerals - Gas and Oil

At the present time there is no activity within the zone and none is anticipated in the near future.

C. Management Activities (and Services)

1. Transportation

The transportation system within this zone is good with the exception of the Eureka-Fortine lakes area. For full recreational development an improved road system will be needed.

2. Landownership Adjustment

Considerable acreages of private land exist within

the zone; many are highly desirable as recreation sites.

3. Fire Control

The number of man-caused fires within the zone has been limited. As the recreation use increases it is anticipated that more intensified prevention measures will be needed. Objectives are to fireproof this zone as financing will permit and emphasize prevention measures.

4. Forest Insect and Disease Control

Infestations of spruce bark beetles necessitated the removal of spruce timber in the Therriault Lakes Water Influence Zone.

Some problem exists in the uncut Stream Influence Zone of the spruce areas. Windthrown trees of the zone have probably contributed to the endemic population of spruce bark beetles. This usually results when volumes are too small to allow an economic cleanup of the area by logging.

All of the spruce cutover areas within the zone are adequately stocked with spruce and alpine fir reproduction.

III. Problems and Decisions

A. Conflicts

1. Problem

Sanitation facilities are needed to avoid polluting

and littering heavily used areas.

Decision

- a. Minor development will be planned prior to overuse of existing facilities.
- b. Minimum sanitation facilities will be provided at the heavily used area until heavy use dictates other measures are necessary.
- c. Recreation improvements will not be constructed in this zone along stream banks.
- d. As a minimum, the set back strip will be 100 feet. If this is not deep enough to protect aesthetics and the recreation resource it will be increased to a distance that will offer full protection to the natural beauty of the zone.

2. Problem

Prevent excessive damage from trampling caused by domestic grazing in the zone.

Decision

- a. Livestock concentrations in this zone shall be avoided.
- b. No salting will be allowed in the zone.
- c. Where necessary and desirable, fences will be constructed to prevent trampling of stream banks, lake shores and duck nesting sites on lakes.
- d. Where grazing use conflicts with recreation in developed sites, the sites will be fenced.

- e. The lake shore area will be maintained to provide wildlife, waterfowl and fisheries habitat.
- f. Development of recreation sites will be coordinated with the fish stocking programs of the Montana Fish and Game Department.

3. Problem

Correlate timber harvest with recreation and watershed needs.

Decision

- a. Timber will be harvested from the zone on a modified basis. Full consideration will be given for the protection of the stream banks, riparian vegetation, stream channels and lake shores. At all times, in planning, aesthetics and recreation will be given primary consideration.
- b. Timber shall be felled away from the streams. Low stumps will be required as will the intensive cleanup of logging slash and debris.
- c. Logging debris will be winched from stream channels.
- d. Stand improvement work will be compatible with aesthetics and recreation.
- e. Potential occupancy sites will be treated in advance of development to secure the following:
 - 1. Removal of hazard trees.
 - 2. Remove trees to improve recreational values.
 - 3. Removal of diseased, insect infested and high risk trees.

TRAVEL INFLUENCE ZONE

TRAVEL INFLUENCE ZONE

TI-1 - TRAVEL INFLUENCE ZONE

I. Description

The Travel Influence Zone parallels: the access roads through the Grave Creek drainage to Therriault Lakes and the Flathead National Forest boundary via the Frozen Lake Road; the Fortine-Wolf Creek Road from Trego to the Twin Meadows divide; and State Highway No. 93 from Stryker to Eureka.

The areas designated vary in width to conform with routes of travel and the streamside or timbered areas adjacent to the roads which would come under close scrutiny of the motorist or recreationist. The primary use within this zone is recreational in nature.

II. Management Situation

A. Resources

1. Recreation

South Dickey, North Dickey, Big Therriault and Little Therriault Lake campgrounds are adjacent to this zone. Approved recreational plans include another large development on Dickey Lake and one on Murphy Lake -- an additional 45-50 family units. These campgrounds are receiving increased use each year. The construction of Libby Dam and its related projects will progressively boost the use of these developments.

Recreation objectives will be to provide safe and enjoyable developments for public use in this zone as the demand grows. The zone will be managed primarily for the preservation and enhancement of the recreation potential and aesthetic values.

2. Range

Grazing use will be coordinated with recreation through special management practices such as, fencing intensively used recreation sites, herding by permittees, informational multiple use signing — to inform travelling public concerning grazing use, etc.

Objectives will be to promote grazing and recreational use where practical and carefully regulate areas of possible conflict.

3. Timber

Timber management in this zone will meet multiple use requirements and feature the enhancement of recreational and aesthetic values. The recreation management plan will be used as a functional guide in harvesting timber or engaging in silvicultural activities. Out-ting or cultural practices will be determined on an "area by area" basis — always with an eye toward what the aesthetic values to the travelling public are.

