

ENVIRONMENTAL ASSESSMENT

JULY 1992

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MOTORIZED ACCESS AND TRAVEL MANAGEMENT

Heppner Ranger District

Morrow, Grant, and Wheeler Counties, Oregon

Responsible Agency
USDA Forest Service
Umatilla National Forest
2517 SW Hailey Ave.
Pendleton, OR 97801

Responsible Official
JEFF BLACKWOOD
Forest Supervisor

For Further Information Contact

DELANNE FERGUSON, District Ranger
Heppner Ranger District
117 South Main
Heppner, Oregon 97836
Telephone: (503) 676-9187

TABLE OF CONTENTS

INTRODUCTION	i
MAP 1: DISTRICT LOCATION MAP	ii
MAP 2: ACCESS STRATEGY AREAS	iii
CHAPTER 1: PURPOSE OF AND NEED FOR ACTION	1
HISTORY OF USE	1
CURRENT SITUATION	2
PROPOSED ACTION	2
TIERING AND INCORPORATION BY REFERENCE	3
PURPOSE AND NEED	3
Management Direction	4
FIGURE 1: MANAGEMENT AREA DISTRIBUTION	5
FIGURE 2: ACCESS STRATEGY AREA DISTRIBUTION	5
FIGURE 3: MANAGEMENT ALLOCATIONS IN SUMMER RANGE	6
FIGURE 4: MANAGEMENT ALLOCATIONS IN GENERAL FOREST	6
FIGURE 5: MANAGEMENT ALLOCATIONS IN WINTER RANGE	6
Desired Future Condition of the Forest	7
Recreation	7
Big game	7
Minerals and energy	7
Transportation	7
Resource Summaries	8
Transportation	8
ISSUES	9
Key Issues	9
ISSUE 1: Road-oriented recreation	9
ISSUE 2: OHV and snowmobile use	10
ISSUE 3: Nonmotorized recreation	11
ISSUE 4: Effective big game habitat	12
ISSUE 5: Administrative use	13
Other Concerns (listed)	14
Other Concerns (addressed)	73
Issues Beyond Project Scope	15
Heavier use of Kinzua roads due to closures of Forest Service roads	15
Global warming	15
DECISION TO BE MADE	15

CHAPTER 2: ALTERNATIVES	17
ALTERNATIVE DEVELOPMENT PROCESS	17
DESCRIPTION OF THE ALTERNATIVES	18
Alternative A	19
Mitigation measures which currently exist	19
Alternative B	20
Mitigation measures	20
Alternative C	21
Mitigation measures	21
Alternative D	22
Mitigation measures	23
MITIGATION REQUIREMENTS COMMON TO ALTERNATIVES B, C, AND D	23
TABLE 1: RESTRICTED MOTORIZED USE PERIODS ADMINISTRATIVE USE	28
MONITORING REQUIREMENTS COMMON TO ALTERNATIVES A, B, C AND D	30
COMPARISON OF ALTERNATIVES	31
Project Objectives	31
ISSUE 1: Road-oriented Activities	33
ISSUE 2: OHV and Snowmobile Use	34
ISSUE 3: Nonmotorized Recreation	35
ISSUE 4: Effective Big Game Habitat	36
ISSUE 5: Administrative Use	37
TABLE 2: COMPARATIVE SUMMARY OF ALTERNATIVES	38
CHAPTER 3: ENVIRONMENTAL CONSEQUENCES	41
INTRODUCTION	41
EFFECTS QUANTIFIED	42
ISSUE 1 Road-oriented Activities	42
ISSUE 2 OHV/snowmobile Use	44
ISSUE 3 Nonmotorized Recreation	48
ISSUE 4 Effective Big Game Habitat	58
ISSUE 5 Administrative Use	70
OTHER ISSUES	73
Watershed, Fisheries, Soils, and Riparian Areas	73
Forest Health	74
Access for Fire Suppression	75
Noxious Weeds	76
Access for Disabled & Senior Citizens	76
Yearlong Access on Bull Prairie Road	76
Access to Private Land	77

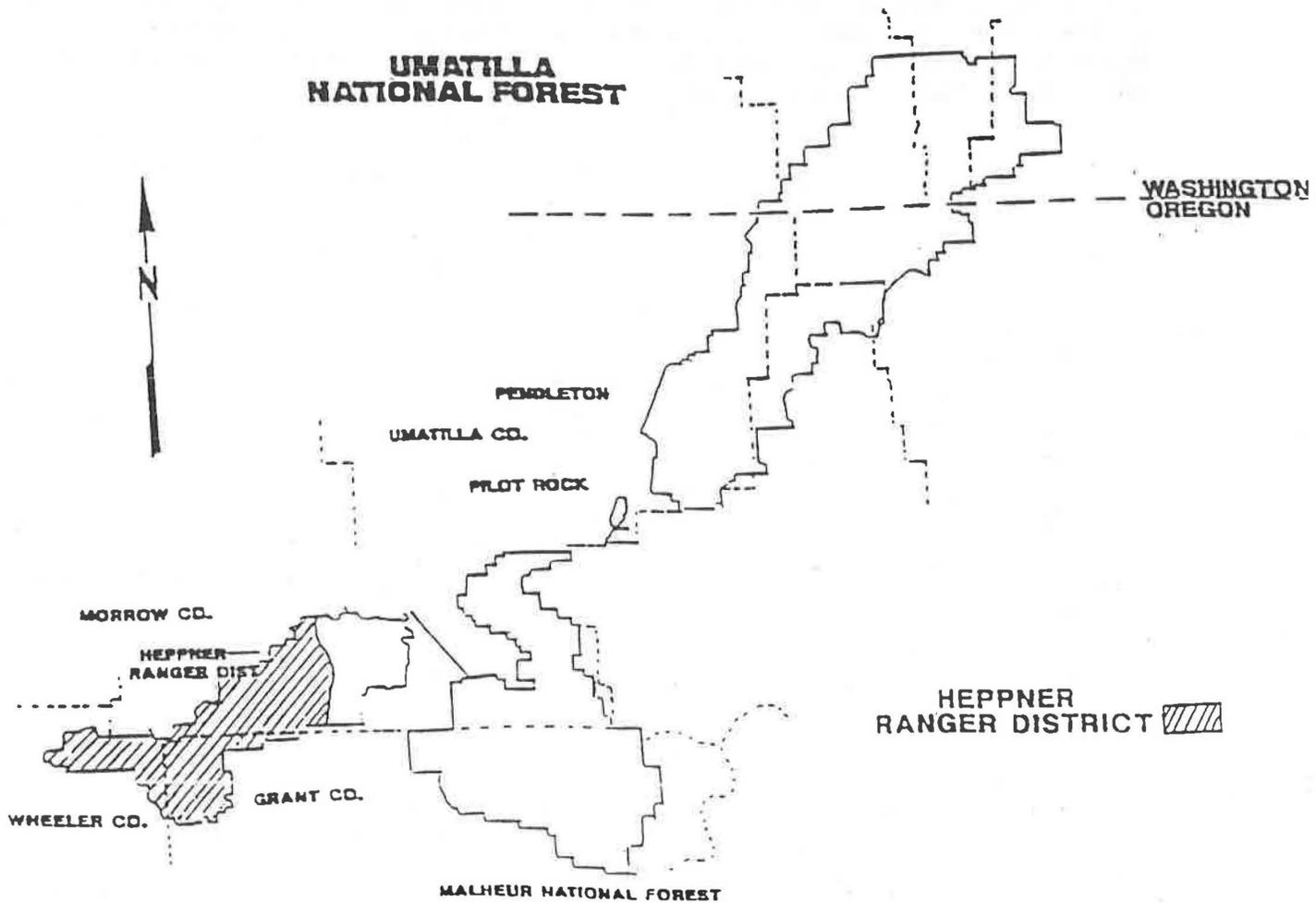
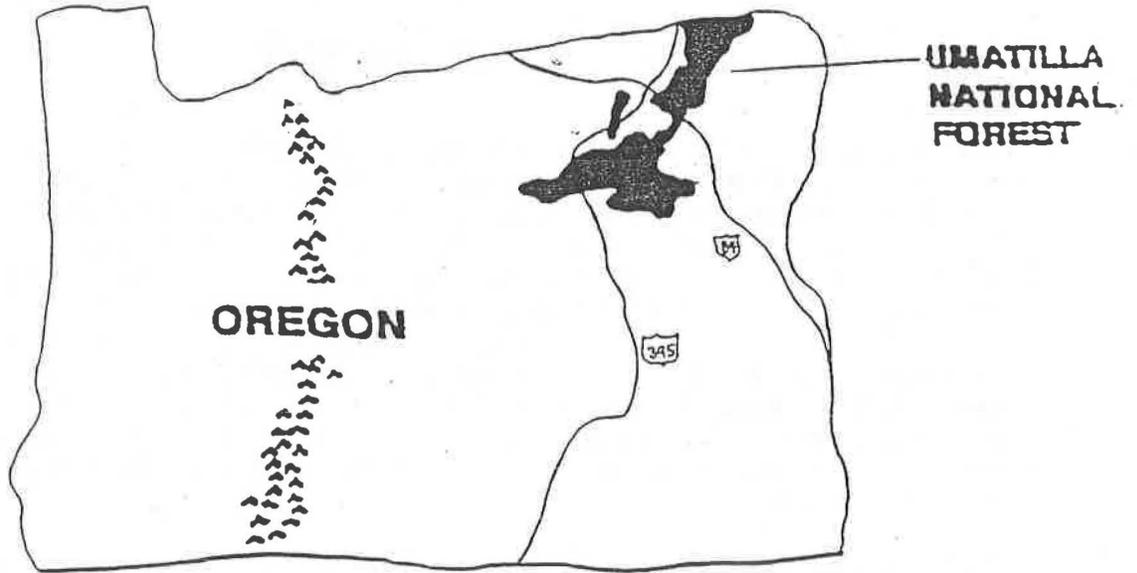
Access for Snowmobiles/OHVs From Blake Ranch	77
Access for Personal Uses	77
Minimal Access Available to Areas Not Managed for Timber	78
OHV/Passenger Vehicle Safety Conflict	78
Road Jurisdiction/Maintenance	78
Management of Roads Not Shown on Maps	79
Access Management May Affect the Well-Being of Local Communities	79
Access to Minerals and Oil Claims	79
Consumers, Civil Rights, Minority Groups, and Women	80
Prime Farmland, Rangeland, and Forestland	80
Wetlands and Floodplains	80
Species of Plants and Wildlife	80
Cultural Resources	81
Irreversible and Irrecoverable Effects	82
CHAPTER 4: LIST OF AGENCIES AND INDIVIDUALS CONSULTED	83
TABLE 3: INTERDISCIPLINARY TEAM	84
TABLE 4: PUBLIC WORKING GROUP	84
TABLE 5: CONSULTANTS	85
LIST OF REFERENCES	86
GLOSSARY	89
APPENDIX A — FOREST PLAN MANAGEMENT AREA STANDARDS AND GUIDELINES	107
APPENDIX B — ROAD MANAGEMENT OBJECTIVE FORM	119
ATTACHMENTS	
MAP 3: ALTERNATIVE A	
MAP 4: ALTERNATIVE B	
MAP 5: ALTERNATIVE C	
MAP 6: ALTERNATIVE D	

INTRODUCTION

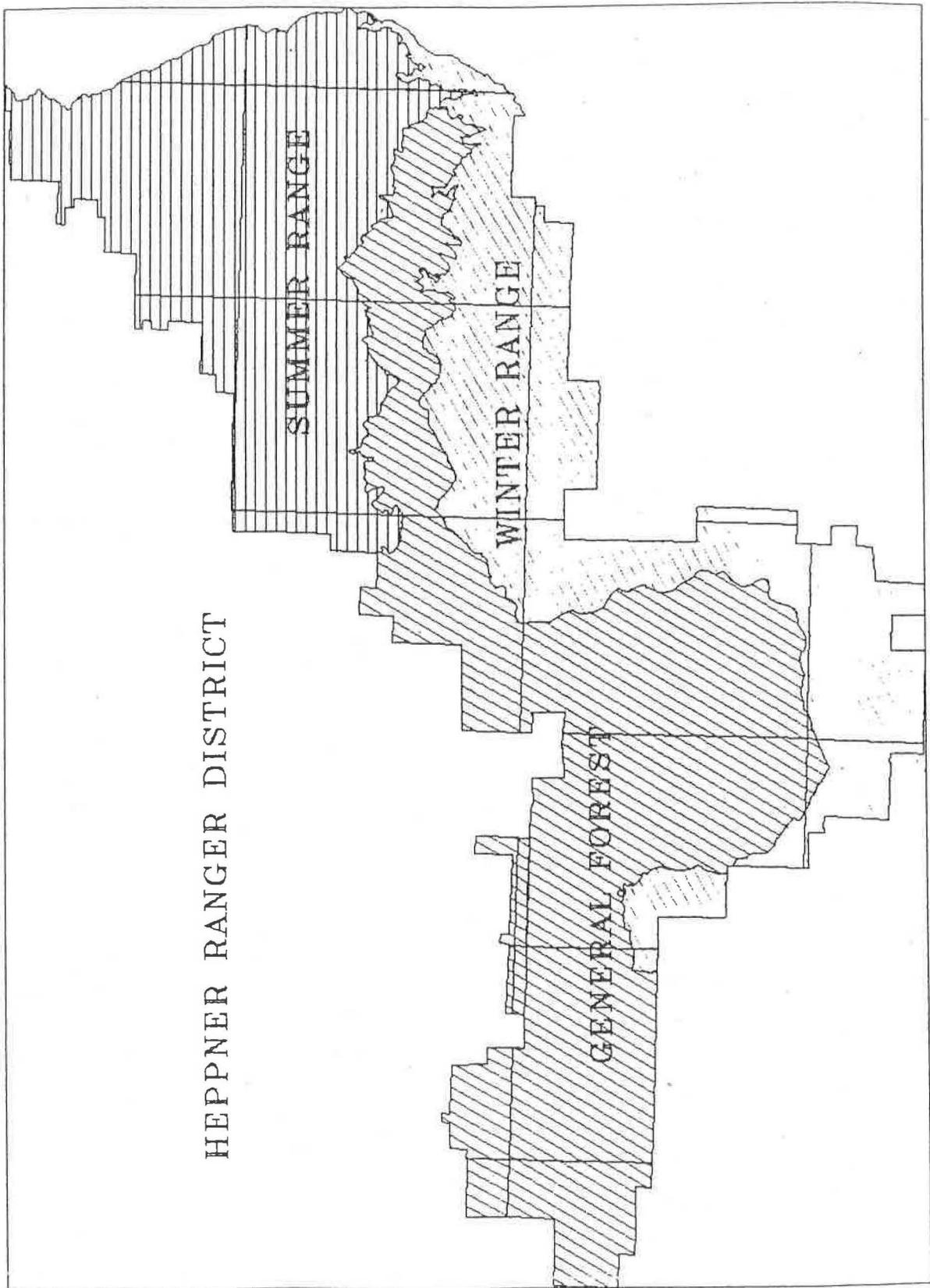
Following, is the EA (Environmental Assessment) for the Motorized Access and Travel Management Program. This program covers the entire Heppner Ranger District of the Umatilla National Forest in Morrow, Grant, and Wheeler counties of northeastern Oregon (Figure 1). This EA documents analysis of the environmental consequences of the proposed action and various alternative courses of action; it also provides the decision-maker, Jeff Blackwood - Forest Supervisor, with sufficient environmental and economic information to aid in the selection of the preferred alternative. The preferred alternative is the course of action which best meets combined resource needs while responding to public issues.

This document is divided into four chapters: purpose of and need for action, alternatives, environmental consequences, and agencies and persons consulted. In addition, a list of references, glossary of terms, and 2 appendices complete the package. The appendices present additional information on: applicable goals, desired future conditions, and standards and guidelines per management area as outlined in the Umatilla National Forest Land and Resource Management Plan; and an example of a Road Management Objectives form.

MAP 1: DISTRICT LOCATION MAP



ACCESS STRATEGY AREAS



CHAPTER 1: PURPOSE OF AND NEED FOR ACTION

This chapter establishes the need for action, the proposed action, and resources that could be affected by the proposed action.

HISTORY OF USE

In the past, the Heppner Ranger District constructed roads to support the timber sale program. The road system was managed through a number of separate plans (i.e., road management objectives, ED - 10 process, road management plan, etc.). The district did not have a road management plan that integrated other resources; as roads were needed, they were built. Many of these remained regardless of whether the area was to be logged again at a later date. Other roads were originally wheel tracks that developed into roads through frequent use. The extensive miles of roads began to provide easy access to an increasing number of forest visitors. Uses included hunting, firewood gathering, sightseeing, OHV riding, horseback riding, bicycling, and mushroom picking.

As conflicts and demands in resources other than timber increased, it became obvious to resource managers that a reduction in the number of open roads was necessary. Biologists realized that to sustain big game populations (for which the heaviest recreation use occurs during hunting season), open road mileage would need to be reduced. The District received many comments from interested publics such as day-users, hunters, and members of local communities. Viewpoints were also expressed during development of the Umatilla National Forest Land and Resource Management Plan. Public responses showed conflicting opinions: there was a strong interest to reduce access to protect a number of resources and an equally strong concern to keep roads open for public use (mainly recreation).

Nearly ten years ago, the District began closing roads. Some were closed because they were replaced by new roads, others were closed to protect sensitive soils or provide a quality hunt. In many cases, the District did not adequately explain or seek public involvement in these road closures, and forest visitors often found themselves locked out of their favorite areas.

CURRENT SITUATION

The Heppner Ranger District needs to develop a way to manage its road system in order to: reduce conflicts between recreational user groups while still providing a variety of recreation opportunities; reduce vehicular disturbance to soil, vegetative, and wildlife resources; eliminate roads (and associated maintenance costs) that are not needed for resource management; cooperate with adjacent private land owners in providing access to private lands; and provide for commodities and administrative activities. To achieve this, the District established an interdisciplinary team in November of 1989 to examine the situation and develop ways to improve the conditions. In addition, the public was invited to comment on the project. At one public meeting, a Public Working Group was selected by attendees to represent public concerns and assist in development of the Access and Travel Management program.