4. Water

Where the Water and Travel Influence Zones merge as one zone, close attention needs to be given to runoff

and erosion control. The continuous observation and evaluation of the transportation system's relation to streams and lakes is of great concern to the land manager. Grave and Fortine Creeks together with their tributaries carry better than one-half of the district's running water.

4. Wildlife

Wildlife management is important within this zone. The portion conterminous to Highway No. 93 from Stryker to Eureka and from Trego, along the Fortine-Wolf Creek road to the north tunnel portal, is in key winter game range. Large numbers of deer are killed along Highway No. 93 during severe winters. There should be no conflict between recreation and wildlife use in this zone. Actually, any cultural work done within timber stands throughout the zone could very well become a direct benefit to wildlife.

B. Forest Land Uses

1. Land Occupancies

Two special use residence permits are within the zone. Both are for private homes and are in Stryker, Montana. They are located on a small parcel of land which is not continuous with other national forest lands along the highway.

One pasture permit exists on 80 acres which is crossed by Highway No. 93. No particular problem exists from

this use. Three fenced pasture permits are located along the Fortine-Wolf Creek road.

The powerline parallels Highway No. 93 but is outside of the set back strip.

2. Minerals - Gas and Oil

No problem exists at the present for the zone.

C. Management Activities (and Services)

1. Transportation

No further development is needed for the zone except approach roads for additional improvements and perhaps the initiation and approval of a program to improve road drainage, width and surfacing on the Fortine and Grave Creek roads.

2. Landownership Adjustment

Little private land exists within the zone.

3. Fire Control

Because of the heavy recreational use and travel within the zone, it possesses the highest fire risk on the district. Occurrence and damage has been light in the past. However, the risk will increase tremendously due to the influx of construction people into the area.

4. Forest Insect and Disease Control

No problem exists at this time for the zone.

III. Problems and Decisions

A. Conflicts

1. Problem

Recreation facilities within the zone are heavily used.

Decision

- a. Recreation use is the key value for the zone. Management of all resources will consider recreation as highest and best use.
- b. Additional facilities on Dickey Lake will include improvements for group use. This includes the proposed Summit Creek Campground.
- c. Access and improvements will be constructed on the south shore of Murphy Lake as soon as funds are available.
- d. Complete impact surveys will precede the recommendation of any land occupancy permit. The Forest Supervisor will approve all special use permits in this zone.
- e. No summer home sites will be established in the zone.
- f. Locate, design and construct roads to enhance recreational and aesthetic values and to allow for public use of recreational resource.

2. Problem

Domestic grazing conflicts with recreational use

and constitutes a hazard on the highway and on the Fortine-Wolf Creek road. Big game crossing the highway is also a hazard during the winter.

Decision

- a. Allotment boundaries shall be adjusted to reduce, and if possible, eliminate grazing within the Highway No. 93 zone.
- b. Big game crossings will be posted on national forest roads.
- c. Cooperate with enforcement agencies to promote safer traffic conditions on the Fortine-Wolf Creek road.
- d. Where necessary, construct drift fences to alter cattle routes.

3. Problem

Timber harvest in this zone must be compatible with recreational values and the protection and preservation of aesthetics.

Decision

- a. Manage timber in accordance with prescriptions in the recreation management plan.
- b. Carry out all timber management activities in a well-organized manner and expedite preparation of sales and removal of timber so that interference with public use of areas will be held to a minimum.

- c. Avoid straight edge effect or large openings in forest canopy.
- d. Strictly control logging activities to avoid damage to soil, improvements, etc., during inclement weather.
- e. Require low stumps (10" or less where feasible) and 100% disposal of logging slash and debris. Allow for intensive cleanup operation in appraisal.
- f. Recognize and allow for balanced compromises between silvicultural and aesthetic requirements.
- g. Provide for interpretive signing so that public is informed in advance and subsequent to any planned work, especially if such work will cause a major alteration in the travel zone's character.

SPECIAL ZONE

SPECIAL ZONE

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480 - SPECIAL ZONE - WILDERNESS

*-481 - Definition. The wilderness special zones are defined as areas of land classified as Wildernesses or Primitive Areas to protect and benefit the wilderness resource. In section 226 of these guides, the wilderness resource of the Region is described and some conclusions and assumptions reached concerning it. Section 482 following, the areas of land are described, together with all their resources, including the wilderness resource. The two sections complement each other, and both must be read to obtain the full picture of the Region's wilderness situation.

482 - Description and Characteristics. The Wildernesses of the Northern Region are generally the higher, rougher, more scenic country, important water producers, and have an abundance of wildlife and fish. Over two-thirds is in what would be classed as "High Area Zone" if it were not designated as "Special Zone," and the physical description of the former is applicable, although prescribed management is different due to basic law. The other one-third lies below the altitude of the High Area Zone and consists of what would be General Forest, Riverbreak, Water, or Travel Influence Zones, if not classified as Wilderness. These parts of the Region's Wildernesses are usually less spectacular and scenic than the higher area. They provide suitable campsites for the public and outfitters, contain much of the forage for recreation stock, and also provide many of the wilderness hunting and fishing opportunities.

Research is in progress on the primary activities and likes of users and should be valuable for administration. We know that many visitors hunt, fish, ride horseback, look at the wildlife and scenery, and camp. A lesser number climb mountains and run whitewater streams in rafts or canoes. We need to know more about how important the wilderness resource is for them, especially the natural scene, lack of motorized equipment, and opportunities for solitude.

Although the prevailing condition of the wilderness resource is good, there are numerous examples of small "sore spots" where use has been heavy or uncontrolled. Popular campsites, mainly around the better fishing lakes and streams, show the damaging effects of inadequate planning and administration. Cans, bottles, and other litter mar the natural setting. Trees have been damaged or killed by serving as hitching posts. Fires have been built in numerous spots killing out the vegetation and resulting in an unsightly condition.-*

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*-Generally speaking, signing has been kept to a modest level in the Region's Wildernesses. The changeover to present standards has not been completed. In a few cases, signing in excess of needs prevails. Wilderness sign plans have not been fully completed or implemented to accomplish our Wilderness objectives.

Trail maintenance funding has seldom been adequate for much more than cutting windfalls out of the main trails. Drainage and maintaining tread have of necessity been given inadequate attention. Much of the system is not located or designed to facilitate maintenance. A few trails in recent years are considered "over built" considering the impact on the Wilderness resource and the type of uses to be served.

There is relatively little permitted sheep and cattle grazing on Northern Region Wildernesses. There is a considerable amount of grazing by horses owned by outfitters and private parties. The wilderness resource has, in some cases, received inadequate consideration in management of recreation stock. Use of forage has been guided by much the same standards that prevail on lands not managed for protection of the wilderness resource. The natural conditions whose preservation is recognized as a part of the wilderness resource by the Wilderness Act do not prevail. The natural ecology is upset by overgrazing, trampling, puddling of wet soils, change in plant composition, introduction of exotic plants (both noxious weeds and good forage species) and soil erosion. Fortunately, this situation exists on only a small portion of the Region's Wildernesses.

Picketing of horses in small parks and level areas around mountain lakes and along streams has resulted in spot damage to both forage and soil.

Increased attention is being given to management of forage in the Wildernesses. Inventories are progressing, and transects established to determine condition and trends. Wilderness Rangers have assisted in better distribution of stock. There is an opportunity for them to educate the Wilderness visitors in the effects of grazing on the wilderness resource and enlist their cooperation in protection of this resource.

The effects of better forage management in the past few years are quite striking in some areas. The control of stock and use of pelletized feeds have helped considerably to reduce the damage to the wilderness resource from this source.-*

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*-There is some minor use of trees for such items as corral poles, posts, logs, and other material for wilderness camps and administrative centers, but this use has generally had no drastic effect on the natural ecology. Trees are mainly important for cover and shade, and certain stands have outstanding scenic or scientific values.

In most of the Region's Wildernesses, obtaining wood for fuel is not a problem. Dry wood in some cases becomes scarce near fall hunting camps. This usually means going further from camp to obtain wood. Warming fires are sometimes almost a necessity, especially at high elevations or during inclement weather. Present use of dead wood for fuel is generally considered compatible with the definition of the wilderness resource in the Act. There may be some places at or above timberline where use of wood may be having serious impact on the Wilderness.

The Wildernesses of the Region are generally providing good conditions for production of a relatively stable supply of good water. Water measurement and management involves other Federal agencies such as the Soil Conservation Service, Bureau of Reclamation, Weather Bureau, and Corps of Engineers. State agencies such as the State Water Boards, Reclamation Commission, and others are also involved. Municipal water supplies and private water rights and use also play a role in Wilderness water management. A great deal of coordination between the Forest Service and the above agencies including informing them of the requirements of the Wilderness Act is necessary. Both a lack of understanding and sometimes a lack of sympathy for the purposes of the Act throw up barriers to Wilderness management. Examples of practices and installations which may conflict with the wilderness resource include:

1. Cloud seeding to produce heavier snowpack in the South Fork Flathead drainage.
2. Existence of irrigation reservoirs, particularly on the east side of the Bitterroot Range, where the dams and required access for maintenance could result in substantially noticeable imprints of man's work.
3. Requests of agencies and individuals to use helicopters, telemetry, gauges, snow pillows and other equipment and installation for snow measurement, all of which conflict with the wilderness resource.