PROPOSED ACTION

The Heppner Ranger District, with input from the Public Working Group, proposes to adopt Alternative C which would trend toward Forest Plan desired future conditions and resolve public issues by:

- a. closing the roads least needed for recurring management or public access, saving taxpayers dollars in road maintenance
- b. identifying roads to be opened or remain open, yearlong or seasonally, for public or administrative access.
- c. allow overland snowmobile use yearlong in Summer Range and General Forest and seasonally in the Winter Range. This overland snowmobile use in the Winter Range would be allowed except when restricted to designated routes as follows: 1) west of Ditch Creek from December 15 through April 14 and 2) east of Ditch Creek from August 15 through April 14.
- d. allow OHV use on designated trails yearlong in Summer Range. In General Forest, overland OHV use would be allowed in E1 management areas west of Ditch Creek yearlong, and in E1 management areas east of Ditch Creek except from August 15 through December 14, when they would not be allowed. In the Winter Range west of Ditch Creek, overland OHV use would be allowed in C3 and C8 management areas except from December 15 through April 14, when they would be restricted to designated routes. In the Winter Range east of Ditch Creek, overland OHV use would be allowed in C3 and C8 management areas except from August 15 through April 14, when OHV's would not be allowed.

Activities resulting from the proposed action could include: installing a gate, guard rail, earthen barricade, or other obstruction at entrances of roads to be closed; installing informative and restrictive signs to assist users and control use; obliterating roads determined to be unnecessary or contributing to environmental damage; constructing OHV and snowmobile routes; educating the public through maps and brochures; and enforcing signing and closure regulations.

TIERING AND INCORPORATION BY REFERENCE

Tiering to higher-level direction is appropriate to narrow the analysis, to focus on the issues which are ripe for decision, and to exclude from consideration issues already decided or not yet ripe [40 CFR 1508.28]. Ripeness means the issue is timely and can be addressed within the scope of this proposal and decision to be made. This document is tiered to the following: Best Management Practices [40 CFR 130.2]; Clean Water Act; Regional Guide; Managing Competing and Unwanted Vegetation Final Environmental Impact Statement and its Mediated Agreement; and the Forest Plan.

The FEIS and Record of Decision for the Umatilla National Forest Land and Resource Management Plan (June 1990) provides discussions of associated environmental impacts and provides direction for management of the Heppner Ranger District, Umatilla National Forest for the next 10 to 15 years.

In order to eliminate repetition and focus on site-specific analysis, material from documents in the bibliography (both NEPA-related and research) are incorporated into this document by reference. The Analysis File for Access and Travel Management, which provides a more detailed description of analysis, is also incorporated by reference.

All supporting material is available for review at the Heppner Ranger District office.

PURPOSE AND NEED

During the development of the Umatilla National Forest Land and Resource Management Plan, Access and Travel Management was a highly controversial issue. The Record of Decision (ROD) for that document, pages 11, 20, and 21 states that a District Access and Travel Management Plan will be completed.

The purpose of this proposal is to progress toward the desired future condition of the management areas located on the District. Because of the problems stated in the sections 'History of Use'

and 'Current Situation', areas of the District do not meet the desired future conditions described in the Forest Plan. This is particularly apparent in the level of road density (linear mile of road per square mile of area).

In order to move toward the desired future condition, goals, and objectives of each management area (summarized in the following section - "Management Direction"), the following needs were identified:

- * There is a need to examine options and define a plan for making the transition toward the desired future condition over time.
- * There is a need to create a plan which is understandable, implementable, and enforceable.
- * There is a need to create a plan that is consistent District-wide and with Access and Travel Management on the North Fork John Day District.
- * The Heppner Ranger District needs to develop a plan to manage its road system in order to: reduce conflicts between recreational user groups while still providing a variety of recreation opportunities; reduce vehicular disturbance to soil, vegetative, and wildlife resources; eliminate roads (and associated maintenance costs) that are not needed for resource management; cooperate with adjacent private land owners in providing access to private lands; and provide for commodities and administrative activities. This plan must address public needs in its development and must be fair, providing for a wide range of recreational and seasonal uses and physical limitations (public access to public lands).
- * There is a need to base road closures on resource objectives to improve conditions or prevent damage.

MANAGEMENT DIRECTION

The implementation of this proposal would comply with direction stated in the Forest Plan. Like the Forest Plan, this EA is programmatic; it defines a broad design across the District. Project planning, like timber harvest, is the second level of planning and concentrates analysis on characteristics distinct to a particular site. Though this EA recommends the status of each inventoried road on the District, future, more site-specific projects may identify new facts which could show a need to adjust a road's status.

Access and Travel Management affects all forest resources. Outputs of these resources are dependent on Access and Travel Management, and the development of a plan to manage access and

travel must consider forest management goals, [see Forest Plan pages 4-1 to 3].

The Access and Travel Management analysis area includes all area within the congressionally designated boundary of the Heppner Ranger District. Some acres of private land are included within the analysis boundary; they have only been included so that cumulative effects may be accurately analyzed. Roads on those lands are shown as closed on maps only to indicate that they are not available for public use. Private use of these roads is not within the authority of this project.

The analysis area includes 14 management areas, as defined in the Forest Plan. The amount of the District allocated to each management area is displayed in Figure 1 below.

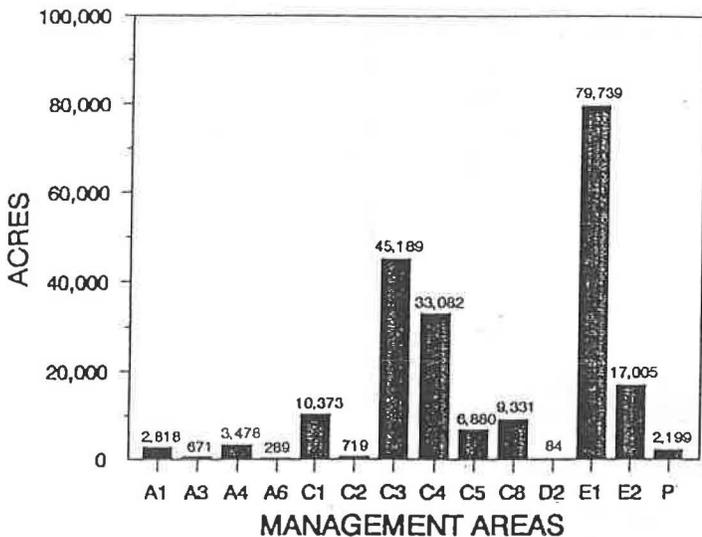


FIGURE 1: Management Area Distribution

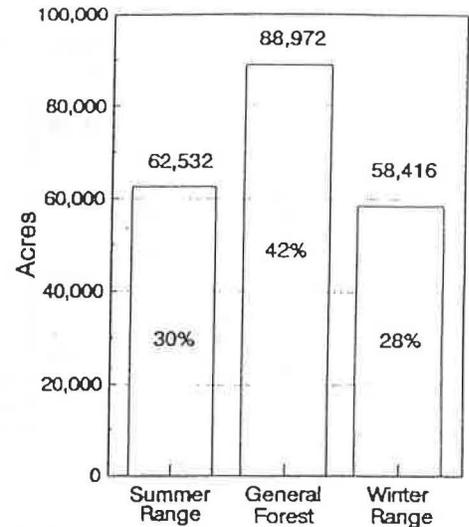


FIGURE 2: Access Strategy Area Distribution

To effectively analyze and compare the proposed action with various alternatives, access strategy areas, which are coordinated with the direction for each management area, were identified. The access strategy areas include: General Forest, Summer Range (for big game) and Winter Range (for big game). These categories are consistent with the Forest Plan and do not replace management area designations, desired future conditions, or standards and guidelines. The distribution of these areas is shown in Figure 2 and Map 2 shows the location of these areas on the District. Figures 3, 4, and 5 show the distribution of management allocations in Summer Range, General Forest, and Winter Range respectively.

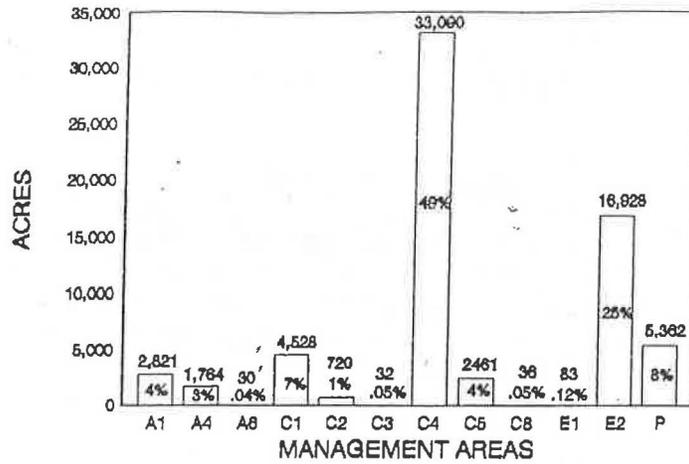


Figure 3: Management Allocations in Summer Range

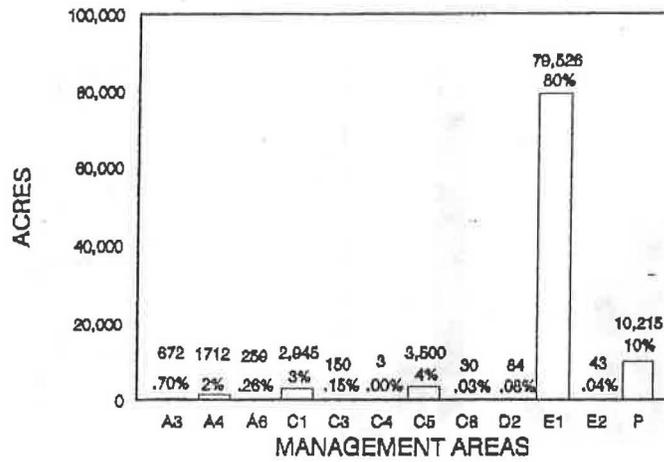


Figure 4: Management Allocations in General Forest

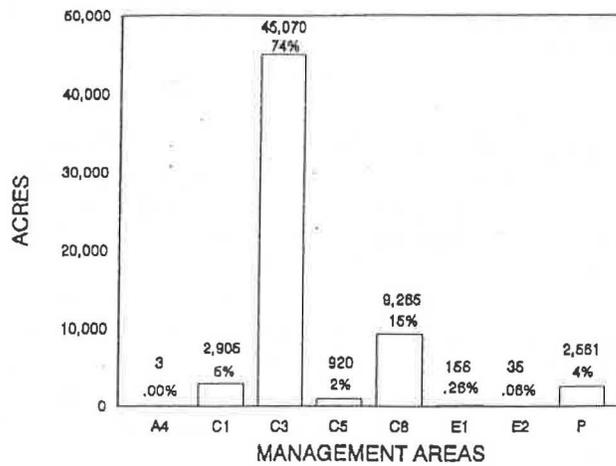


Figure 5: Management Allocations in Winter Range

DESIRED FUTURE CONDITION OF THE FOREST

Desired future condition statements from the Forest Plan are paraphrased here to provide a focus relevant to this assessment. For the full text, please refer to the Forest Plan, which is available at the Umatilla National Forest Supervisor's Office and all Districts. Each Management Area has its own set of goals and objectives, Standards and Guidelines, and Desired Future Condition. A list of those which relate to access and travel management can be found in Appendix A; they can also be found in Chapter 4 of the Forest Plan.

RIPARIAN/FISH [Forest Plan page 4-7]

- * Significant increases in the production of both anadromous and resident fish will occur on the Forest.

- * Fisheries habitat capability will improve Forest-wide as a result of management emphasis and activities. Stream temperatures will be maintained or improved, instream diversity increased, sediment production decreased, and stream channel stability maintained. Trends in improving vegetative, soil, and other conditions on Forest riparian areas will continue. Overall riparian condition will be better than the present riparian status.

RECREATION [Forest Plan page 4-5]

- * Some decreases in road-related hunting will occur as additional road closures are used to improve big game habitat.

- * The trail system will be expanded.

- * Off-highway vehicle use will be accommodated through development of loop trails, closed road systems and staging areas.

BIG GAME [Forest Plan page 4-7]

- * About half the roads will be closed.

MINERALS AND ENERGY [Forest Plan page 4-10]

- * The demand for Forest Service road construction and reconstruction for access to these minerals will remain at about current levels.

TRANSPORTATION [Forest Plan page 4-11]

- * During the first decade, planned local roads needed to support the timber management program will be constructed. The Forest road system will continue to be operated to meet Forest goals, a process which will include an active program of road closures to meet elk habitat requirements, dispersed recreation needs, and soil, water, and economic criteria, as described in District access management plans. Most local

roads will be closed to motorized use. Even though additional roads are constructed, the density of open roads will decline below current levels to an average of about 2.0 miles per square mile, Forest-wide. The miles of road suitable for passenger cars will increase slightly as roads reach their objective level of maintenance. All of the arterial and about half the collector roads will be managed for passenger cars; the remainder will be managed for high clearance vehicles.

RESOURCE SUMMARIES

TRANSPORTATION [Forest Plan page 4-45]

Each ranger district will develop access management programs within 2 years in order to determine the nature and extent of road access that will best meet resource requirements as well as address the public's desire for access to those resources. The access management programs will be developed through the NEPA process that involves interested and affected publics. The effect of these programs will mostly likely be a reduction in the amount of open road available on the Forest. A Forest-wide average open road density of 2.0 miles per square mile is anticipated to result from implementation of management area direction; open road density will vary between allocation zones in response to objectives. All of the arterial and about half the collector roads will be managed for passenger cars, and the remainder will be for high clearance vehicles.

ISSUES

Concerns or conflicts between project needs and alternative uses of resources were identified as issues. These issues were mainly identified at a public meeting on January 15, 1991, although letters, District recreation surveys, and specialists' opinions also contributed. The interdisciplinary team further defined the issues by comparing desired future conditions with existing resource conditions and the proposed action. Issues were then separated into three categories: issues that will drive the alternative development process (key issues), other issues addressed through mitigation, existing laws, or policy, and issues beyond the scope of the project.

KEY ISSUES

The following issues provide the foundation for the development of alternatives and the environmental analysis process. The highlighted titles for these key issues are used consistently throughout this document to permit easy comparison of alternatives. Key issues identified include:

ISSUE 1: ROAD-ORIENTED RECREATION

Open roads provide opportunities for people limited to motorized access (senior citizens, families with young children, and the physically challenged) to enjoy the Heppner Ranger District. They also provide recreation opportunities, such as viewing scenery, hunting, motorhome camping, and driving for pleasure. Often, diverse road standards (paved, gravel, high clearance) are desired to provide a variety of driving experiences. Some areas have been used traditionally by recreationists who pass on their favorite spot from generation to generation. Native Americans also need access to lands historically used by their ancestors; treaties and laws have guaranteed certain rights to use such lands.

Restricting motorized access may reduce the enjoyment of a particular area for these users. Access to dispersed campsites may be eliminated in some areas, which may cause crowding and competition for the remaining available sites. This may result in more damage to those sites and their immediate surroundings through vegetation loss, soil disturbance or compaction, and loss of snags and wildlife trees due to the gathering of firewood. This reduction in dispersed campsites could also cause visitors to randomly create new campsites which could impact previously unaffected areas. High levels of road closures could also impact roads which remain open, as the amount of use from displaced recreationists increases. Visitors may become dissatisfied and the quality of their recreation experience could be reduced.

Alternatives will be compared in Chapter II using the following measurements:

1. Miles of open road by maintenance level -
Maintenance levels indicate road conditions: level 5 would be a paved, two lane road useable by low clearance vehicles, while level 2 would require a high clearance vehicle for passage. This provides information about the variety and availability of roaded recreation. Opportunities for both pleasure driving and a more rugged experience can be measured with this criteria.

2. Miles of road by access management area - This indicates the variety of areas and landscapes available across the district.

ISSUE 2: OHV AND SNOWMOBILE USE

Unrestricted use has provided OHV and snowmobile users with a wide range of recreation opportunities. However, if such use continues to increase, as current trends indicate (Oregon Department of Motor Vehicles, 1989-1991), other resources may be impacted. Such impacts may not be easy to locate or repair, since they would be dispersed across the District. Conflicts between recreational uses can increase; for instance, some hunters prefer a more primitive experience. Likewise, snowmobiles and cross-country skiers are often incompatible on the same trails. OHV and snowmobile use can disturb wildlife, especially big game, and could cause animals to be displaced. Sensitive soils and riparian areas may be damaged by careless or uninformed OHV users. This damage can cause a chain of problems such as erosion, sedimentation of streams, or a reduction in vegetation which shades streams, keeps water cool, and stabilizes stream channels. Ultimately, water quality and quality of fish habitat may be reduced. OHV use also has the potential of spreading the seeds of noxious weeds to new areas. Although snow should adequately protect soils, riparian areas, and most vegetation, overland snowmobile travel could damage uncovered tops of young trees.

Restricting OHV and snowmobile use to designated routes may eliminate access to favored areas, limit the variety of challenging terrain, and increase competition for areas where these uses are permitted; this could reduce the quality of the recreation experience. Designated routes could have serious impacts by concentrating use, which may cause safety hazards from crowding, or damage to adjacent areas and the trail itself. There would be an increase in cost from having to build trails, post signs, and enforce restrictions. Enforcement of restrictions may also be more difficult. However, routes would also direct use away from sensitive areas, reduce disturbance to wildlife, permit monitoring and repair of impacts, and allow recreationists who prefer a more primitive experience to avoid disturbance from these activities.

Alternatives will be compared in Chapter II using the following measurements:

1. Miles of designated OHV and snowmobile routes - This measures opportunities available in areas which prohibit overland use.
2. Acres of area open to overland OHV and snowmobile use - This measures the potential for a variety of opportunities and landscapes for this activity.

ISSUE 3: NONMOTORIZED RECREATION

Many nonmotorized recreation activities, including mushroom hunting, root digging, hiking, hunting, horseback riding, mountain biking, and cross-country skiing occur on the Heppner Ranger District. Open roads and unrestricted OHV/snowmobile use can result in noise, safety hazards, a high concentration of people, and in the case of OHVs, dusty conditions. These factors can decrease or eliminate solitude, reduce enjoyment, and result in a low quality experience for nonmotorized recreationists. These users may elect to go elsewhere.

Road closures and restrictions placed on OHVs and snowmobiles could enhance opportunities for nonmotorized recreation activities. However, road closures could also close access to routes which are not identified on the Forest trail system. This could increase use on the more accessible trails, which may cause erosion, soil compaction, a decrease in vegetation, and damage to the trailbed itself. Routes and areas limited to nonmotorized travel would eliminate opportunities for recreationists preferring a motorized experience.

Alternatives will be compared in Chapter II using the following measurements:

1. Acres within each disturbance zone - This measures the amount of area which experiences high, moderate, or low levels of disturbance from open roads. Because there is no data which indicates the amount of use each road receives, seasonally open roads were not considered in order to compensate for different levels of use on roads open yearlong.

2. Areas of unrestricted OHV and snowmobile use - This measures the potential for disturbance from OHVs and snowmobiles to the nonmotorized experience. Because this is also a measure for issue 4, it will be displayed under that issue to avoid repetition.

ISSUE 4: EFFECTIVE BIG GAME HABITAT

High open road densities and overland OHV and snowmobile travel limit the amount of big game habitat that remains unaffected by access. Motorized vehicles disturb animals, which can be harmful during critical periods in their life cycle. If disturbance occurs during calving/fawning, mothers may desert animals too young to take care of themselves. Disruption during breeding may reduce successful fertilization. During the winter, energy reserves are low due to a lack of food and poor weather conditions; disturbance causes animals to use that energy to flee instead of supporting their body functions. Disturbance may also cause big game to move onto private land, impacting crops and livestock forage which increases business costs for the land owner. Vulnerability of big game during hunting seasons is another effect of open roads. Hunters have easier access to their targets, increasing their success rate and encouraging a higher concentration of hunters. This can reduce the number and age of bulls/bucks, which can mean that cows/does are not successfully fertilized during their first breeding cycle. This causes offspring to be born later in the year; they then enter the winter period physically smaller and weaker, which may make them more susceptible to death.

Closing roads and managing OHV and snowmobile use would reduce access, reducing disturbance and vulnerability of big game. Access which is restricted seasonally in big game winter and summer ranges could reduce stress to animals during critical periods in their lifecycle.

Alternatives will be compared in Chapter II using the following measurements:

1. Open road density - This measures how close each alternative comes to the forest-wide average of 2.0 miles of open road per square mile of area (as well as the state recommended density of 1.5 miles of open road per square mile of area).

2. Areas open to unrestricted OHV/snowmobile use by access strategy area - This indicates where effects of OHVs and snowmobiles might occur in the three types of big game habitat on this District.
3. Acres greater than a half of a mile from roads, with and without seasonally open roads - This measures amount of habitat unaffected by roads. Including seasonally open roads measures the amount of potential disturbance to big game. Excluding seasonally open roads indicates the amount of big game vulnerability during hunting seasons.

ISSUE 5: ADMINISTRATIVE USE

Open roads, OHV, and snowmobile use provide easy access to conduct resource management activities and projects. This administrative use is not limited to Forest Service personnel; it also includes contract work (such as timber harvest, tree planting or vegetation surveys), permittees (for grazing and mining), and special use permits (access to private lands, firewood gathering, yew bark collection, etc.) Access is also necessary for fire fighting, search and rescue, medical emergencies, and law enforcement. Current administrative use by Forest Service personnel on closed roads is regulated, but does not consider frequency of travel on a closed road with respect to big game disturbance; four trips per month [Forest Plan pages 4-58 and 4-68] may still disturb big game and permits are easily obtained. Such privileged use can be resented by other forest users who contend that it is unfair.

Closing roads to administrative use and restricting use of OHVs and snowmobiles could increase the cost of resource management. Slower types of access (such as walking, horseback riding, and mountain biking) would decrease the time during a work day spent implementing a project; transporting quantities of equipment or supplies for a project would not be possible using these methods. A helicopter could also be used for access, but this is often too expensive. Seasonal restrictions could conflict with the proper timing for performing management activities. Fires may not be detected when they are still small; more area may be affected, if a fire occurs, since closed roads would need to be reopened to access the fire. Entire resource management programs may cease to exist as cost becomes prohibitive. This would affect all resources.

Contractors, permittees, and special use permittees may not be able to afford operations requiring nonmotorized access. Local economies may be affected as these operators shift their business elsewhere. In the long term, future forest health could be degraded as the reduced ability to improve planting stock, reforest areas, silviculturally treat stands, and the reduction in fire fighting capabilities are compounded.

Alternatives will be compared in Chapter II using the following measurements:

1. Miles of road open to administrative use - This measures the amount of motorized access.
2. Change in management costs - This measures the increase or decrease in the cost of doing business, resulting from the amount of motorized administrative access.

OTHER CONCERNS

The following list of concerns are recognized by the interdisciplinary team as important for this analysis, but are best addressed by Forest Plan direction, policies, laws, or special mitigation measures. Where appropriate, measures to meet these issues were included in design or mitigation, and are found in Chapter II. While the key issues are tracked consistently through the remainder of this document, these other issues will be briefly discussed only in Chapter III.

- (6) Watershed, Fisheries, Soils, and Riparian Areas.
- (7) Forest Health.
- (8) Access for Fire Suppression.
- (9) Noxious Weeds.
- (10) Access for Disabled and Senior Citizens.
- (11) Yearlong Access on Bull Prairie Road.
- (12) Access to Private Land.
- (13) Access for Snowmobiles/OHVs From Blake Ranch.
- (14) Access for Personal Uses.
- (15) Minimal Access Available to Areas Not Managed for Timber.
- (16) OHV/Passenger Vehicle Safety Conflicts.
- (17) Road Jurisdiction/Maintenance.
- (18) Management of Roads Not Shown on Maps.
- (19) Access Management May Affect the Well-being of Local Communities.
- (20) Access to Minerals and Oil Claims.

ISSUE BEYOND PROJECT SCOPE

The following issue was found to be beyond the project scope and so it has been dropped from further consideration.

(21) Heavier Use of Kinzua Roads Due to Closures of Forest Service Roads. The planning process for Access and Travel Management has not considered use on Kinzua roads other than those roads under cost share agreement between Kinzua and the Forest Service (see Issue 17 Road Jurisdiction/Maintenance for a discussion on those roads). Determining whether users of Forest Service roads would shift their use to roads on Kinzua-owned lands, move completely out of the area, or continue to use Forest Service roads which remain open is speculative and beyond the scope of this plan.

(22) Global Warming. The USDA is developing a Strategic Plan for Global Change which includes assessment and development of policy options, and research on the effects of management of forest and agricultural ecosystems on carbon dioxide and greenhouse gas cycling. Until research removes significant scientific uncertainties, NEPA disclosure documents at the regional or project levels are not the appropriate means for addressing global-change issues. [Forest Service Position on Global Warming 12/90].

DECISION TO BE MADE

This Environmental Assessment (EA) documents results of the environmental analysis conducted for the proposed project. This EA will provide the decision-maker with a basis on which to make an informed decision. The Umatilla Forest Supervisor is the official responsible for deciding:

1. Whether access should continue to be managed on a project by project basis as currently done (No Action Alternative).
2. Whether specific management activities or combination of activities presented in this assessment should be approved.
3. If implementation of the selected alternative would result in significant impacts on the environment.
4. If the selected alternative is consistent with the Forest Plan.

5. If the selected alternative is not in compliance with the Forest Plan, what amendments need to be made to permit implementation.
6. Initial decisions on which roads should remain open yearlong, which roads should remain open seasonally, which roads should be closed, which areas should be open to overland OHV and snowmobile use and when, which designated routes should remain open to OHV and snowmobile use and when, and which areas should be closed to OHV and snowmobile use and when.

CHAPTER 2: ALTERNATIVES

This chapter is the main part of the Environmental Assessment. Four alternatives for managing access and travel on the Heppner Ranger District are described, compared, and evaluated. Chapter II is intended to provide the decision-maker and public with a clear basis for choice.

Alternatives were designed to address each key issue and project objective (purpose and need) identified in Chapter I. The key issues were addressed to varying degrees in order to present a reasonable range of alternatives, while all the alternatives tried to satisfy project objectives. From this range of alternatives, the deciding official (Jeff Blackwood, Forest Supervisor) will identify the alternative which best responds to the issues and objectives. Each alternative would be consistent with the Umatilla National Forest Land and Resource Management Plan. Alternative D would work toward an interpretation of Desired Future Conditions that emphasizes big game and non-motorized use; alternative B would work toward an interpretation of desired future conditions that emphasizes more motorized recreation use while fitting with state recommendations for deer management in Heppner Ranger District.

ALTERNATIVE DEVELOPMENT PROCESS

Alternative development began with the assignment of a District interdisciplinary team (IDT) in November, 1989. Public comments were encouraged through notices, a survey of recreational users, two open houses, newspaper articles, meetings, and newsletters. Public meetings occurred January 15 and 29, 1991, to identify concerns and select representatives of the various user groups to serve on a Public Working Group. This Public Working Group met 23 times from February 1991 to February 1992 to assist the IDT in developing a design (later labeled Alternative C) which would achieve a balance between all recreational users, wildlife, and other resource needs.

As the project progressed and additional public comments were received, it became apparent that the project scope required an Environmental Assessment to be prepared. The interdisciplinary team reviewed agency and public concerns, identified the key issues, and determined how to measure the extent that an issue would be satisfied by each alternative. The key issues were then used, along with the desired future conditions stated in the

Forest Plan and comments made during the Public Working Group process, to design a wide range of alternatives; each alternative emphasizing a unique combination of the key issues. The Public Working Group reviewed the new alternatives on February 23, 1992 and agreed that a wide range had been developed. These alternatives were then displayed at a third public meeting on March 30, 1992.

The interdisciplinary team developed both mitigation measures to minimize potential environmental effects caused by this project and monitoring requirements to measure the success and effectiveness of project design and mitigation. Finally, the interdisciplinary team analyzed the environmental consequences of the alternatives and documented the results in this Environmental Assessment.

DESCRIPTION OF THE ALTERNATIVES

Alternatives were designed to manage access and travel across the District. Employee and local citizens knowledge was relied upon to identify the use and condition of each road. This information was then used to determine what roads to close or seasonally close according to each alternative's emphasis. Implementation of this program or other site-specific project plans (such as timber sales) may reveal further information which could result in changes to the status of a road. These changes have been anticipated and are considered acceptable, as long as the intent of the program remains the same across the District.

In most alternatives, Forest Service roads that access private lands were carefully considered and every effort was made to allow for access to those lands. Private roads on private land were considered closed (except for the purposes of analysis for wildlife disturbance) as the Forest Service has no jurisdiction over these roads. County and state roads were considered open unless otherwise closed by those governments. In all alternatives, the status of cost share roads would remain as it is now (in most cases, open), in order to honor the agreement through which they were constructed and maintained.

The open/closed status of newly constructed roads would be decided in the project which required the new road. Generally, new roads would not remain open after the project is completed.

The Access and Travel Management Plan (following the decision for this EA) will describe how the selected alternative will be implemented. This will include the type of closure device, closure location guidelines, and alternate access provisions (bypasses, parking, trailhead facilities). Monitoring and site-specific project EAs would verify road status with on-the-ground conditions, reevaluate or select road management objectives, and

choose what type of closure device would be used. When the status of a road needs to be changed, a Road Management Objective form will be revised and the revision approved by the District Ranger. An example of this form is displayed in Appendix C.

ALTERNATIVE A

This is the "No Action" alternative required by NEPA and is the baseline for comparison of the action alternatives (B, C, and D). The "No Action" alternative has two basic parts: current situation and future actions. Currently, all existing open roads would remain open, seasonal roads would remain seasonal, and closed roads would remain closed. No additional measures would be undertaken to close additional roads. In the future, open/closed status of roads would be determined on a project by project basis; management would continue as it occurs now.

Mitigation measures that would reduce environmental impacts would be different with each project. This alternative also represents the existing condition of access and how it effects various resources (such as big game, OHV use, non-motorized opportunities). Map 3 shows the project area boundary and current road status.

Mitigation Measures which currently exist

- * The Texas Butte Cooperative Closure Area was established to mitigate the effects of the Texas Timber Sale by providing a quality hunt area and a disturbance-free zone for deer and elk. Within this area, roads are closed three days prior to the first rifle elk season through the end of the last rifle elk season. The closure was first implemented in 1976.
- * The Wickiup Cooperative Closure Area was established to decrease open road density in this area during deer and elk rifle seasons. Within this area, roads are closed three days prior to rifle buck deer season through the end of the last rifle elk season. The closure was first implemented in 1985.
- * The Texas Butte Cooperative Closure Area is also closed to commercial activities during the calving/fawning season.
- * Several miles of road are closed yearlong on the district to motorized use by CFR order. In addition, several miles of road are effectively closed by some type of barricade; although these roads may not be closed by order, traffic has been effectively eliminated.

ALTERNATIVE B

This alternative was designed to respond to the issue of road oriented recreation, additional motorized access, those OHV and snowmobile users who would like additional access, and those who want more administrative access for commodity uses. This alternative shows what would result if more roads were opened than there are now.

Roads would be closed only if they duplicate access or obviously degrade the environment (such as roads located in streams). In Winter Range and Summer Range, major roads along ridges would be left open year round, while other roads in these areas would be seasonally open. OHV and snowmobile use would be unrestricted over most of the District and restricted to designated trails in sensitive areas or during critical seasons for big game. Administrative use would be possible to most of the District. Permits for administrative use would be issued for those few closed roads that would remain on the Forest Development Transportation System. Map 4 displays open, seasonal, and closed roads; designated OHV and snowmobile trails; suggested snowmobile trails; and areas where overland OHV and snowmobile use is allowed for this alternative. Mitigation measures and monitoring, which are all a key part of alternative design, can be found on pages 23-31.

Mitigation Measures specific to this Alternative

- * In Summer Range and General Forest, overland snowmobile use would be allowed with no seasonal restrictions. In Winter Range, overland snowmobile travel would be allowed except from December 15 through April 14, when snowmobiles would be restricted to designated routes. (see Table 2, page 38)
- * In Summer Range and General Forest, suggested snowmobile routes would be mapped and signed on the ground, to provide users a more guided opportunity without restricting overland travel.
- * In Summer Range, OHVs would be restricted to designated routes yearlong. In General Forest, overland OHV use would be allowed in E1 management areas yearlong. In Winter Range, overland OHV use would be allowed in C3 and C8 management areas except December 15 through April 14, when OHV's would be restricted to designated routes. (see Table 2, page 38).
- * Seasonal roads in Summer Range would be closed May 1 through June 30 to protect big game during the calving/fawning season.

- * Seasonal roads in Winter Range would be closed December 15 through April 14 to reduce disturbance to big game.
- * Administrative use may be allowed, by permit, on the following yearlong closed roads: 2100160 (access to Tupper Work Center), 2105033 (access to seed orchard), 5326030 (access to radio tower), 2100051 (access to Ditch Creek Guard Station), and on 2104120 to Ditch Creek (access to ISCO water monitoring study).

ALTERNATIVE C

This alternative was developed using input from the Public Working Group. It was designed to "balance" user demands and move the District toward the desired future conditions identified in the Forest Plan. This alternative develops an Access and Travel Management Plan that provides some resolution for each key issue as well as other issues identified in the planning process.

Roads in Summer Range would be managed similar to the way they are now (although the Texas and Wickiup Cooperative Closure areas would end, replaced by seasonal roads with set dates of closure), while more roads would be closed in General Forest and Winter Range. OHV and snowmobile use would be unrestricted over most of the District and restricted to designated trails in sensitive areas or during critical seasons for big game. Security areas (developed in coordination with the Oregon Department of Fish and Wildlife) would be scattered across the District. These would limit motorized access in order to provide areas of low disturbance for big game during this period of poor cover and wide-spread salvage activities. Administrative use would be possible over most of the District. Permits for administrative use would be issued for closed roads that are not obliterated. Map 4 displays open, seasonal, and closed roads; designated OHV and snowmobile trails; suggested snowmobile trails; and areas where overland OHV and snowmobile use is allowed for this alternative. Mitigation measures and monitoring, which are all a key part of alternative design, can be found on pages 23-31.

Mitigation Measures specific to this Alternative

- * In Summer Range and General Forest, overland snowmobile use would be allowed with no seasonal restrictions. In Winter Range west of Ditch Creek, overland snowmobile use would be allowed except from December 15 through April 14, when they would be restricted to designated routes. In Winter Range east of Ditch Creek, overland snowmobile use would be allowed except from August 15 through December 14 and from December 15 through April 14, when they would be restricted to designated routes. (see Table 2, page 38)

- * Suggested snowmobile routes would be mapped and signed on the ground to provide users a more guided opportunity without restricting overland travel.
- * In Summer Range, OHV use would be restricted to designated routes yearlong. In General Forest west of Ditch Creek, overland OHV use would be allowed yearlong only in E1 areas outside of security areas. In General Forest east of Ditch Creek, overland OHV use would be allowed in E1 areas outside of security areas except from August 15 through December 14, when OHV's would not be allowed. In Winter Range west of Ditch Creek, overland OHV use would be allowed in C3 and C8 management areas outside of security areas, except from December 15 through April 14, when OHV's would be restricted to designated routes. In Winter Range east of Ditch Creek, overland OHV use would be allowed in C3 and C8 management areas outside of security areas, **except** from August 15 through December 14 and December 15 through April 14, when OHV's would not be allowed. (see Table 2, page 38).
- * Seasonal roads in Summer Range would be closed May 1 through June 30 to protect big game during calving/fawning season and again August 15 through December 14 to reduce big game vulnerability during hunting seasons.
- * Seasonal roads in Winter Range would be closed December 15 through April 14 to reduce disturbance to big game.
- * Areas which restrict motorized entry would be scattered across the District to provide areas for big game to escape disturbance. Motorized access would be allowed with a permit.

ALTERNATIVE D

This alternative focuses on the resolution of the key issues of big game and non-motorized recreation. It shows what would result if access were much more limited than it is now. Roads would only be left open if they are major routes (like roads 21 and 53); access trailheads, campgrounds, or facilities; lead to private land or are share-cost roads; or are not under Forest Service jurisdiction (such as county roads). Map 5 displays open, seasonal, and closed roads; designated OHV and snowmobile trails; suggested snowmobile trails; and areas where overland OHV and snowmobile use would be allowed for this alternative. Mitigation measures and monitoring, which are all a key part of alternative design, can be found on pages 23-31.

Mitigation Measures specific to this Alternative

- * Road 2119033 would be seasonally open from July 1 through August 14 to provide access to the Madison Butte Lookout. The portion of Road 2115 which is within Winter Range would be seasonally open to provide access to the Skookum Game Enclosure.
- * In Summer Range and General Forest, OHV use would be restricted to designated routes. In Winter Range, OHV use would also be restricted to designated routes, except from December 15 through April 14, when OHV's would not be allowed.
- * In Summer Range and General Forest, overland snowmobile use would be allowed with no seasonal restrictions. Snowmobile use would not be allowed in Winter Range.