The large elk herds of the Selway-Bitterroot and Bob Marshall Wildernesses were the result of natural forces. Trees reached a stage of maturity-*

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*-where they were susceptible to insect attack, large bodies of fuel accumulated which set the stage for large wild fires.

Huge fields of browse which came in after the reburns of 1929 and 1934 on the Selway-Bitterroot and Bob Marshall Wildernesses set the stage for the large elk herds which rapidly developed with the abundant winter forage. These areas became famous for elk hunting, and even inexperienced hunters were successful.

Now a new stage in succession is setting in. Browse has outlived its natural stage and conifer reproduction is replacing it with a consequent reduction in winter forage.

Widespread and drastic habitat manipulation would appear necessary to maintain the present herds. Such practices would be incompatible with the "untrammled" provision of the Wilderness Act. Allowing fire to play its natural role would not be very likely to sustain present elk herds which are probably naturally cyclical in areas such as these, and now on the down swing. Elk hunting in these areas will continue to be an important use for many years.

Fishing is a popular activity in the Region's Wildernesses. There is, therefore, considerable public support for fisheries improvements to plant fish best suited to the habitat and to provide facilities to accommodate fishermen up to the fishing capacity. A practice that has in the past been carried on in the Wildernesses is the introduction of exotic fish species. This practice is adverse to allowing natural ecological processes to prevail. One of its greatest impacts could be to scientific values. It would definitely decrease the value of Wilderness waters as a benchmark or control against which to measure results of management outside Wilderness. It conflicts with "untrammled" nature, primeval character and influence, and "protected and managed to preserve its natural conditions." (Language from the Act.)

The Act authorized the Forest Service to permit the continued use of aircraft where such use was established prior to passage of the Act. Thus, those waters in which fish were once stocked by aircraft can continue to be so stocked, although landing of aircraft is not allowed. There is no basis in the Wilderness Act to permit use of aircraft in stream or lake surveys or other fish and game management work.

Land occupancies have local adverse impacts on the wilderness resource in the Region. This is largely confined to the private lands along the Selway River and Moose Creek in the Selway-Bitterroot Wilderness. -*

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*-Some of these lands have been acquired by Land and Water Conservation funds, and the buildings, airstrips, and other improvements are being removed or closed as the case may be. There has been some public and State agency opposition to this program. The benefits to the wilderness resource include moving toward a situation where:

- Man becomes a visitor rather than resident.
- Land becomes "undeveloped Federal land."
- "Without permanent improvements or human habitation."
- "Protected and managed to preserve its natural conditions."
- "Generally appears to have been affected primarily by the forces of nature."
- "The imprint of man's work substantially unnoticeable."

Other private occupancies include mining claims, airfields, reservoirs, and permanent commercial outfitter camps. They all have some adverse effect on one or more aspects of the wilderness resource.

Unpatented mining claims are being examined for their validity where use does not appear proper. Reservoirs are, in some cases, being repaired and in other cases, breached and their use discontinued. Temporary permits for campsites are granted to outfitters. Control and distribution of the reservoirs and camps are two of the more important management challenges in the larger Wildernesses.

Administrative improvements and occupancies in the Wildernesses include a Ranger Station, a work center, lookout, airfields, trails, bridges, fences, and signs. Provision is made in the Act for structures to the extent required for "minimum requirements for administration of the area for the purposes of the Act." However, at least six of the ten components of the wilderness resource are adversely affected by these occupancies and improvements and they must be studied to see if they meet the "minimum requirements" provision of the Wilderness Act.

There are no producing mines in the Region's Wildernesses. The mineral potential of the Primitive Areas will be studied by the U.S. Geological Survey and Bureau of Mines as a part of the reclassification program required by the Wilderness Act to be completed by September 4, 1974. The Act also calls for recurrent studies by these agencies of the mineral potential of National Forest units of the National Wilderness Preservation System (NWPS). The State of Idaho is conducting a program to determine the mineral values of the Wilderness land in that State. Private exploration companies are also engaged in exploring the mineral potential of the Region's Wildernesses. There have been only a few applications for gas and oil leases.-*

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*-The Cabinet Mountains Wilderness lies in a mineralized area. Considerable exploration is going on near the boundaries. There are unpatented claims within the area. It seems apparent that decisions weighing mineral resources against the wilderness resource will be required in the not too distant future. Minerals are apparently a lesser consideration in the Selway-Bitterroot, Bob Marshall, and Gates of the Mountains Wildernesses. The Anaconda-Pintlar Wilderness lies near extensive mining operations of the present and past. The imminence of decision between wilderness and minerals cannot be appraised very well at this time. Mineral surveys of all existing Wildernesses which are called for in the Wilderness Act will provide facts on which realistic value judgments and agency recommendation can be made.