MITIGATION REQUIREMENTS COMMON TO ALTERNATIVES B, C, AND D

LANDLINES

Present survey corners or references will be protected when the possibility of disturbance exists. Mining claim markers will also be protected during installation of closure devices, road obliteration, and construction of OHV routes.

WILDLIFE

Temporary roads constructed for timber sales may be obliterated after harvest or post-harvest activities are completed. Identified roads designated as closed and not required for natural resource management will be obliterated also (see Soil/Site Productivity section).

The status of any permanent roads that are reopened or newly constructed for resource management activities will be determined in that project's analysis and NEPA document.

Nest and roost sites for snag dependant wildlife will be protected during installation of closure devices or obliteration.

RANGE

All fences, trend study plots, trails, and water improvements will be protected, where possible, during installation of closure devices, road obliteration, and construction of OHV routes. Any damages resulting from such activities will be repaired.

Motorized use for movement of livestock will comply with the Access and Travel Management Plan.

WATER/FISHERIES/RIPARIAN AREAS

Streams, springs, and other riparian areas will be protected during installation of closure devices, road obliteration, and construction of OHV routes. Closure devices will be located and installed such that ground disturbance in riparian areas is minimized. New roads and OHV routes will be located outside of riparian areas, except at designated crossings. Areas dominated by riparian vegetation will be administered to meet the direction for management of wetlands and floodplains in accordance with Executive Orders 11990 and 11998, and Best Management Practices [Forest Plan page 4-59].

Existing roads located along stream banks, in riparian areas, and those that duplicate access will be closed where such roads are not necessary for resource management. If a closed road is not needed for administrative use, it may be obliterated (see Soil/Site Productivity section). The method of obliteration will depend on site specific factors and will be accomplished such that sedimentation is minimized and site productivity is increased. Allowing existing vegetation and large woody material to remain in the old roadway after obliteration will be used to increase soil productivity and reinforce the closure. Construction of waterbars and the seeding of ground disturbed during closure device construction or during road obliteration activities will be used to minimize loss of soil and stream sedimentation from these areas. These areas will be placed back into resource production where possible and revegetated in accordance with the District erosion plan.

Roads next to streams or in riparian areas that are designated open will continue to receive road maintenance activities in accordance with the level of maintenance associated with that road. These maintenance activities are designed to reduce sedimentation from the roadway. Road maintenance activities also work toward keeping the roadway travelable, thus keeping vehicles within the roadway and protecting vegetation and soils nearby.

Culverts that are unstable or at risk of failure will be stabilized; on roads to be obliterated, they will be removed permanently. On other closed roads, they may be removed and the stream channel stabilized until they can be replaced under a project. On open and seasonal roads, unstable culverts will be replaced as soon as possible.

If, through implementation and monitoring, previously unidentified roads are discovered in riparian areas, they may be closed and obliterated if they are not needed for resource management.

SOIL/SITE PRODUCTIVITY

All cut banks and fill slopes suitable for revegetation will be revegetated after road construction. All ground disturbed during road obliteration activities that is suitable for revegetation will be revegetated.

Roads to be obliterated may be treated with one or a combination of many techniques. Such techniques include, but are not limited to the following: mechanical, winged subsoilers which break soil compaction, placing rocks and logs in the old roadbed, planting trees and shrubs as well as grass seed in old roadbeds, constructing structures in streams (which can obliterate nearby roads), scarifying only the surface of a road (for instance in terrain where solid rock lies just beneath the road surface) which would encourage revegetation, or recontouring the fill material back into the old roadbed. Note: Roads on scab land or in riparian areas will be obliterated in such a manner to protect the fragile ecosystem of such features.

RECREATION

OHV routes will avoid threatened, endangered, or sensitive plant populations, cultural resource sites, and, where possible, sensitive soils and riparian areas. Designated and suggested routes will be delineated on maps with appropriate dates of use.

Vehicles will be permitted up to 300 feet off an open road for dispersed camping, firewood collection, and unloading trailers. Closure devices on closed roads that intersect open roads will be placed to allow for such use. Vehicles will not be allowed behind closure devices without a permit.

If access is closed to a trailhead, the closed road may be added to the trail and the trail head moved to a more accessible site.

This plan is not intended to overrule any applicable State laws that regulate use or operation of motorized vehicles.

ADMINISTRATIVE USE OF CLOSED ROADS

Administrative use includes Forest Service administration, contracts, and permitted use. Administrative use is infrequent, but necessary to accomplish specific work tasks. It will be limited to actual work, which does not include traveling through a closure for convenience only. Administrative use will be tightly controlled and administered through a permit system managed by the District Ranger. Permits will be issued, to individuals, organizations, and companies that have valid operational use of the National Forest and can comply with requirements for permit issuance. Individuals or Forest Service employees who need a permit to enter a closure must submit a request in advance of the actual trip. Requests could identify the following: the date or inclusive dates for entry, the number of entries required, the number of vehicles to be used, the distance to be travelled, and the purpose of the work trip. All forms of transport or entry must be explored, rather than assuming that vehicular access is the only alternative. All requests will be evaluated to determine the effect of the entry on the stated objective for the closure. Additional restrictions may be added to the permit to aid in mitigation of entry. If entry is determined to be detrimental to the stated closure objective, entry may be denied or rescheduled to a more suitable time. A permit must be in the vehicle during the time of entry. Violations of the entry permit requirements may result in termination of the permit, denial of re-entry, or a citation.

The following administrative use data table for closed roads (CFR), is an example of the types of activities that may request permitted use on closed roads during the restricted motorized use periods. The table is separated into the dates of restricted use by access strategy area and then is further divided into the alternatives which apply. This table does not list every potential activity that may have a need for permitted entry; activities which are not listed would be evaluated according to the most similar activity listed. Administrative use activities not included because they are infrequent and variable in nature are: wildlife, recreation, fisheries, watershed, fire prevention, etc.

Restricted Motorized Use Period Definitions

Big Game Calving and Fawning Period (May 1-June 30)

This is the time when cow elk and doe deer give birth to their young. It is very critical to the survival and early growth of the young that during this time period, any physical disturbance to these animals (mothers included) be kept to a minimum. In general, calving and fawning areas are usually dependent on areas where certain habitat features are unique. The Summer Range areas on the District provide the needed habitat required for the survival of mother and offspring, and receive heavy use for this purpose.

Big Game Hunter Access Restricted Periods (August 15-October 14 & October 15-December 14)

To provide big game a better chance of surviving the hunting season and to provide hunters a quality hunting experience. This restriction period may be applied in Summer Range, General Forest, or Winter Range. Some motorized use may be restricted to designated routes, while other motorized uses may be completely eliminated during this restricted use period. The closure dates include the time when the bow hunting season begins until the end of elk rifle season. Public comment suggested that bow hunters should have the same set of rules as rifle hunters. Part of this period also corresponds to the elk rutting season; limited disturbance from motorized vehicles would enable cows to successfully conceive during their first cycle. The restriction period was divided into two parts: August 15 through October 14 and October 15 through December 14. Administrative activities may be restricted during either part or during the entire period depending on the reasonable length of time needed to complete that type of activity, and other additional restrictions imposed on that activity such as during the Big Game Calving and Fawning period.

Big Game Winter Range Restricted Period (December 15-April 14)

This period is for the benefit of wintering deer and elk. Periods of severe weather can stress big game; the conditions require them to eat twice as much food to maintain body functions. Human disturbance can cause displacement to lower quality habitat, adding further stress during this critical period. By limiting the number of roads open to motorized travel in winter range habitat during the winter, big game may remain in high quality areas and stress could be reduced. This restriction could also assist in keeping big game animals on the forest during the winter use periods, which would help reduce the amount of animal damage to private lands.

Table 1: Restricted Motorized Use Periods - Administrative Use

ACCESS STRATEGY AREA	SUMMMER RANGE						WINTER RANGE			SECURITY AREAS
	5/1-6/30			8/15-10/14		10/15-12/14	12/15-4/14			YEARLONG
ALTERNATIVES	B	C	D	C	D	C	B	C	D	C
<i>FOREST SERVICE</i>										
Contract Admin.	Y ²	Y	Y ²	Y	Y	Y ²	Y	Y	Y	Y
Permit Admin.	N ¹	Y	N ¹	Y	N	N	Y	Y	N ²⁻³	N ²
Project work	N ¹	Y	N ¹	Y	N	N	Y	Y	N ¹⁻³	Y ³
<i>CONTRACTS</i>										
Timber sales	N	N	N	Y	Y	N	N	N	N	N
Tree planting (4/1-5/31)	Y	Y	Y	-	-	-	Y	Y	Y	Y
Thinning (8/1-11/15)	-	-	-	Y	N	N	-	-	-	N
Road Obliteration	N	N	N	Y	N	N	N	N	-	Y
Road Maintenance	N	N	N	Y	N	N	N	N	N	Y
Road Construction	N	N	N	Y	N	N	N	N	N	Y
Fence Construction	N	N	N	Y	N	Y ⁴	N	N	N	Y
Gopher Control (10/1-10/30)	-	-	-	Y	N	Y ⁴	-	-	-	Y
Porcupine Control (3/20-10/15)	Y	Y	N	Y	N	-	Y	Y	N	N
Big Game Control (4/1-5/31)	Y	Y	N	-	-	-	Y	Y	Y	Y
Commercial firewood /post & poles	N	N	N	Y	N	N	N	N	N	N
Cone collection (8/15-10/15)	-	-	-	Y	N	-	-	-	-	Y
Stocking surveys (9/1-12/5)	-	-	-	Y	N	N	-	-	-	Y
Stand exams (6/15-9/30)	N	N	N	Y	N	-	-	-	-	N
Implant/fertilize. (12/15-4/15)	-	-	-	-	-	-	Y	Y	N	Y
Select Trees maint./culture (5/31-9/30)	N	Y	N	Y	N	-	-	-	-	Y
Subsoiling (7/15-11/1)	-	-	-	Y	N	N	-	-	-	Y
Prescribed burn (3/1-6/15)	Y	Y	N	-	-	-	Y	Y	Y	Y
<i>PERMITS</i>										
Grazing	N	Y	N	Y	N	N	-	-	-	N
Personal firewood	N	N	N	Y	N	N	N	N	N	N
X-mas tree cutting	-	-	-	-	-	N	N	Y	N	N
Personal posts & poles	N	N	N	Y	N	N	N	N	N	N
Mushrooming	N ²	Y	N ²	N	N ²	N ²	N ²	Y	N ²	N ²
Special Uses	N ²	Y	N ²	Y	N ²	N ²	N ²	Y	N ²	N ²

- = Non-applicable
 Y = Access permit would be issued
 N = Access permit would not be issued

- 1 Except for tree planting and prescribed burning.
- 2 Access to Special Use electronic sites; exceptions made on case-by-case basis for Special Uses.
- 3 Prescribed burning permitted.
- 4 No access permitted during elk rifle season.
- 5 If necessary to maintain the objectives of Big Game Security Areas.

Travel associated with active, operating contracts on roads designated as closed yearlong, is a form of administrative use and will require a permit. Public admittance to the area will be restricted. Although a closure device may be open, the road will still be closed, by a sign, to any use not covered by the permit. Entry devices will be closed during periods of inactivity or after the project is completed.

Each closure order will have a standard exemption for 36 CFR 261.50(e). It shall read as follows; Anyone engaged in an official search and rescue, fire fighting force, or law enforcement duty.

Road closure devices will be designed to fit the anticipated needs.

Discussion of the need for and purpose of administrative use will be included on access and travel management maps, signs, and other educational materials.

NOXIOUS WEEDS

Any treatment of noxious weeds would be in agreement with measures specified in the Managing Competing and Unwanted Vegetation Final Environmental Impact Statement, Record of Decision and Mediated Agreement (Nov. 1988).

Control of additional road construction and overland OHV travel can limit spread into new locations. Hand pulling of known populations of noxious weeds will continue, where possible. Known populations of noxious weeds which are located along roads designated for obliteration will be treated prior to implementation and the dead, seed-bearing noxious weed skeletons will be collected. Use of herbicides will be an option to control noxious weeds, when a NEPA document allowing such use is approved.

Areas of soil disturbance will be seeded with grasses and forbs to prevent invasion by noxious weeds. The rate of seeding will be at a level which will not deter reforestation of the site.

Measures to avoid the spread of noxious weeds will be included on maps, informational signs, and other education materials. Such education should encourage the following:

- i. Hunters with livestock to purchase pelleted feed, certified weed-free hay, or local weed free hay.

- ii. OHV users to stay on designated routes and to be sure machines are free of noxious weed seed prior to entering National Forest lands.

Knutson-Vandenburg funds are collected, through timber sales, to fund monitoring and control of existing populations.

MONITORING REQUIREMENTS COMMON TO ALTERNATIVES A, B, C, AND D

FOREST PLAN

Monitoring will be conducted in accordance with the Umatilla National Forest Land and Resource Management Plan, FEIS and ROD (June 1990).

PROJECT DESIGN

An interdisciplinary team will review the Access and Travel Management Plan after each stage of implementation and annually after implementation is complete, to monitor success and to determine if changes in program design are needed to achieve objectives. The Public Working Group may be included in such monitoring.

The effectiveness of the type and location of closure device, maps, signing, education, road obliteration, and law enforcement will be monitored through site specific reviews and public comment.

WILDLIFE

Big game herd composition data will be evaluated annually (in cooperation with the Oregon Department of Fish and Wildlife), focusing specifically on bull/buck escapement and calf/fawn recruitment.

WATERSHED/FISHERIES

Existing stream sediment and water quality monitoring will continue.

RECREATION/VISUALS

Activity reviews comparing project planning and execution will be scheduled to track the effects and evaluate impacts of the Access and Travel Management Plan on recreation resources.

ADMINISTRATIVE USE

Monitoring of permitted use will be done on a yearly basis through a formal permit system. This monitoring will be analyzed annually by the IDT and District staff.

DISTRICT PROGRAM OF WORK

The District program of work will be monitored to evaluate the effects of implementation of the Access and Travel Management Plan. The District Staff and interdisciplinary team will monitor annually using various types of documentation, such as contract diaries, accomplishment report information, and other similar administrative sources of information. Included in monitoring will be project timing delays, significant organizational changes, unusual upward or downward changes in bids for government contracts, elimination or downsizing of existing programs, ability to execute projects within a biological window (such as planting or prescribed burning), and project and program unit costs.

COMPARISON OF ALTERNATIVES

A comparison of the alternatives and their corresponding effects on key issues are discussed below. Refer to Table 2, page 38, for a comparative summary of this discussion.

PROJECT OBJECTIVES

Alternative A would only achieve the objectives of moving toward the desired future condition and using road closures to improve or prevent resource damage. Since management would continue to develop on a project by project basis, the objective of consistency across the District and with our neighboring districts might not occur. Depending on the extent of inconsistency, the plan could be somewhat confusing and difficult to implement or enforce. Attempts would be made to consider public needs, but the extent to which these needs are met would be different with each project and access to historically favored areas might occasionally be closed with little notice to the public.

Alternative B would work toward Forest Plan desired future conditions (pp 4-7 and Appendix A), but with regard to big game, only minimally. Public needs of access, road-oriented activities, and OHV/snowmobile use would be satisfied at the expense of the needs for non-motorized recreation opportunities and a non-motorized hunting experience. Since most roads are open or seasonally open, this would be the most understandable, implementable, and enforceable plan. The dates of seasonal closure will be easier to understand than seasonal closures currently in place; instead of shifting with the various hunting seasons, closures will occur on the same dates every year. The plan would be consistent District-wide, although it may not be consistent with the North Fork John Day District. Road closures would

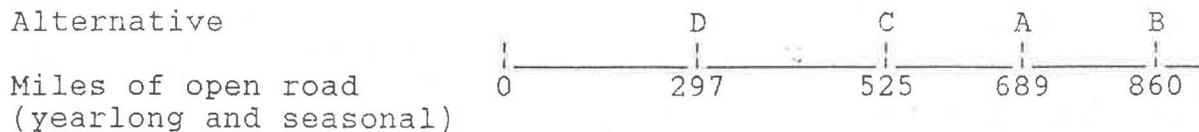
be based on resource objectives for soil, fish, and water to improve or prevent the most severe damage. Road closures based on resource objectives for big game would be minimal.

Alternative C would move the District toward desired future conditions stated in the Forest Plan by closing additional roads to accommodate big game, providing a trail system for OHVs and snowmobiles, and providing a wide range of recreation opportunities and access. During the transition, from current management to implementation of this alternative, confusion could occur regarding which roads are open; this would resolve as the new program becomes established, maps are distributed, signs are posted, and education efforts pay off. The dates of seasonal closure will be easier to understand than seasonal closures currently in place; instead of shifting with the various hunting seasons, closures will occur on the same dates every year. Because this alternative would be consistent across the District and with the North Fork John Day District, it would be reasonably easy to implement and enforce. A range of recreation opportunities, both seasonal and in a variety of settings, would be provided. Though access would be limited in some areas, this would provide opportunities for non-motorized recreation. Roads would be closed based on resource objectives to prevent damage and enhance resources.

Security areas are being considered as areas that will give big game a place to find refuge during the time it takes big game cover to be restored to surrounding areas where salvage efforts have been intense. Because of this, security areas are being considered a temporary mitigation measure and the interdisciplinary team felt this alternative would still be consistent with the Forest Plan.

Alternative D would move the District toward an interpretation of desired future conditions that strongly emphasizes big game and non-motorized recreation. It would be easy to understand and implement, since few roads would be open. It could be difficult to enforce OHV and snowmobile restrictions since motorized patrol would be confined to open roads. It would be consistent District-wide but not with the North Fork John Day District. The range of recreation opportunities would be narrow and much of the District would be unavailable to the public majority. Road closures would be based on resource objectives, with a large emphasis on big game, to prevent damage and enhance resources.

ISSUE 1: ROAD-ORIENTED ACTIVITIES



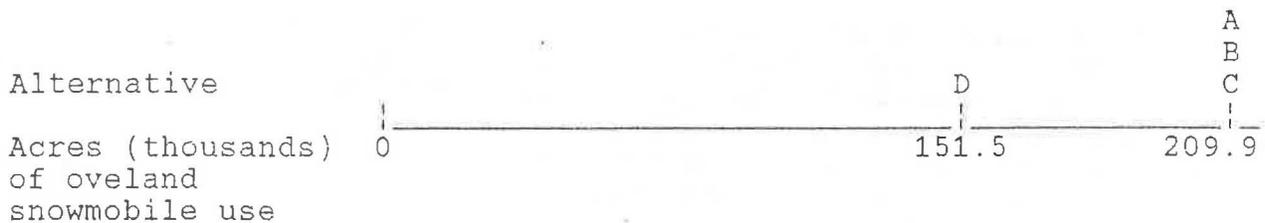
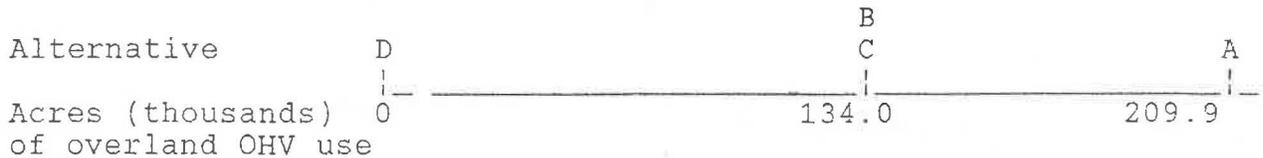
Alternative A would allow road-oriented activities throughout most of the District, but only seasonally in the Texas and Wickiup closures. The biggest concern is that areas providing road-oriented opportunities cannot be depended upon year after year, since access may change with every new resource management project.

Alternative B would maximize opportunities for road-oriented activities by providing the greatest amount and variety of open roads. The large amount of maintenance level 2 roads would provide the most variety and challenge for high clearance vehicle users.

Alternative C would supply a wide variety of road types to provide a more diverse driving experience. However, fewer roads would be available for road-oriented activities in Winter Big Game Habitat and General Forest and none would be available in security areas.

Alternative D would be the most restrictive, greatly reducing opportunities for road-oriented activities. This would particularly effect forest users who require motorized access (such as senior citizens, physically challenged persons, families with young children, and motor homes).

ISSUE 2: OHV AND SNOWMOBILE USE



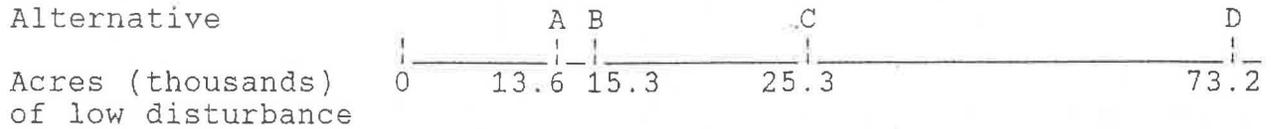
Alternative A would allow the most freedom across the District for OHV and snowmobile use. However this unrestricted use may result in conflicts with other recreationists and disturbance to wildlife. Any damage to natural resources would be difficult to monitor and control, including the spread of noxious weeds.

Alternative B would place some restrictions on time of use and overland travel, but there would be an increase in designated and suggested routes. OHV opportunities would be less than alternative A because OHV's are restricted to designated routes yearlong in the Summer Range and seasonally in the Winter Range. OHV opportunities would be greater than alternatives C or D because overland use is still allowed in E1 areas of General Forest and in C3 and C8 areas of Winter Range seasonally.

Alternative C would restrict overland travel for OHVs and snowmobiles even further, although there would be an increase in suggested and designated routes. OHV opportunities would be less than alternatives A or B because in addition to restrictions in alternative B, they would be completely eliminated seasonally east of Ditch Creek in the General Forest and Winter Range. Furthermore, OHVs would not be allowed at all in security areas. Snowmobile opportunities would be the same as alternative B except in the Winter Range east of Ditch Creek, where overland use would be restricted seasonally.

Alternative D would be the most restrictive to OHV and snowmobile use. No overland travel opportunities would exist for OHVs, severely limiting the recreation experience for these users. Designated routes could also concentrate use in certain areas of the District, which could lead to resource damage. Snowmobiles would be excluded, yearlong, from Winter Range.

ISSUE 3: NONMOTORIZED RECREATION



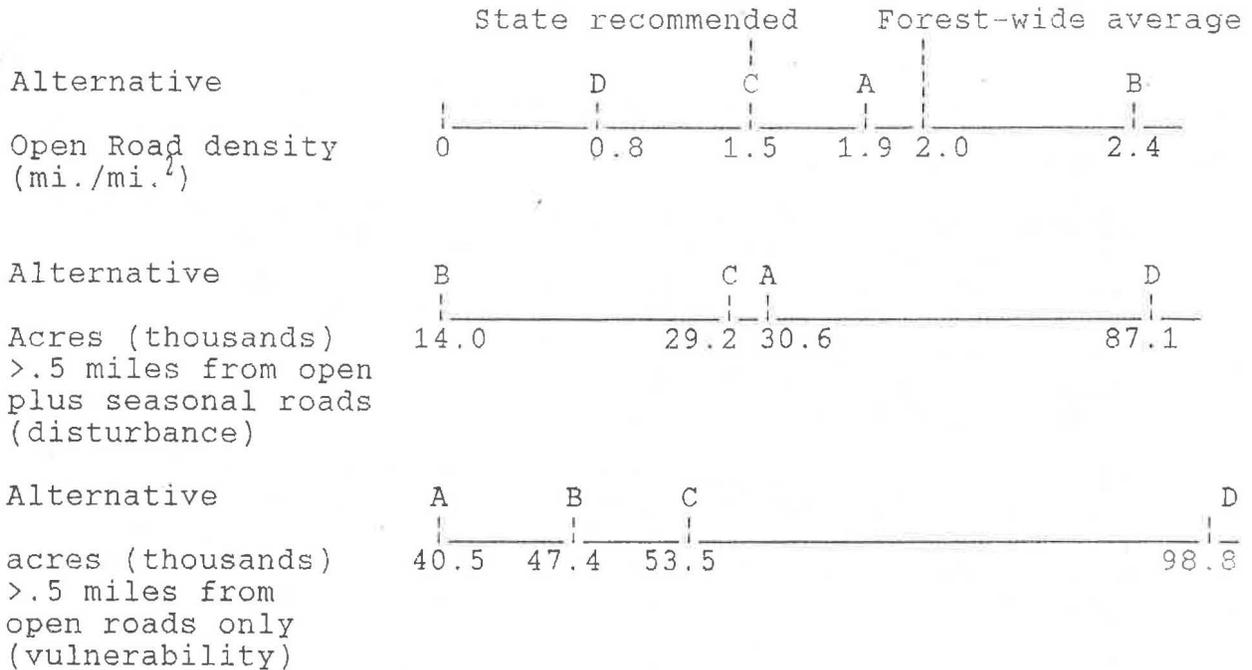
Alternative A would limit opportunities for and quality of non-motorized recreation. Because no routes exist specifically for OHV or snowmobile use, they use routes which would otherwise provide opportunities for non-motorized recreation. There is an opportunity to expand this resource by converting some closed roads to nonmotorized trails.

Alternative B would have the most impact on non-motorized recreation with the increased number of open roads. The increased number of seasonally open roads, primarily in the Summer Range, would further reduce non-motorized opportunities and experiences. Increased open roads could limit the opportunity to expand the non-motorized trail system.

Alternative C maintains almost the same amount of non-motorized opportunities as Alternative A, however the resource isn't as limited as in Alternative B. The large number of road closures would provide more opportunity to designate additional non-motorized trails than in Alternatives A or B.

Alternative D would benefit the non-motorized recreation resource the most of all proposed alternatives. Many more areas would be available for non-motorized activities, disturbance would be greatly reduced from other alternatives, and the opportunities for solitude would be maximized. This alternative would also provide the most opportunity to convert roads to non-motorized trails and existing trails would prohibit use by OHVs and snowmobiles.

ISSUE 4: EFFECTIVE BIG GAME HABITAT



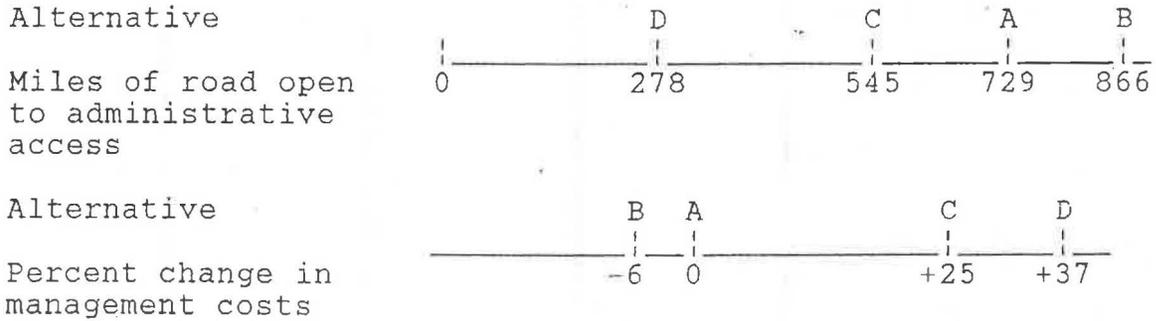
Alternative A would result in poor quality big game habitat across the District because of a high road density, unrestricted OHV and snowmobile use, and a minimal number of low disturbance areas. These effects may or may not be sufficiently reduced on a project by project basis.

Alternative B would provide the least amount of quality big game habitat. Improvement of habitat effectiveness would be heavily dependent on an adequate supply of quality cover or on further hunting restrictions. This may not be feasible, since the current forest health problem is depleting cover and hunting regulation is beyond the control of the Forest Service.

Alternative C would increase big game habitat quality. For additional protection, areas where big game could escape harassment (security areas) would be closed to most motorized access.

Alternative D would improve the quality of big game habitat the most of all the alternatives, since the number of open roads would be reduced in both winter and summer habitats, and OHV and snowmobile use would be greatly limited. This could make up for a loss of quality cover due to the poor forest health situation.

ISSUE 5: ADMINISTRATIVE USE



Alternative A would permit administrative access to most areas, with use limited seasonally only in the Texas and Wickiup areas.

Alternative B would allow the most administrative access of all the alternatives and the cost of doing business would be minimized.

Alternative C would be more restricted than in alternatives A and B. The permit system, which allows access during periods of road and area closure, would be more strictly controlled.

Alternative D would significantly reduce administrative access. Business costs would greatly increase, as sources other than motor vehicles are used. This could cause some District resource management programs to be dropped and contractors and permittees may be forced to work elsewhere. This may affect forest health and the economy of local communities in the long term.

TABLE 2: COMPARATIVE SUMMARY OF ALTERNATIVES

ISSUES & MEASUREMENT CRITERIA	ALTERNATIVES											
	A			B			C			D		
<i>Road-oriented Activities</i>												
Miles of open road by:												
maintenance level 1	0			0			0			0		
2	491			531			311			149		
3	97			97			97			96		
4	-			-			-			-		
5	10			10			10			9		
Miles of yearlong and seasonally open road by:												
Summer Range	179			229			146			81		
General Forest	372			466			278			167		
Winter Range	138			165			101			49		
Totals	689			860			525			297		
<i>OHV & Snowmobile Use</i>												
	GF	SR	WR	GF	SR	WR	GF	SR	WR	GF	SR	WR
OHV Restrictions:												
Overland travel	1	1	1	3		5	4		6			
Designated routes					2	5		2	6	2	2	7
No use allowed							4		6			7
Snowmobile Restrictions:												
Overland travel	1	1	1	8	8	9	8	8	10	8	8	
Designated routes						9			10			
No use allowed												11
Miles of designated routes:												
OHV	0			17			17			70		
Snowmobile	0			9			9			0		
Acres of overland use:												
OHV	209,920			134,017			134,017			0		
Snowmobile	209,920			209,920			209,920			151,504		

- 1 Overland use is allowed except on roads, trails, and areas closed by CFR orders.
- 2 Restricted to designated routes yearlong.
- 3 Overland use in E1 management areas allowed yearlong.
- 4 West of Ditch Creek:
Overland use in E1 management areas outside security areas allowed yearlong.

East of Ditch Creek:
Overland use in E1 management areas outside security areas allowed except from August 15 through December 14 when use will not be allowed.

- 5 Overland use in C3 and C8 management areas allowed except December 14 through April 14 when use will be restricted to designated routes.
- 6 West of Ditch Creek:
Overland use in C3 and C8 management areas outside security areas allowed except from December 15 through April 14 when use will be restricted to designated routes.

East of Ditch Creek:
Overland use in C3 and C8 management areas outside security areas allowed except from August 15 through December 14 and December 15 through April 14 when use will not be allowed.
- 7 Restricted to designated routes except from December 15 through April 14 when use will not be allowed.
- 8 Overland use allowed yearlong.
- 9 Overland use allowed except from December 15 through April 14 when use will be restricted to designated routes.
- 10 West of Ditch Creek:
Overland use allowed except from December 15 through April 14 when use will be restricted to designated routes.

East of Ditch Creek:
Overland use allowed except from August 15 through December 14 and December 15 through April 14 when use will be restricted to designated routes.
- 11 Use not allowed.

TABLE 2: COMPARATIVE SUMMARY OF ALTERNATIVES CONTINUED

ISSUES & MEASUREMENT CRITERIA	ALTERNATIVES			
	A	B	C	D
<u>Non-motorized Recreation</u>				
Acres in disturbance zone (Seasonal roads closed):				
High *	138,680	140,370	117,100	82,290
Moderate **	72,160	68,080	80,550	100,930
Low ***	17,070	19,460	30,260	44,690
<u>Effective Big Game Habitat</u>				
Open road density (mi./mi. ²)	1.94	2.42	1.51	0.83
Overland OHV use:				
Summer Range	Yes-Seasonal	No	No	No
Winter Range	Yes-Yearlong	Yes-Seasonal	Yes-Seasonal	No
Overland snowmobile use:				
Summer Range	Yes-Yearlong	Yes-Yearlong	Yes-Yearlong	Yes-Yearlong
Winter Range	Yes-Yearlong	Yes-Seasonal	Yes-Seasonal	No
Acres >.5 miles from roads:				
Open + Seasonal	30,610	14,020	29,170	87,130
Open roads only	40,500	47,360	53,516	98,750
<u>Administrative Use</u>				
Miles of road open to administrative use	729	866	545	278
Change in management costs	0%	-6%	+25%	+37%

* This includes the area less than 0.25 mile from an open road. Within this zone, recreationists may be disturbed by dust from roads, notable noise from vehicle motors, and a high concentration of people.

** This includes the area from 0.25 to 1 mile from an open road. Within this zone, recreationists may be disturbed by occasional noise from vehicle motors and a moderate concentration of people.

*** This includes the area greater than 1 mile from an open road. Within this zone, recreationists may rarely be disturbed by noise from vehicle motors. There would be a low concentration of people, so recreationists should experience the most solitude.

CHAPTER 3: ENVIRONMENTAL CONSEQUENCES

This chapter describes the potential consequences of implementing the alternatives (described in Chapter II). It also provides the scientific and analytical basis for the comparison of the alternatives. This information was provided by resource specialists and was taken from detailed analysis which can be found in the Access and Travel Management Analysis File at the Heppner District office. The organization of this chapter follows the sequence of key issues and other concerns listed in Chapter I.

INTRODUCTION

Discussion of the environmental effects of each alternative on the key issues follows. Direct, indirect, and cumulative effects of implementing each alternative along with the tradeoffs of mitigating undesirable effects are discussed. This analysis is not intended to explore tradeoffs that were part of the Forest planning process, but rather those which are legitimate Access and Travel Management options under Forest Plan direction [Forest Plan page III-3-K, Implementation Strategy]. Environmental effects not discussed in this section are addressed in the FEIS for the Forest Plan; see Chapter IV in the FEIS for details.

Effects are shown as being direct, indirect, or cumulative. These effects are described in terms of increases or decreases, intensity, duration, and timing. They are defined as:

Direct effects occur at the same time and place as the triggering action. For instance, road obliteration has a direct effect on the availability of that road for public or administrative access.

Indirect effects are separated in time or space from the action that caused them. The displacement of elk to private land because of disturbance from open roads, OHVs, and snowmobiles is an indirect effect.

Cumulative effects are those which result from the impact of the project when added to other past, present, and reasonably foreseeable actions or catastrophic events. These are regardless of administrative boundaries, ownership lines, or who is planning other projects [40 CFR 1508.7]. The cumulative effects analysis discussed here considered all roads within the project area, whether or not they are under the jurisdiction of the Forest Service. The results of this

analysis may be used to determine threshold values or resource constraints [Forest Plan III-4-L, Implementation Strategy]. Forest Plan standards and guidelines, project scoping, and interdisciplinary analysis insure that the proposed actions could be implemented from within this project area without cumulative effects exceeding those expected under current direction. An example of cumulative effects would be the effects of open road densities coupled with declining forest health and the associated massive salvage program on the quality of big game habitat.

EFFECTS QUANTIFIED

ISSUE 1: ROAD-ORIENTED ACTIVITIES

ALTERNATIVE A

DIRECT: Motor vehicle access is moderately high in that 689 miles of road (or 66% of the road system) are open, either yearlong or seasonally. Road-oriented opportunities could be decreased in some parts of the District more than others, depending upon the project objectives and the focus of each project's designing team. Roads could be closed after a project's completion with little or no warning to potential users of a particular road in question. Access to some favored roads, dispersed campsites, or recreation areas may be reduced.

INDIRECT: These project-by-project closures may confuse and discourage forest users, as road-oriented opportunities occur in patches across the District. This can diminish the recreation experience, since users who are unable to access their favorite area feel disappointment and anger.

CUMULATIVE: The effects of road closures occurring a little at a time across the District may be serious, as the collective elimination of dispersed campsites and favorite areas may not be noticed on a project-by-project basis. This could cause users who prefer road-oriented recreation to go elsewhere.

ALTERNATIVE B

DIRECT: Under alternative B, road-oriented opportunities would increase across the District. Motor vehicle access is the highest of all alternatives in that 860 miles of road (or 82% of the road system) are open, either yearlong or seasonally. Some traditionally favored roads and areas closed by previous projects would be reopened. Most of the District

would be available for forest users who are either limited to or prefer motorized access. Many types of road conditions would be available, providing many opportunities both for passenger cars and high clearance vehicles.

INDIRECT: Additional road-oriented opportunities may provide greater enjoyment for forest users and encourage additional use. However, an increase in open roads may also allow road-oriented activities and dispersed campsites in sensitive areas or in areas which need recovery. The results of additional access may include: a decreased amount of vegetation, increased erosion, reduced water quality and quantity, and damage to wildlife and fish habitat.