The Beartooth and Absaroka Primitive Areas have areas of known local mineralization and are currently being studied by the USGS and Bureau of Mines. The values of wilderness vs. minerals will play a significant part in recommendations for classifications and boundaries in this area. The study by the above agencies will provide facts on which value judgments can be made. Minerals are apparently not so significant in the Mission Mountains and Spanish Peaks Primitive Areas, although they may be of some significance in the latter. The Salmon River Breaks Primitive Area is currently being studied by the USGS and Bureau of Mines. The results and significance of minerals in that area is not yet known, but will be available before final judgments are made concerning the wilderness resource and use of minerals.

Large fires in the last 60 years have burned over much the Region's Wildernesses, in many cases, followed by reburns which resulted in almost complete disposal of ground fuels, litter, and duff. These lands, usually occupied now by a cover of browse, grass, or conifer reproduction are less susceptible to fire, and fires are easier to control than on unburned areas. There are, however, extensive areas of heavy and hazardous fuels located in the Wildernesses. Aerial fire control methods which emphasize rapid initial attack were developed largely to cope with Wilderness fires.

The role of fire in areas managed for the protection and maintenance of the wilderness resource is discussed at some length in previous sections of these guides. It is one of the more interesting challenges in Wilderness management. There is coming to be greater agreement on this subject among people who are recognized as leaders in Wilderness thought and practice, both in Wilderness organizations and the Forest Service.-*

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*-The matter of the role of natural (lightning caused) fires in Wildernesses, of man-caused wildfire, and of prescribed use of controlled fire must be explored fully, and more definitive management direction provided for each Wilderness. In areas where lightning fires are frequent and burning conditions often extreme, there is no doubt that effective control of fire has a drastic effect on the natural ecology. Letting lightning fires burn is the natural process. The use of prescribed fire to off-set such control could result in a more natural situation.

Forest (tree) insects and diseases are a part of the natural biota and, as such, play their role in the wilderness environment. One of the primary benefits of allowing these forms of life to play their natural role is the value for study. Control of tree insects and diseases alters the balance of nature by the very act of removing natural agents at work in the plant and animal community. The control project itself can have adverse effects on the wilderness resource. There has been some thought in the past that control could be justified in a Wilderness in order to protect timber stands outside of such areas. This kind of decision is a value judgement and provided for in the Act. Maintaining vigorous stands resistant to insects and diseases is important on adjacent lands.

483 - Management Direction

1. Manage Wildernesses primarily to perpetuate and provide benefits from thier wilderness resource.
2. Research and administrative studies shall be carried out to determine the past and present adverse effect of man on the wilderness resource. Within the authority of the Wilderness Act, work diligently to restore the "primeval character and influence" of the Region's Wildernesses where this has been lost or eroded.
3. Plant and animal communities will be given full opportunity to develop naturally. Normal management concepts of game species, predators, beneficial or harmful insects or diseases, good forage vs. unpalatable, etc., which are valid for other National Forest lands and resources, are not valid for the Region's Wildernesses.
4. The role of man in the Region's Wildernesses shall be that of "a visitor who does not remain." His influence shall be controlled to the extent necessary to insure that the remaining evidence of his activities is "substantially unnoticeable."-*

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*-5. Recognize that the National Wilderness Preservation System is a "system" to provide the components of the wilderness resource named in the Act, and that individual areas will vary in quantity and quality of these components.

6. Sustain rare and endangered species native to a given Wilderness.

7. Acquire all private lands within the Wilderness boundaries.

8. Through control of and cooperation with miners, protect wilderness values insofar as possible in their prospecting for and developing mineral resources.

484 - Coordinating Requirements1. Recreation

a. Recreation use shall be managed in such fashion that a Wilderness will "retain its primeval character and influence," its "natural condition" will be "preserved" and the "imprint of man's works" will be "substantially unnoticeable."

b. Visitors shall be managed rather than the environment. Intensive efforts shall be made to educate visitors in:

(1) The unique values of the wilderness resource.

(2) How to minimize the effects of their visits on the wilderness resource.