CUMULATIVE: The amount of road-oriented activities may increase across the District. Over time, the negative effects of an increased amount of open roads, coupled with the effects of declining forest health, may reduce the quality of the available non-motorized recreation experiences. The decline in visual appearances and lower hunting and fishing successes may disappoint forest users and cause them to go elsewhere.

ALTERNATIVE C

DIRECT: Road-oriented opportunities would decrease in the General Forest and Winter Range portions of the District. Motor vehicle access would be less than alternatives A and B in that 525 miles of road (or 50% of the road system) would be open, either yearlong or seasonally.

Most of the known traditionally favored roads, dispersed campsites, and areas would still be accessible. However, access to some of these would be closed for mitigation for forest health or for protection of other resources. Portions of the District would be unavailable to forest users limited to motorized access. Many types of road conditions would be provided for users who prefer a more rugged driving experience.

INDIRECT: A reduction in road-oriented opportunities may disappoint and anger some forest users. However, closing roads may also improve the condition of other resources, including big game and fish habitat. The reduction in available dispersed campsites should not be enough to crowd users into creating new sites. Road closures would also allow "well used" dispersed campsites along those roads to rehabilitate on either a planned or natural schedule.

CUMULATIVE: An increase in the quality big game and fish habitat may attract more users. However, a reduction in the amount of road-oriented opportunities may concentrate use to

areas still available to motorized access. This may be most apparent with dispersed campsites in that vegetation, soil, water quality, and the availability of firewood may be reduced. Still, concentrated use is expected to be a limited problem; the overall benefits across the District should offset any localized negative effects.

ALTERNATIVE D

DIRECT: Road-oriented opportunities would be very limited across the entire District. Motor vehicle access would be less than alternatives A, B, and C in that 297 miles of road (or 28% of the road system) would be open, either yearlong or seasonally.

Many traditionally favored roads, dispersed campsites, and areas would be closed. Most of the District would be unavailable for forest users limited to motorized access. There would be fewer opportunities for rugged driving recreation.

INDIRECT: The large reduction in road-oriented opportunities could disappoint and anger many forest users. Heavy impacts may occur to those dispersed campsites along the remaining open roads; competition for and use of these sites would greatly increase. Additionally, more sites would randomly develop along the remaining open roads, where no campsites now exist. However, the condition of resources along closed roads may improve through natural or planned rehabilitation, resulting in an increase in the quality of big game and fish habitat across the District.

CUMULATIVE: An increase in the quality of big game and fish may attract more users. However, use would be highly concentrated in areas still accessible by road; impacts to natural resources in these areas could be severe. This would be most apparent with dispersed campsites; with a limited number of sites easily accessible, recreationists would have to compete for available sites or create new ones. This could disappoint and anger many forest users and cause them to be displaced.

ISSUE 2: OHV/SNOWMOBILE USE

ALTERNATIVE A

DIRECT: Overland OHV use would occur across the District with few restrictions, which could result in conflicts with other recreationists. Recreationists preferring a more secluded, quiet experience may be disturbed by noise and dust. Overland OHV use could also damage soils, riparian areas, and

vegetation, disturb wildlife, and spread the seeds of noxious weeds.

Overland snowmobile use would occur across the District with few restrictions, which could result in conflicts with other recreationists. Although snow should adequately protect soils, riparian areas, and most vegetation, overland snowmobile travel could still disturb wildlife.

Project-by-project road closures associated with this alternative could positively affect OHV and snowmobile use, providing additional routes for those users who prefer road travel rather than overland travel.

INDIRECT: The quality of the recreation experience may be reduced for those recreationists preferring a nonmotorized setting. In some areas, water quality and fish habitat may be degraded by overland OHV use. OHV use may cause the spread of noxious weeds. OHV and snowmobile use may cause wildlife to become stressed due to disturbance.

CUMULATIVE: Though by itself, damage from OHVs may only occur in scattered areas, the affects to water quality and fish habitat could be compounded when joined with the affects from open roads and declining forest health. With neighboring Forest's and other lands becoming more restrictive to OHV use, unrestricted overland use allowed on this District may promote increased use which could create more resource damage over time. Cumulative effects from snowmobiles are not expected, since few trees would be affected.

ALTERNATIVE B

DIRECT: Seasonal and permanent restrictions could close off areas that may have been traditionally used by OHV users, especially in the Summer Range. Designated routes could also reduce opportunities and variety for these types of recreation. Opening roads (to pickup use) would reduce opportunities for OHV users who prefer road travel rather than overland travel. Designated and suggested OHV routes may concentrate use, which could cause damage in the immediate area (around the routes). However, these effects would be localized, routes would direct recreationists away from sensitive areas, disturbance to wildlife and other recreationists would be minimized, and the spread of noxious weed seeds would be confined (at least initially) to the immediate area.

Seasonal restrictions in the Winter Range could close off areas that may have been traditionally used by snowmobile users. Snowmobile travel could still disturb wildlife.

INDIRECT: The effects of restrictions could cause dissatisfaction by reducing the variety and areas available to OHV users or closing some user's favorite area. The concentration of users on designated routes could also reduce the quality of the recreation experience and cause safety hazards. However, designated and suggested routes would also offer security to those OHV users not familiar with the District. If impacts from use begin to appear, measures can be taken to mitigate them, while with unrestricted use, damaged areas may never be discovered. OHV routes would assist in the control of noxious weeds by making it easier to locate infestations. In some areas of General Forest and Winter Range, water quality and fish habitat may be degraded by overland OHV use and wildlife may become stressed.

The effects of restrictions on snowmobile use could cause dissatisfaction by reducing the variety and areas available to snowmobile users or closing some user's favorite area. However, the risk of dissatisfaction is minimal as snowmobiles are only restricted to designated routes in the Winter Range seasonally.

CUMULATIVE: Over time, designated OHV routes and adjacent areas may show resource damage. Also, in areas open to overland OHV use, adverse resource effects to soils and vegetation could occur unchecked. Though by itself, damage from OHVs may only occur in scattered areas, the effects to water quality and fish habitat could be compounded when joined with the effects from open roads and declining forest health. These effects should be partially reduced by seasonal restrictions and designated routes. Because this would be similar to restrictions in other locations, there would be little reason for OHV users to relocate to this District. The combination of designated routes and unrestricted areas should still provide an enjoyable and challenging experience for users.

Cumulative effects from snowmobiles are expected to be minimal. Disturbance to big game from snowmobiles would only occur near designated snowmobile routes in the Winter Range.

ALTERNATIVE C

DIRECT: The effects would be similar to those in Alternative B. Restrictions would reduce OHV and snowmobile opportunities from levels in alternative B, but other resources would benefit from these additional restrictions.

This alternative would further restrict OHV use, limiting it to the E1 management area in General Forest, with designated

routes provided for stream crossings and other sensitive areas.

INDIRECT: Again, the effects of these restrictions could cause OHV users dissatisfaction through closure of favorite areas and a reduction in variety of possible experiences. The concentration of users on designated OHV routes could also reduce the quality of the recreation experience and cause safety hazards. Restrictions and designated routes should reduce negative effects to water quality, fish habitat, wildlife, and other recreationists. Designated routes may experience concentrated negative effects, but as impacts from use begin to appear, measures can be taken to repair them.

CUMULATIVE: Over time, designated OHV routes could show resource damage depending on the amount of use. Although negative effects could occur unchecked in areas open to overland OHV travel, the areas available for this are those with the least potential for damage or disturbance. Constraints on OHV use should minimize the effects to water quality and fish habitat, even when joined with the impacts from open roads and declining forest health. There would be little reason for OHV users from other areas to shift to this District. The combination of designated routes and areas available for overland OHV use still provide an enjoyable and challenging experience for users.

Cumulative effects from snowmobiles are expected to be minimal. Disturbance to big game from snowmobiles would only occur near designated snowmobile routes in the Winter Range.

ALTERNATIVE D

DIRECT: Overland OHV use is restricted District-wide; designated routes would be provided yearlong district-wide, except during the winter months in Winter Range, when OHV use is not allowed. This would greatly limit the opportunities and variety available to OHV users and would eliminate many of their favored areas. Soil, vegetation, riparian areas, wildlife, and other recreationists would benefit across most of the District, however serious damage could occur to soils and vegetation along designated routes.

Opportunities for snowmobile use would be totally eliminated in Winter Range, thus reducing effects on big game.

INDIRECT: This alternative provides the highest level of designated OHV routes, significantly changing the OHV experience from the current condition. This could create a widespread dissatisfaction among OHV users. The small number of designated routes for OHV use would cause a high

concentration of use, which could result in severe impacts to the natural resources and a serious safety hazard.

Except for in the Winter Range, snowmobile opportunities would remain similar to current levels.

CUMULATIVE: The total restriction of OHVs to a designated route system could reduce the quality of the OHV experience enough that these users are forced to go elsewhere. Designated routes could experience so much resource damage that the water quality and fish habitat in subwatersheds containing those routes may be impacted, especially if the decline in forest health is severe in those areas as well. However, resources across most of the District should benefit from the combination of OHV and snowmobile restrictions and road closures.

ISSUE 3: NONMOTORIZED RECREATION

To analyze the potential effects to the non-motorized recreation resource, a map was created to show zones where high, moderate, and low levels of disturbance would likely occur with each alternative. These zones were defined as follows:

High levels of disturbance usually occur up to one quarter of a mile from an open road. Within this zone, recreationists may experience dust from roads, notable noise from vehicle motors, and a high concentration of people.

Moderate levels of disturbance usually occur from one quarter of a mile to a mile from an open road. Within this zone, recreationists may be disturbed by occasional noise from vehicle motors and a moderate concentration of people.

Low levels of disturbance usually occur more than one mile from an open road. Within this zone, recreationists may rarely experience noise from vehicle motors. There would be a low concentration of people, so recreationists should experience the most solitude.

Only yearlong open roads were used for this analysis. Because data regarding the frequency of travel on each open road was not available, the District Recreation Forester felt that excluding seasonally open roads from the map would help compensate for this missing information. Disturbance from OHV and snowmobile use was also not included in this map, although the effects of such use are discussed in the preceding issue. These maps are not intended to show the exact location of disturbance zones, instead it should indicate the trend of disturbance for each alternative. The maps for each alternative are displayed along with the discussion of effects.

ALTERNATIVE A

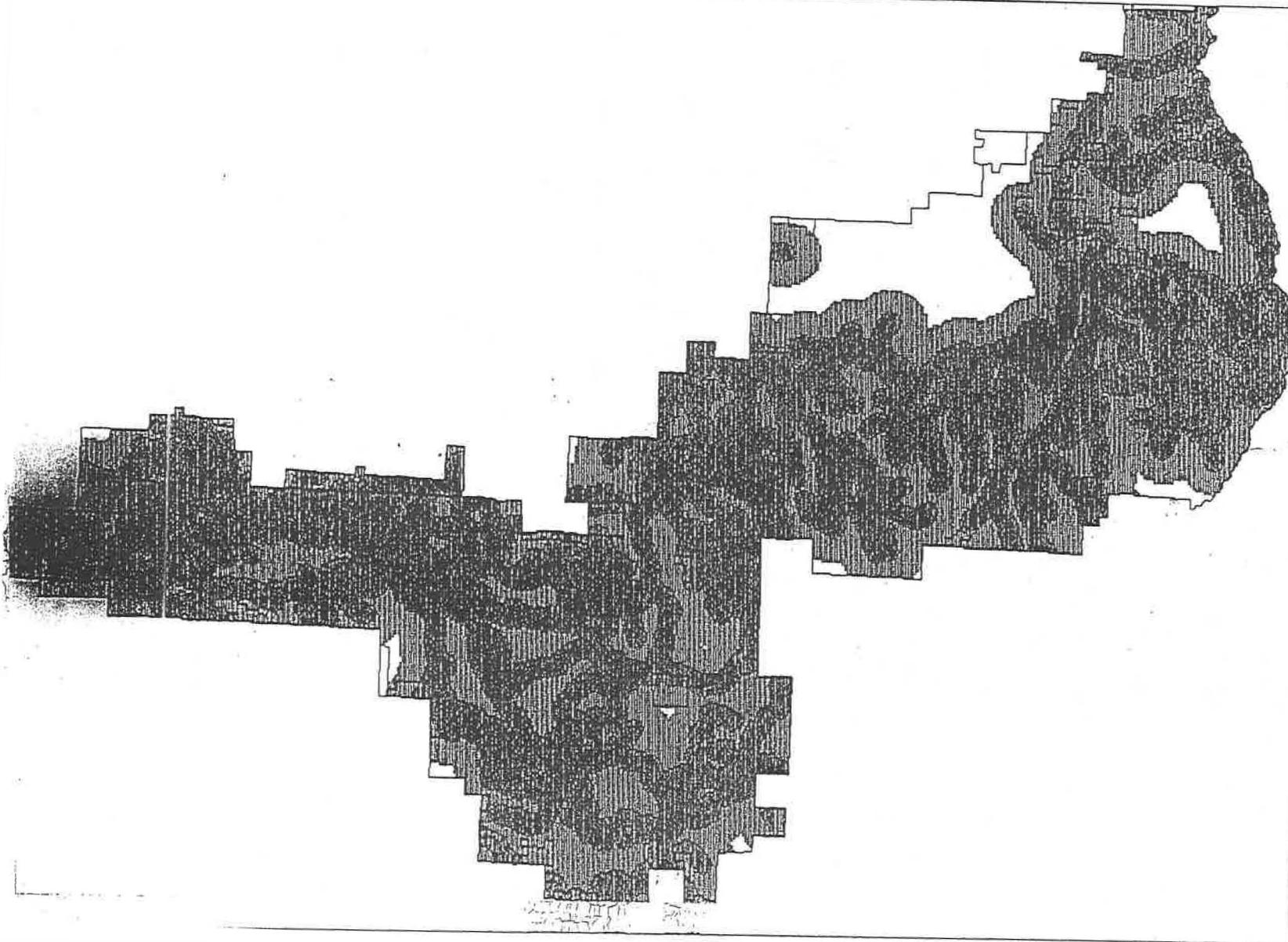
DIRECT: This alternative is one of the least desirable for recreationists looking for non-motorized recreation opportunities. Disturbance to non-motorized recreationists from open roads would be relatively high.

Unrestricted OHV and snowmobile use across the District would cause further disturbance. Access to system trailheads would generally remain open, but trails which haven't been developed by the Forest Service may become inaccessible. Only four District trails are closed to motorized use by CFR order: Copple Butte, Madison, Skookum, and Alder Creek. Because so few trails are restricted, conflicts and safety hazards may occur between OHV or snowmobile users and other recreationists. Conflicts and safety hazards may occur between snowmobile users and other recreationists on the Copple Butte, Skookum, and Alder Creek Trails. Road closures could occasionally create non-motorized opportunities, depending on the road's location.

INDIRECT: Closure of certain roads may anger some visitors if their favorite area or non-system trail is no longer directly accessible. There are only a few areas of the District which offer a high quality non-motorized experience.

CUMULATIVE: With more road closures occurring over time, it may be possible to create a new non-motorized trails. However, because projects rarely occur next to each other so that a system could be developed, the non-motorized opportunities would remain severely limited on the District.

ALT A DISTURBANCE ZONES (excluding seasonal roads)



LEGEND

-  <.25 miles from an open road !
137,949 ACRES
-  .25-1 mile
58,235 ACRES
-  > .1 mile
13,646 ACRES

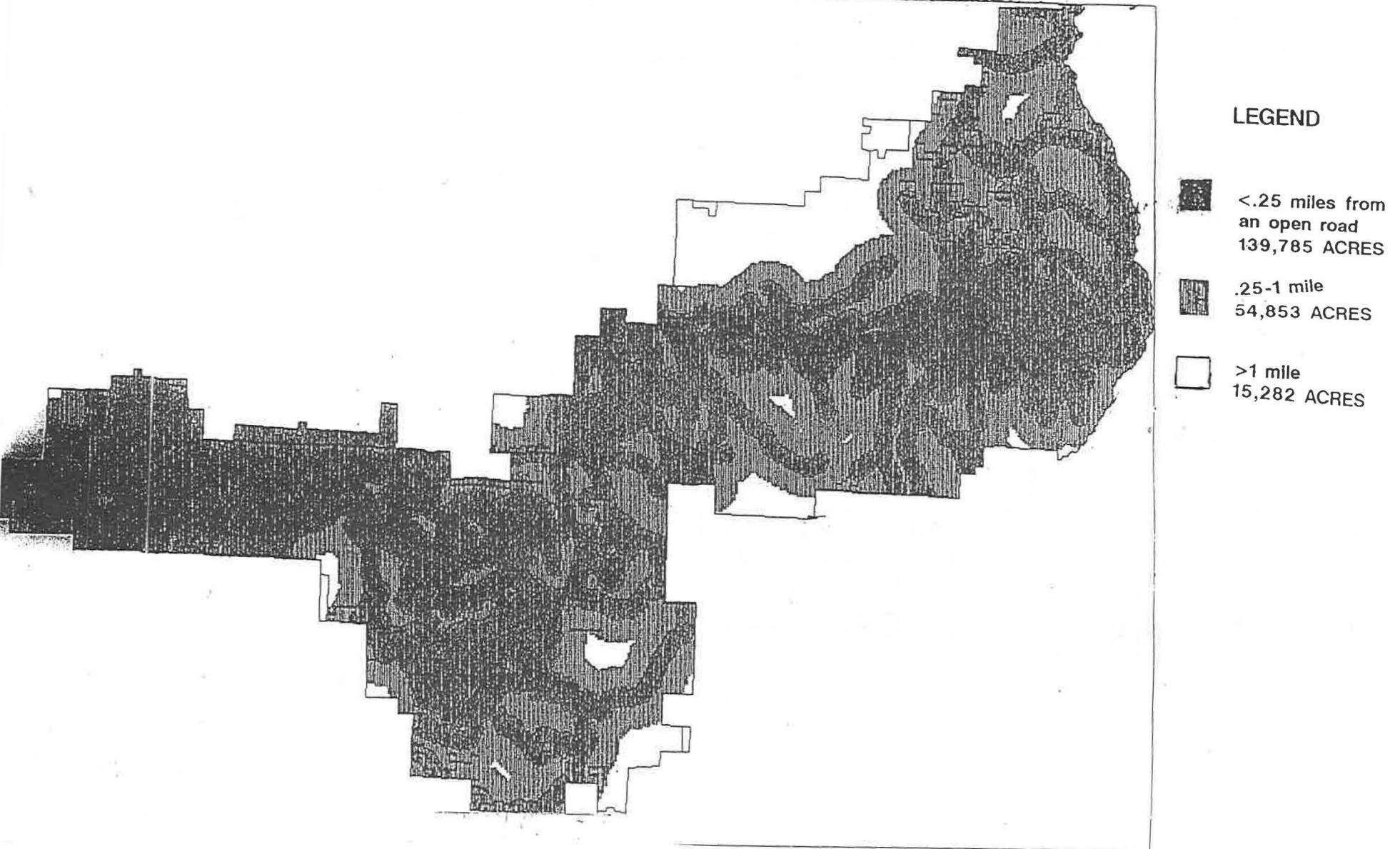
ALTERNATIVE B

DIRECT: Disturbance to non-motorized recreationists from open roads would be relatively high. Because there are restrictions for OHV use in Summer Range and seasonal restrictions for OHV and snowmobile use in Winter Range, additional disturbance from these sources would be reduced. Access to system trails and trails which haven't been developed by the Forest Service would remain the same. Conflicts and safety hazards may occur between snowmobile users and other recreationists on the Copple Butte, Skookum, and Alder Creek Trails. The large number of open roads and areas proposed by this alternative would limit non-motorized opportunities even further, primarily in the Summer Range.

INDIRECT: Non-motorized activities would be channelled to only a few trails. If non-motorized use on trails greatly increases over current levels, soil erosion, a reduction in vegetation, or damage to the trail itself could occur. The large reduction in non-motorized opportunities could cause non-motorized recreationists to be displaced to other areas which provide a higher quality experience. There are only a few areas of the District which offer a quality non-motorized experience.

CUMULATIVE: Over time, the high level of disturbance may diminish non-motorized recreation on the District. If non-motorized recreationists continue to use this District, they would have to endure the disturbances caused by motorized activities.

ALT B DISTURBANCE ZONES (excluding seasonal roads)



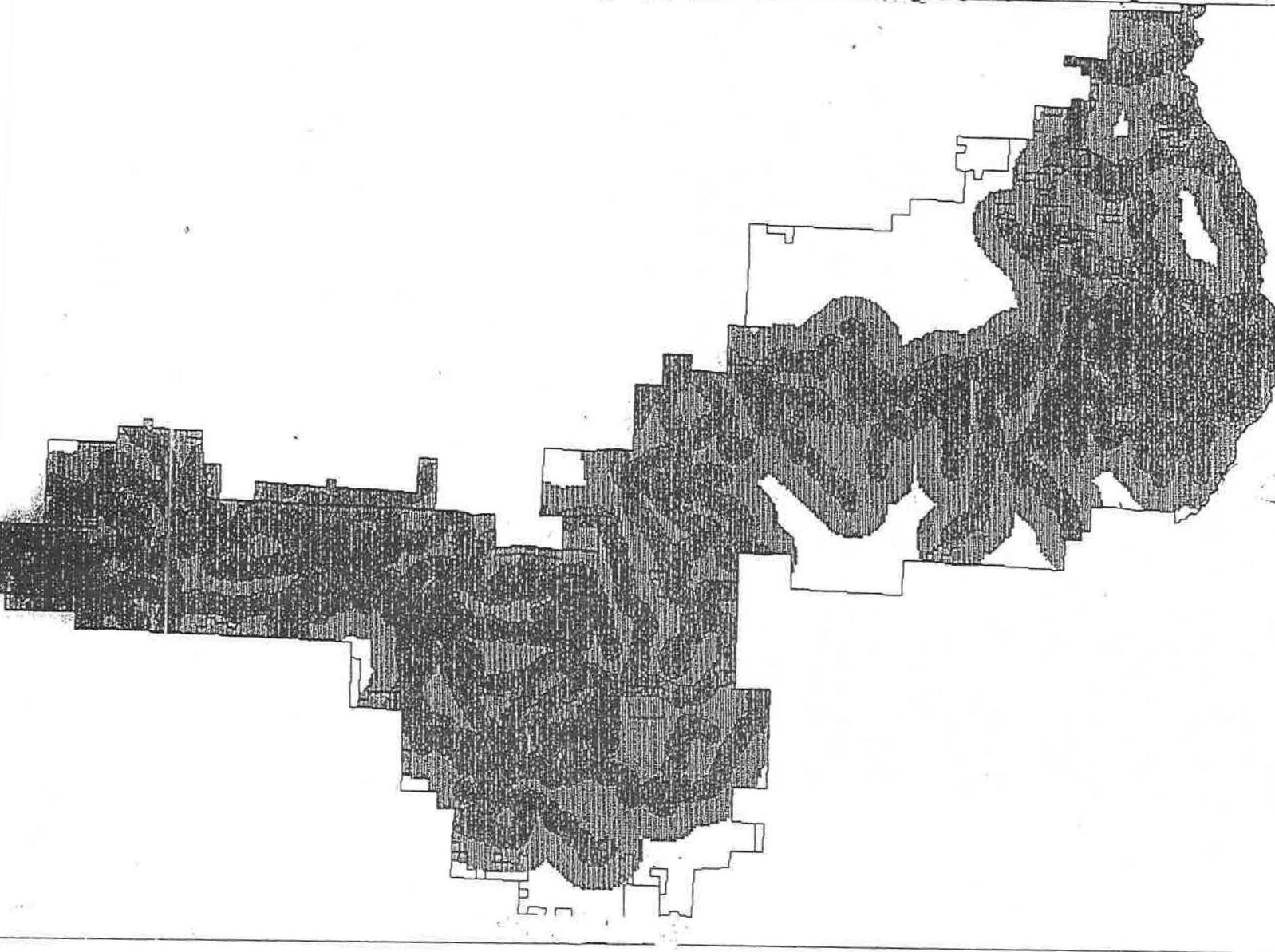
ALTERNATIVE C

DIRECT: Disturbance to non-motorized recreationists from open roads would be relatively moderate when compared to alternatives A and B. Because there are restrictions for OHV use in Summer Range and General Forest and seasonal restrictions for OHV and snowmobile use in Winter Range, additional disturbance from these sources would be reduced. Access to system trailheads would remain the same, but trails which haven't been developed by the Forest Service may become inaccessible. Conflicts and safety hazards may occur between snowmobile users and other recreationists on the Copple Butte, Skookum, and Alder Creek Trails. There would be more opportunities for non-motorized recreation than in Alternatives A or B because there would be fewer open roads.

INDIRECT: Though the reduction in road miles from Alternative A doesn't necessarily create more non-motorized area, it does provide more of a buffer from motorized disturbance. In certain areas this could enhance the non-motorized recreation experience. However, disturbance would still be moderate overall due to the number of roads remaining open. Closure of certain roads may anger some visitors if their favorite area or non-system trail is no longer directly accessible.

CUMULATIVE: Displacement of non-motorized recreationists would be less likely to occur. Though there is greater potential to enhance the non-motorized opportunities than in Alternative A it is still limited because of the amount of open roads.

ALT C DISTURBANCE ZONES (excluding seasonal roads)



LEGEND

-  <.25 miles from an open road
118,185 ACRES
-  .25-1 mile
66,485 ACRES
-  >1 mile
25,250 ACRES

ALTERNATIVE D

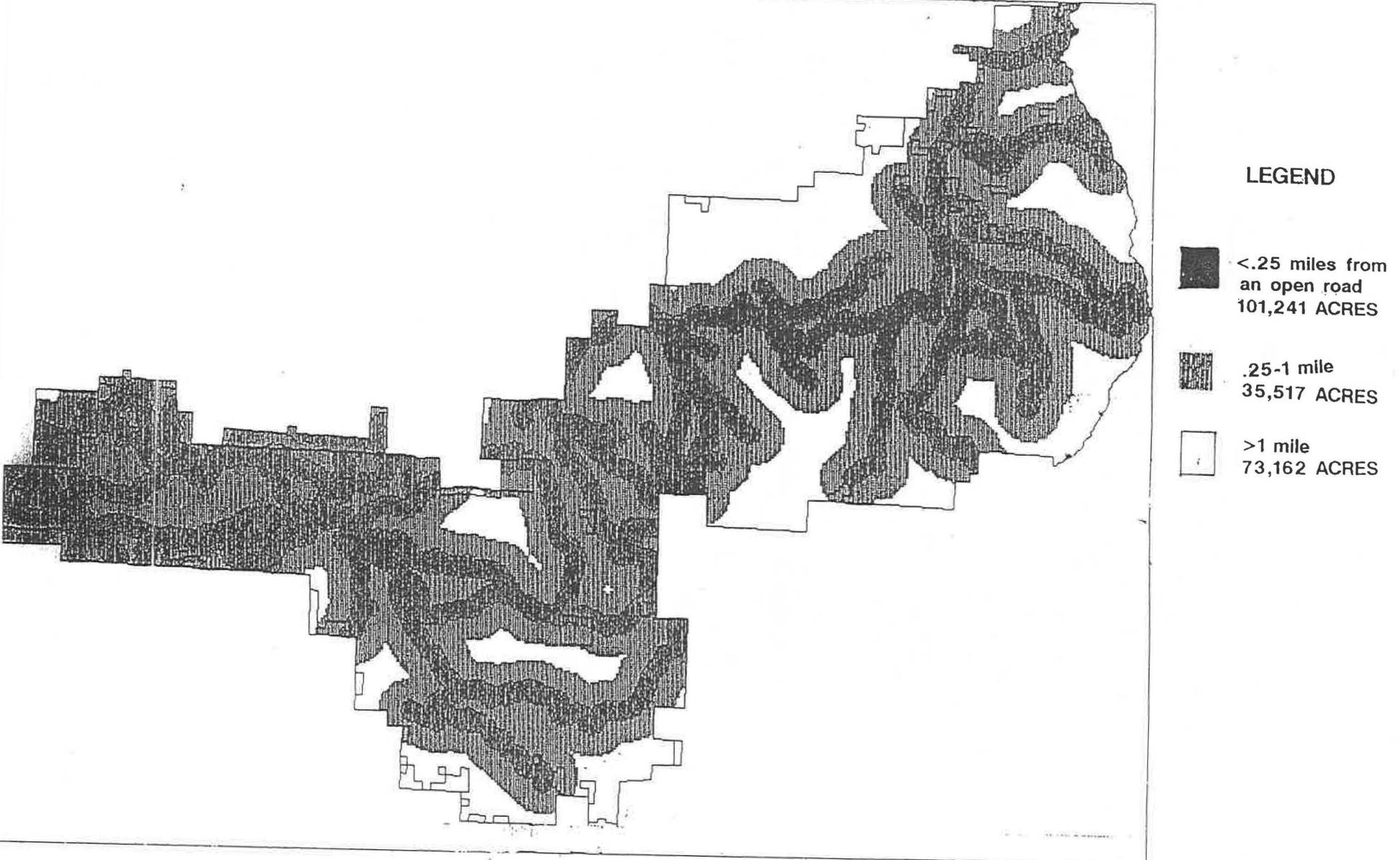
DIRECT: In comparison to other alternatives, disturbance to non-motorized recreationists from open roads would be relatively low. Because OHV use would be restricted to designated routes across the District and snowmobile use would not be allowed in Winter Range, additional disturbance from these sources would be close to non-existent. Access to system trailheads would remain the same, but many trails which haven't been developed by the Forest Service would become inaccessible. Conflicts and safety hazards between user groups would not occur on current Forest Service system trails since these would be closed to OHV and snowmobile use. There would be many opportunities for non-motorized recreation.

INDIRECT: With the abundance of road closures proposed, this alternative would provide a high quality non-motorized recreation experience and opportunities to convert closed roads to non-motorized trails. This would save constructing new trails on undisturbed areas. In addition, non-motorized recreation use could be distributed over a larger area, lessening the chance for resource damage. In contrast with the other alternatives, this alternative would provide relatively more solitude for the non-motorized recreationist. Closure of roads may anger visitors if their favorite area or non-system trail is no longer directly accessible.

CUMULATIVE: This alternative would significantly enhance the non-motorized recreation experience and opportunities across the District. This may cause an increase in the number of non-motorized recreationists using the District.

ALT D DISTURBANCE ZONES

(excluding seasonal roads)



Due to a formatting error, page 57 is a blank insert. No text has been lost.

ISSUE 4: EFFECTIVE BIG GAME HABITAT

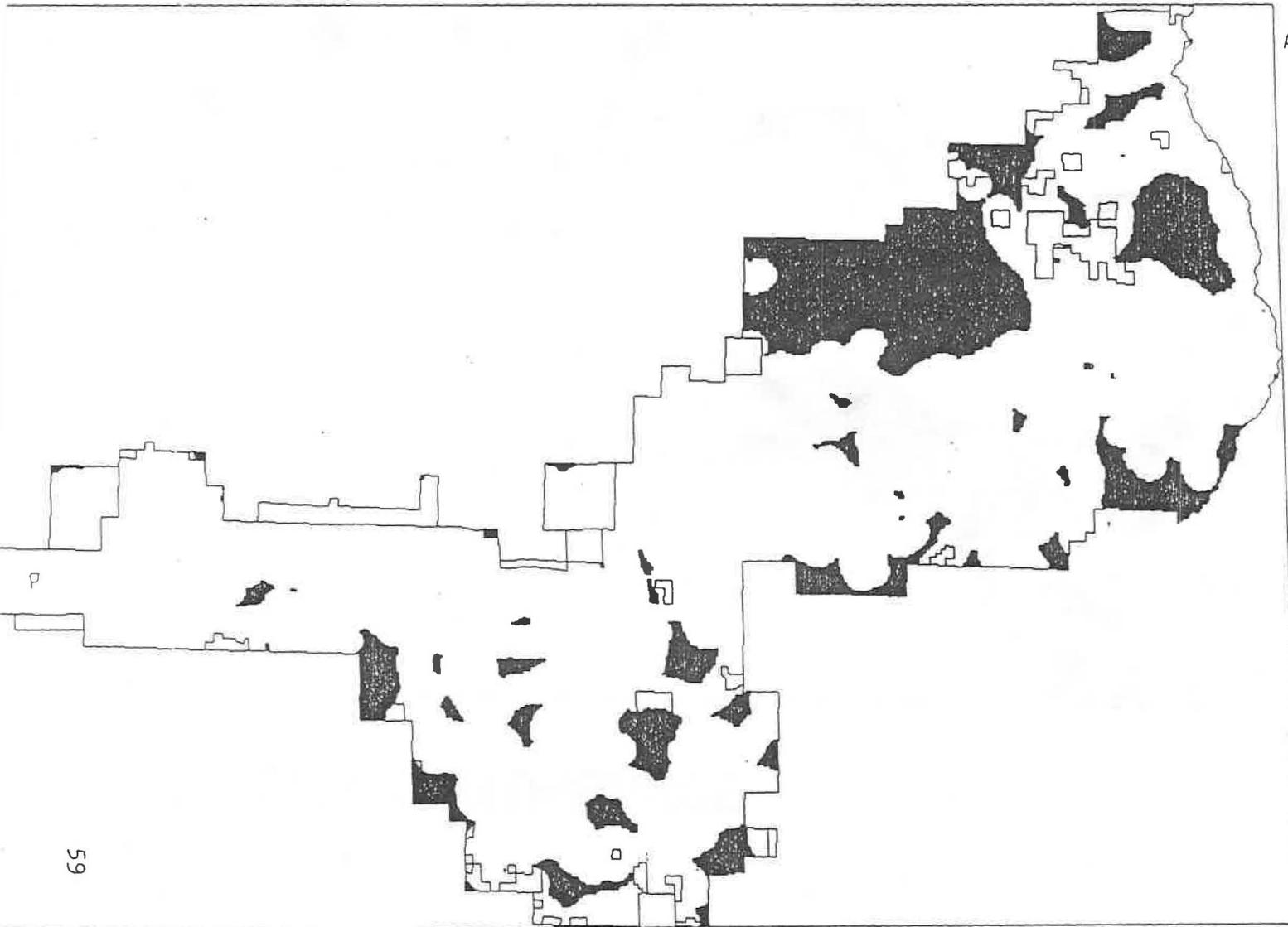
Maps were created for each alternative to help analyze potential District-wide disturbance patterns for big game. These patterns were calculated using open and seasonally open roads to indicate areas of potential disturbance during the periods of highest road use throughout the year. Areas up to one half mile from such roads could result in relatively high levels of road-related disturbance, while areas greater than one half of a mile should provide relatively low levels of road-related disturbance. More maps were developed, using only open roads, to indicate the areas big game would be most vulnerable during hunting seasons. Again, vulnerability would be lowest in areas greater than one half mile from an open road. These maps do not indicate potential disturbance or vulnerability caused by administrative use of closed roads. Disturbance and vulnerability due to OHV and snowmobile use were also not included in this map, although the effects of such use are discussed in the text. These maps indicate the trend of big game road-related disturbance and vulnerability for each alternative. The maps for each alternative are displayed along with the discussion of effects.

ALTERNATIVE A

DIRECT: This alternative has one of the higher potentials to affect big game due to the amount of open roads. Disturbance to big game would fluctuate as road densities decrease in some areas, remain the same in others, or even increase if a project occurs in an area not already accessible by road. Overland use of OHVs and snowmobiles would compound disturbance. Relief from disturbance during calving/fawning would be minimal, since road closures during this season are confined to a small area in the north and OHV use is unrestricted.