In concert with the education program visitor, use will be distributed, specially regulated, or limited as necessary to prevent loss or serious depreciation of the wilderness resource.

c. Identify and protect historic, scenic, geological, archaeological, and similar sites or areas within the Wilderness.

d. Regulate public camping to keep it at a sufficient distance from lakes, streams, trails, or other natural attractions to allow appropriate use without depreciation of the wilderness resource.

e. Recreation facilities shall be installed only when necessary for protection of the wilderness resource - when the installation will result in a site which generally appears "to-*

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*-have been affected primarily by the forces of nature," and the "imprint of man's work is substantially unnoticeable." An example of such a justification of a prepared campsite would be to protect a lakeshore or other attraction from being damaged by human use. Selecting and preparing a campsite, well screened and resistant to human wear and tear, would result in the area generally seen by visitors (the lake) appearing much more "primeval" and "natural."

f. No tables, firegrills or other comfort or convenience facilities will be installed.

g. Wilderness visitors, administrators, and users shall pack out all their unburnable garbage. This will include all commercial outfitters, the general public, and Forest Service crews.

h. Plan and administer outfitters and guides' services in such fashion as to serve the public needs while maintaining the wilderness resource. Outfitters' operations shall be harmonious with those of Wilderness visitors who do not employ guides.

i. All facilities used by outfitters and guides will be truly temporary and will be dismantled when not in use. Non-native material will be removed from the Wilderness and native poles will be stacked neatly out of sight.

j. Locate outfitters' camps away from recreation attractions to avoid monopolizing or detracting from the esthetic qualities of such areas. Camps shall be located off the primary trails or scenic spur trails and away from lakes and streams.

k. Installations necessary to protect the wilderness resource from damage by recreation stock will be well screened and shall harmonize with the natural scene.

2. Range

a. District multiple use plans shall establish priorities, unit by unit, for resolving conflicting needs for available forage between wildlife, administrative stock, recreation stock, and domestic stock.

b. The management of forage must normally be conducted without benefit of new improvements, structures, or practices which conflict with the wilderness resource.-*

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*-c. In all National Forest grazing allotment management plans, the livestock use of that part of the allotment within Wilderness will be so planned and administered as to recognize that wilderness values predominate.

d. Range management plans will incorporate suitable provisions for achieving distribution of stock with a minimum of structural improvements which conflict with the wilderness resource. Plans will recognize that special care must be taken to reduce the evidence of domestic stock use through open herding, careful adherence to one-night bedding of sheep, and broadcast salting of cattle.

e. Stock livestock ranges at a level which will perpetuate and protect such values as opportunities for botanical study and enjoyment of wild flowers.

f. Range seeding with native plants or plants that are established in the area may be done in situations where serious soil loss will result if such action is withheld.

g. So-called "noxious" farm weeds or exotic forage plants may be controlled by grubbing or chemicals if their presence will eventually result in contamination of farm and grazing lands outside the Wilderness, and if control can be accomplished without serious impact on the wilderness resource.

h. Eradication or control of native poisonous plants will not be undertaken unless they threaten public safety.

i. Trees invading meadows may be removed if the invasion is a result of other than natural ecological processes and if the resulting slash can be disposed of so as to present neither an eyesore nor fire hazard. No trees shall be removed if they are larger than can be cut with pruners or pulled by hand.

j. Fire may be considered as a management tool for range management purposes when necessary and appropriate to offset any adverse effects of man's influence.

3. Tree Cover

a. Native trees may be planted in the absence of natural revegetation where necessary to restore a timber cover lost as a result of man's influence.-*

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*-b. Cutting of trees may be permitted for construction of facilities necessary for administering the wilderness resource provided it can be done so that it does not substantially alter the "primeval character and influence" of a Wilderness and that it is "substantially unnoticeable." The public may use live trees for tent poles in the absence of dead ones.

4. Water

a. Objectives of Wilderness watershed management are identical with those of other National Forest watersheds with the important exception that measures which modify plant cover and treat soil mantles or other activities designed to maintain watershed conditions shall not detract from Wilderness as defined in the Act.

b. Gullied trails, eroding stream fords, undercut and raw stream channels, polluted water, overgrazed meadows and slopes, vegetation and soil disturbed by humans, domestic animals, wildlife, large burns, and landslides are examples of undesirable watershed conditions. Where these conditions have a major adverse impact on wilderness and watershed values, they are subject to restoration.

c. All watershed improvement projects will be completely designed as to location, type of treatment, and work methods to insure maximum protection of the wilderness resource.

5. Wildlife

a. All wildlife management measures shall meet the test of "the earth and its community of life" being "untrammelled by man" (nature has a free role), therefore:

(1) The usual distinctions between "game animals," "predators," "game fish," "trash fish," are not valid in the Wildernesses unless they are exotics introduced through the effect of man.

(2) Fish and game management shall largely be confined to control of fishing and hunting, rather than habitat management.

b. Wildlife management must also meet the requirement of the Wilderness Act that the Wildernesses must be "protected and managed so as to preserve" their "natural conditions." Natural in this sense recognizes the cyclical nature of some animal populations.-*

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*-c. Wildlife management responsibilities of the States shall be conducted within the definition of wilderness, the same as Federal activities.

d. Lakes or streams which do not at present have fish will not be planted.

6. Land Occupancy

a. Access to private lands and valid occupancies shall be by means which have the least adverse effects on the wilderness resource.

b. Permit temporary occupancies only to the extent required for realizing the recreational or other wilderness purposes which may include, but are not limited to, the public services offered by packers, outfitters, and guides. Avoid installations which would damage the wilderness resource.

7. Minerals. The use of the mineral resources of Wilderness shall insofar as permissible under the mining and mineral leasing laws and the Wilderness Act be controlled by the Forest Service to maintain the wilderness resource.

8. Transportation

a. Primary access roads and trails to Wildernesses shall be zoned as either Water or Travel Influence Zones.

b. Coordinate the number and standard of access roads to Wildernesses with the carrying capacity of the particular Wilderness.

c. Trails shall be located and constructed to minimize the alteration of the landscape to meet the requirement of the Act that the environment will appear to have been affected primarily by the forces of nature.

d. Portions of Wilderness presently without trails shall be studied carefully and the value with and without a trail system carefully analyzed before deciding upon construction of trails. Marked routes of travel or trails reserved for hikers only shall also be considered for such areas.

e. Coordinate trail construction and maintenance with fish and wildlife management so that the joint product is maintenance of the wilderness resource.-*

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*-9. Forest Fires

a. The role of forest fire in Wildernesses shall conform to the definition of Wilderness in the Act as a "community of life," "untrammled by man," "retaining its primeval character and influence," and "protected and managed so as to preserve its natural conditions." Fire control as "necessary" is provided for under section 4(d)(1) of the Act - "Special Provisions." "Necessary" here is defined as "needed for meeting the definition of Wilderness above and for protecting life and property in the Wilderness or resources outside."

b. Use fire suppression measures and techniques which achieve fire control objectives with the minimum adverse impact on wilderness value. Structures and improvements shall, when feasible, be located outside the Wilderness boundary. Give preference to methods and equipment which least alter the landscape or disturb the land surface.

c. Intentional burning of live or dead vegetation shall be done only in those areas where such practices are needed to offset the exclusion of natural fires, with the objective of having the area "appear to have been affected primarily by the forces of nature."

10. Insects and Diseases Affecting Wilderness Trees. As for fire control, the control of "insects and diseases," is provided for under "Special Provisions," section 4(d)(1) of the Wilderness Act, as "necessary" and as deemed desirable by the Secretary. As trees in Wildernesses are not a source of forest products, the consideration is primarily not one of protecting trees in the Wilderness, but of preventing spread to areas outside.

a. Allow all insects and plant diseases to play their natural role in Wildernesses. Allow fire to play its natural role insofar as possible as a sanitizing and control effect upon such diseases and insects.

b. Stands trees in Wildernesses shall be protected and managed so that they will serve as a benchmark or control for scientific study - of natural parasitism, insect cycles in relation to age and condition of trees, and other factors.

c. Manage timber stands outside but near Wilderness boundaries to maintain maximum vigor and resistance to insects and disease.-*

SP-1 - SPECIAL ZONE - TEN LAKES SCENIC AREA

I. Description

This zone is a high area that has been classified as a scenic area because of its extraordinary beauty. It is now pending classification as a wilderness area. The zone includes ¹⁸⁰¹ 1,992 acres in the headwaters of Blacktail and Phillips Creek on the Rexford District and ¹³⁵⁸ 4,549 acres in Bluebird, Wolverine, and Rabbit Creeks on the Fortine District. All of these creeks flow north directly into Canada. The topography is typical of rugged high areas. The soil is shallow and when disturbed erosion is a problem. Vegetation varies from the subalpine type at 5,000 foot elevation to true alpine type at elevations that exceed 7,000 feet. Rainfall is above the district average and snow depth normally exceeds 10 feet. Forest Service trails are the only access into the zone. ~~A private cabin, which is under a life tenure, is located on Wolverine Lake.~~ Bluebird cabin, a two story structure, is located in the Bluebird Basin and used for trail maintenance work and as an overnight camp during area inspections, etc.

II. Management Situation

A. Resources

1. Recreation

Considerable use is made of the zone. At least one-half of this is local use. There are no recreational improvements within the zone; although Little Therriault Lake campground is within 1½

miles of the eastern boundary. Four to six alpine lakes should offer excellent fishing if properly managed. At present, the three Wolverine Lakes and Rainbow Lake provide good fishing to anglers approaching the Izaak Walton caliber. The zone offers the most interesting and beautiful scenery found on the district. Use of the zone by hikers, fisherman and those interested in scenery is increasing each year. It is anticipated that this area stands the chance of being overused within a few years since it is so small and so easily accessible. If it is to retain its natural beauty, close supervision and competent maintenance will be urgently required.

104
Doeded

Mount
rehabilitate
seedling
signing
area
clearance

2. Range

The small alpine meadows are in good condition. However, the type of vegetation growing in these natural meadows is inherently fragil and will not withstand grazing pressure without damage. The objectives should be to preserve these meadows in their natural state.

3. Timber

The predominant species are alpine fir, whitebark pine, alpine larch, Engelmann spruce and lodgepole pine. Since this is to be a wilderness area no logging is contemplated.

4. Water

Large quantities of pure water produced mainly by snow pack, along with recreation, are the two key resources in the zone. Pure water production must be protected and sustained.

5. Wildlife

As covered in HA-1.

B. Land Uses

1. Land Occupancies

The only land occupancy in the zone now is the special use cabin on Wolverine Lake. A single packer permit will be issued in 1967, making a total of two permits in the zone.

2. Minerals - Gas and Oil

There are only two known mining claims in the zone. These have both gone to patent but have had very little development work in the past few years. Development of these mines is impractical under the present economy. Examination of these claims is being carried out to determine any future impact. It would be desirable for the Forest Service to obtain them if at all possible.

C. Management Activities and Services

1. Transportation

As covered in HA-1.

2. Landownership Adjustment

A small amount of private land is found in the

Bluebird Basin. This is in the form of patented mining claims.

3. Fire Control

As covered in HA-1.

4. Forest Insect and Disease Control

As covered in HA-1.

III. Problems and Decisions

A. Conflicts

1. Problem

Lack of recreational improvements and sanitation facilities to meet increasing use and avoid pollution.

Decision

Provide road and sanitation facilities at Bluebird and Wolverine unloading points when increased use dictates. Require all area users, packer outfits and campers alike, to bring out cans, bottles and unburnable material when breaking camp -- incorporate in use requirements for packers and place instructions at road end take-offs.

2. Problem

Grazing by domestic livestock could cause excessive erosion.

Decision

a. Grazing of cattle, horses or sheep will not be permitted in the zone.

b. Any commercial outfitter or private party which may use the zone will be required to pack in feed for pack and saddle stock. Signs informing of this requirement must be posted at all entry points. Also a part of special use requirements.

*and
loggers*

3. Problem

Harvest of timber is not economical or compatible with watershed or recreation management in this zone.

Decision

Timber will not be harvested for commercial use.

4. Problem

Any disturbance of the thin, shallow, highly erosive soil could cause excessive damage to the watershed unless careful, well thought out management prescriptions are carefully followed.

*Change
be made
1959*

Decision

The watershed is unquestionably the most important resource of the zone. All management plans will be made to coordinate other activities while primarily maintaining watershed values.

5. Problem

Transportation facilities are inadequate and below standard.

Decision

a. Existing trails entering and within the zone, will be inventoried to determine needs. These

trails will be improved to bring them to Forest Service standards as soon as financing permits.

b. New trails will be planned, constructed, and maintained to facilitate full use of the zone.

c. Motorized transportation will be excluded.

Signs will be posted in 1967 at entry points. *Change*

This restriction will be strictly enforced.

Do Safety
B. Opportunities

1. Opportunity

Improve fishing opportunities by planting fish in the existing lakes that show ability to hold and produce fish during normal years.

Decision

Follow up action will be taken on the joint study of alpine lake fisheries initiated in 1964 by the Forest Service and the Montana State Fish and Game Department. *check*

Opportunity

Consider issuing commercial outfitters permits for the zone. Since the area is small, the number of permits issued will be commensurate with size of area, amount of use, etc. *out*

Decision

One special use packer permit will be issued in 1967. Wait until trail work brings trails up to required standards before considering issuance of additional commercial permits. *out*

3. Opportunity

The Frank D. Coombs cabin permit is situated in the Wolverine Lake area. It is a neat log cabin generally left unlocked so that campers and fishermen have use of its shelter. It is no particular administrative problem at this time.

Reverts

Decision

Terminate the cabin occupancy under the provisions of the permit (paragraphs no. 18 and 19). Application for continued use as private occupancy will not be considered. Decide, at this time, whether to dispose of the structure or leave it as a landmark in accordance with paragraph 11 of the permit requirements. If the Ten Lakes Scenic Area is officially reclassified as a Wilderness Area by the time this administrative decision must be made, then the cabin will need to be destroyed, the area cleaned up and allowed to regenerate naturally. It is extremely doubtful if the historical value of this cabin will be "unique" enough to warrant its preservation under Wilderness Management Guidelines.

- A. ADD in Bluebird Cabin
- 5. rehabilitate platform
- 6. Handout - with Sample Signs