The Texas and Wickiup Cooperative Travel Management areas would continue to reduce some vulnerability, but animals migrating to their winter range would be vulnerable to hunters. The high amount of disturbance and vulnerability would reduce the quality of habitat. A small amount of quality habitat would be available, since few

ALT A VULNERABILITY

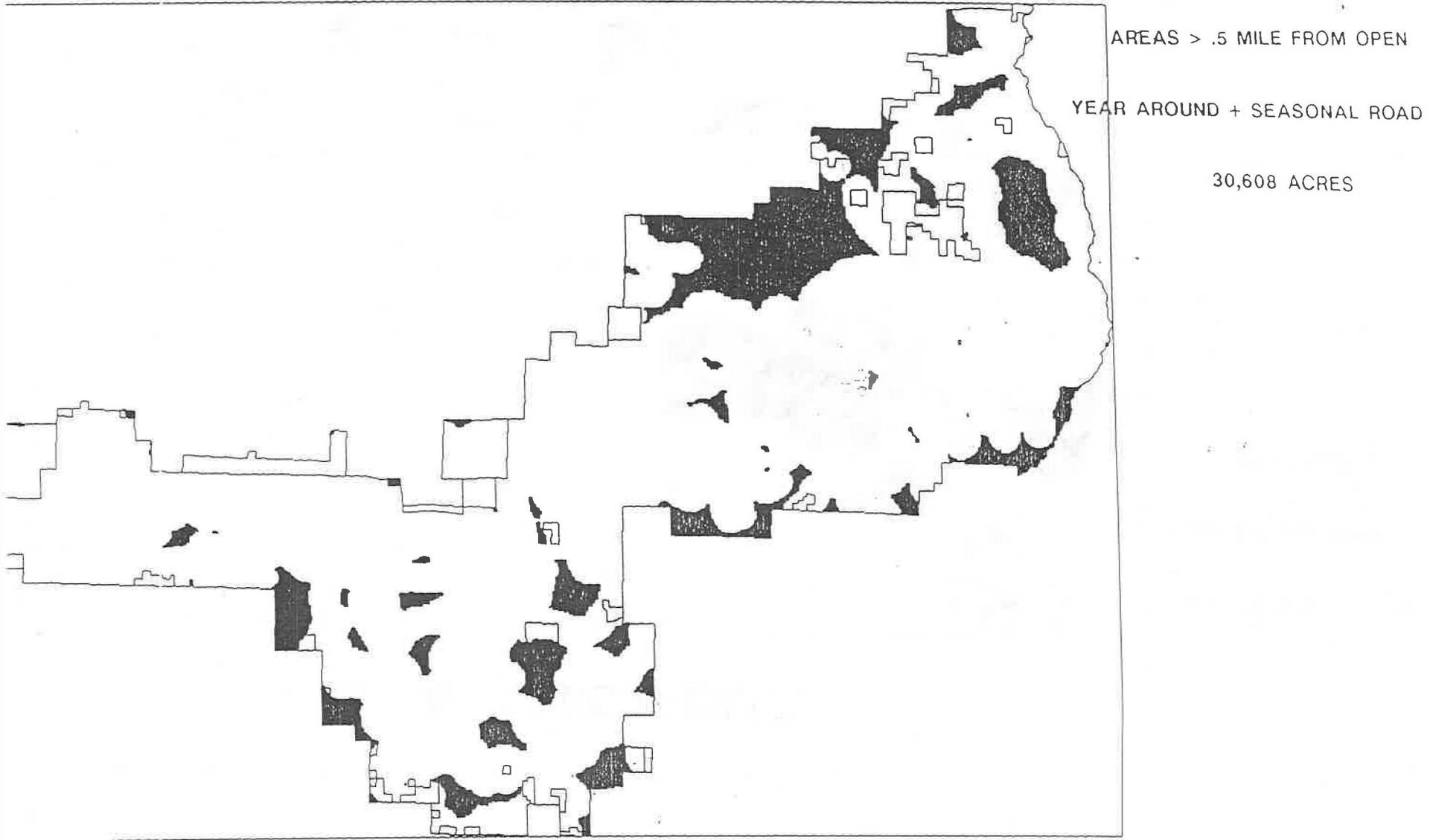


AREAS > .5 MILE FROM OPEN

YEAR AROUND ROAD

40,504 ACRES

ALT A DISTURBANCE



AREAS > .5 MILE FROM OPEN
YEAR AROUND + SEASONAL ROAD
30,608 ACRES

areas are greater than a half a mile from open or seasonally open roads.

INDIRECT: Displacement of big game animals would continue to occur due to disturbance; competition with other herds and damage to private property could result. Stress caused by disturbance could provoke a decline in birth rates and infant survival. In the winter months the additional stress may cause a rise in death rates. Success during hunting seasons may reduce the bull to cow ratio, decreasing the ability to successfully breed.

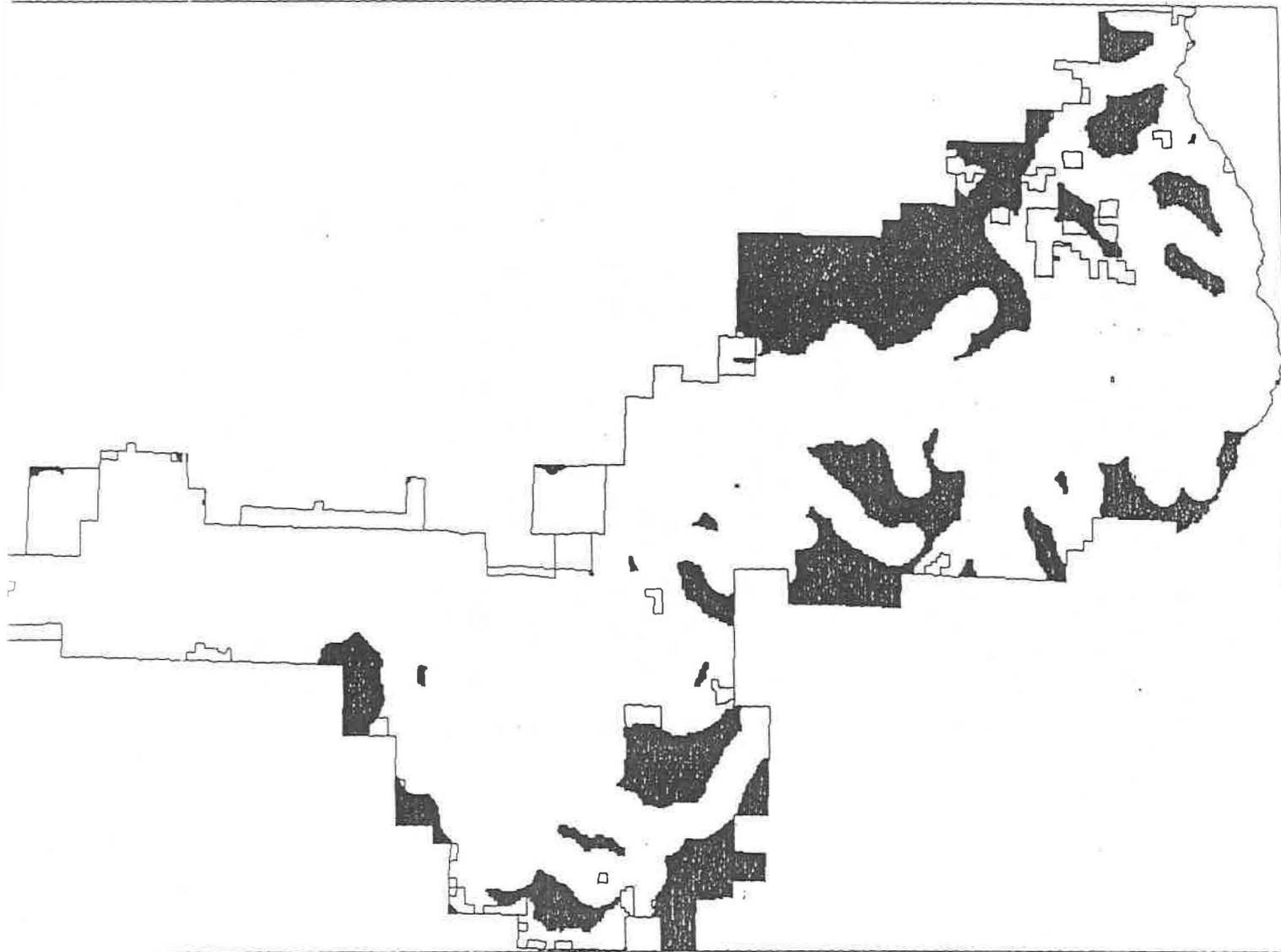
CUMULATIVE: Moderately high open road densities, combined with declining cover due to poor forest health, would reduce the quality of big game habitat across the District. Because of this and a high level of vulnerability, population dynamics would not achieve state management objectives. In the long-term, the type of hunting experience would remain a motorized experience as it currently is; this has the potential to reduce hunter satisfaction due to declining hunter success. Entire herds may stay yearlong on the more isolated, hunter-regulated, private lands; this may financially impact many landowners.

ALTERNATIVE B

DIRECT: Disturbance to big game would be high because the miles of open road would increase. Big game would experience some relief from disturbance during calving/fawning, since overland use of OHVs would not be allowed in Summer Range. OHV and snowmobile use would also be restricted in Winter Range to designated routes during the winter, which would decrease stress on big game during that critical period. In Winter and Summer Range, road closures during the hunting seasons would reduce some vulnerability. The high amount of disturbance and vulnerability would reduce the quality of habitat. Quality habitat is minimal because areas greater than a half a mile from open or seasonally open roads are few, small in size, and seriously fragmented.

INDIRECT: Displacement of big game animals would continue to occur due to disturbance; damage to private property could result. Disturbance could provoke a decline in birth rates and infant survival. In the winter months, the additional stress may cause a rise in death rates. Success during hunting seasons may reduce the bull to cow ratio, decreasing the ability to successfully breed.

ALT B VULNERABILITY

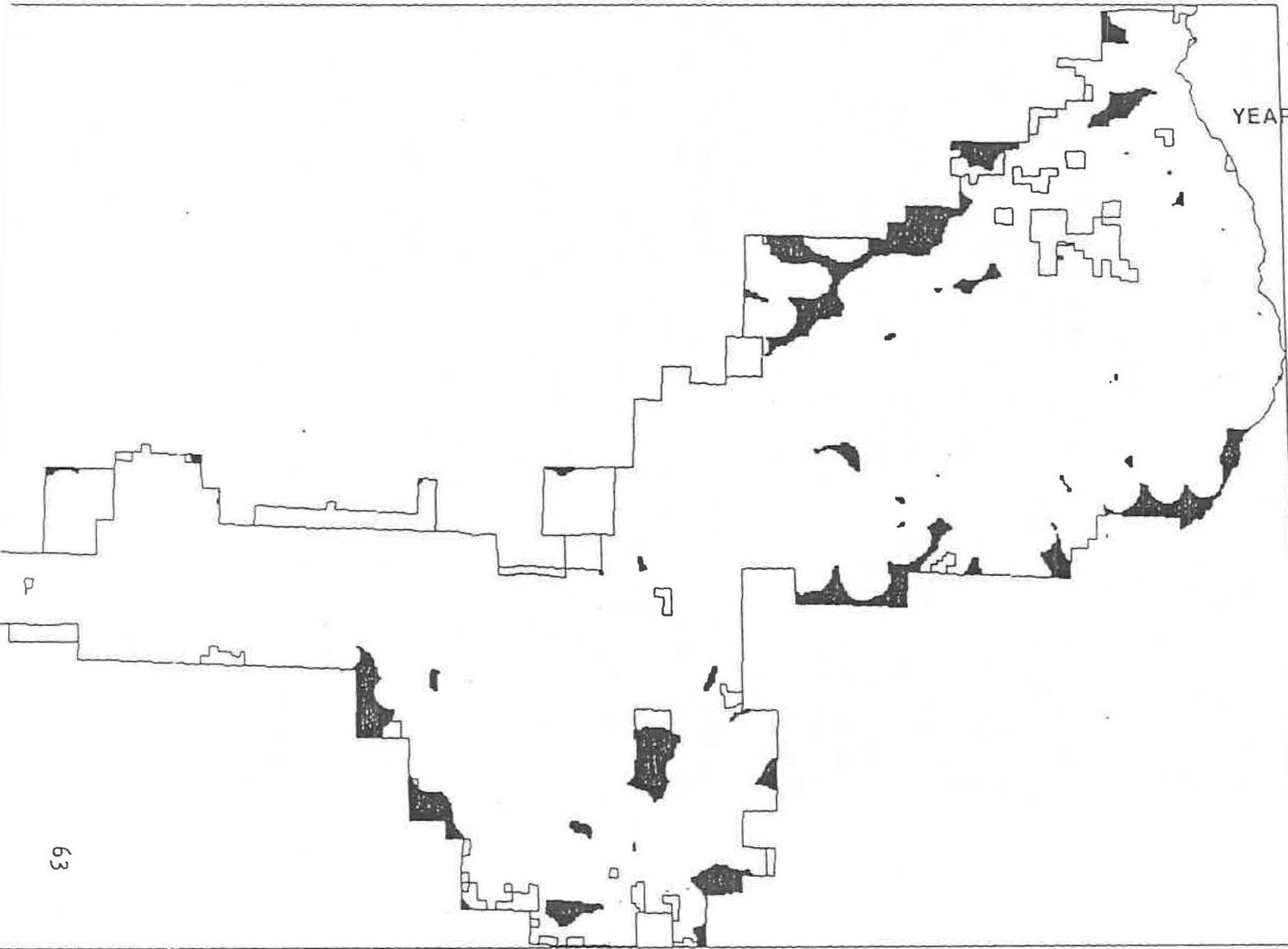


AREAS > .5 MILE FROM OPEN

YEAR AROUND ROAD

47,356 ACRES

ALT B DISTURBANCE



AREAS > .5 MILE FROM OPEN

YEAR AROUND + SEASONAL ROAD

14,018 ACRES

CUMULATIVE: Very high open road densities, combined with declining cover due to poor forest health, would reduce the quality of big game habitat across the District. Because of this and a very high level of vulnerability, population dynamics would not achieve state management objectives. In the long-term, the type of hunting experience would change to more of a motorized experience than it currently is; this has the potential to reduce hunter satisfaction due to declining hunter success. Entire herds may stay yearlong on the more isolated, hunter-regulated, private lands; this may financially impact many landowners.

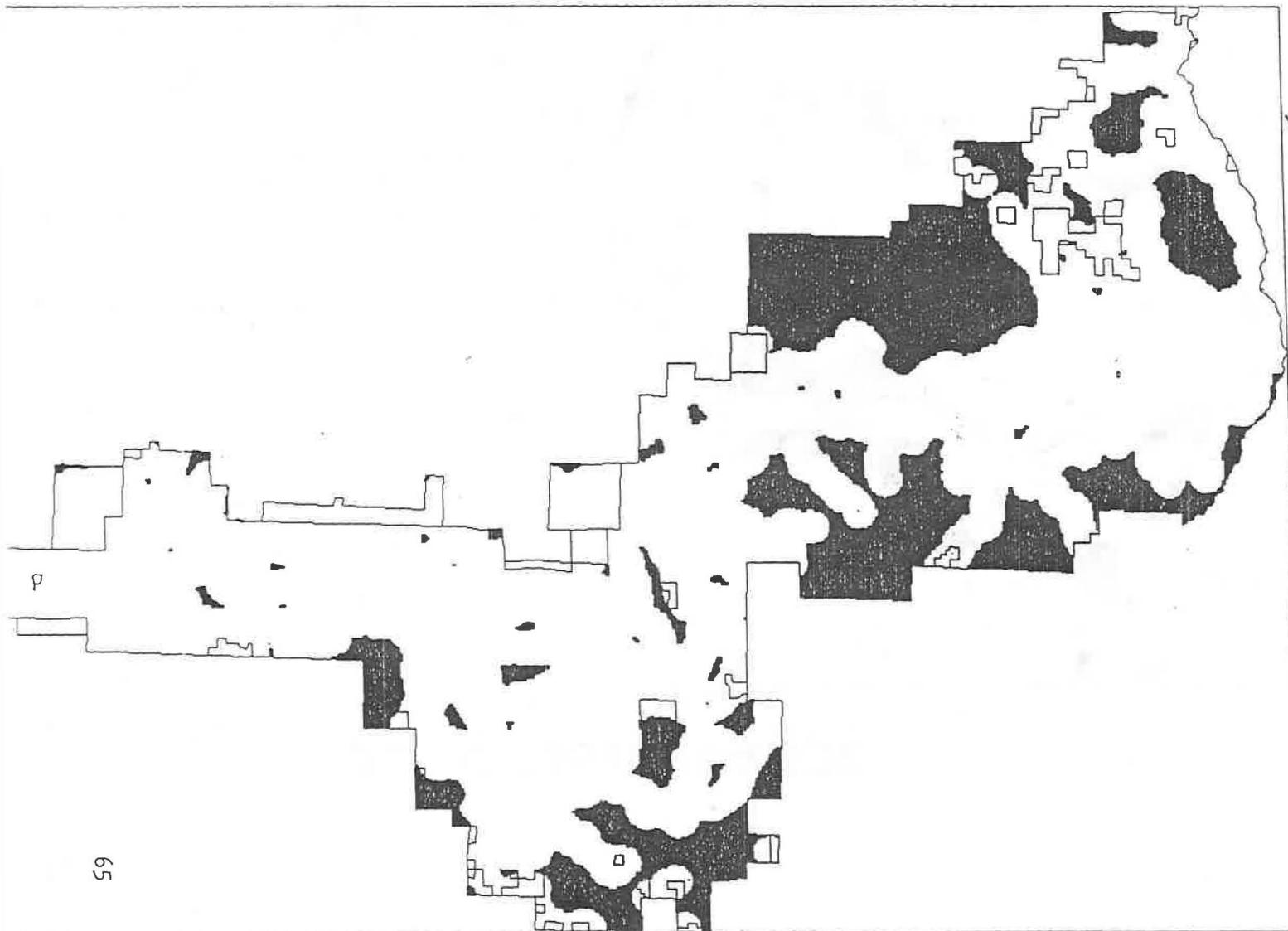
ALTERNATIVE C

DIRECT: Disturbance to big game would be reduced relative to alternatives A and B because open road densities would decrease in General Forest and Winter Range. Big game would experience some relief from disturbance during calving/fawning, since overland use of OHVs would not be allowed in Summer Range. During the winter, OHV's would be restricted to designated routes west of Ditch Creek in the Winter Range, and eliminated completely east of Ditch Creek in the Winter Range. Snowmobile use would also be restricted to designated routes in the Winter Range during the winter. These restrictions would cause a decrease in stress on big game during the winter critical period.

In Winter and Summer Range, road closures during the hunting seasons would partially reduce vulnerability. The quality of habitat would be increased due to a reduction in disturbance and vulnerability, and the addition of limited access areas where big game could escape harassment. Quality habitat would be at a relatively moderate level as areas greater than a half a mile from open or seasonally open roads would increase in size and number, although fragmentation would still be a problem.

INDIRECT: Displacement of big game animals would continue to occur due to disturbance; damage to private property could result. This could provoke a decline in birth rates and infant survival; in the winter months, the additional stress may cause a rise in death rates. Vulnerability is still relatively high and success during hunting seasons may reduce the bull to cow ratio, decreasing the ability to successfully breed.

ALT C VULNERABILITY

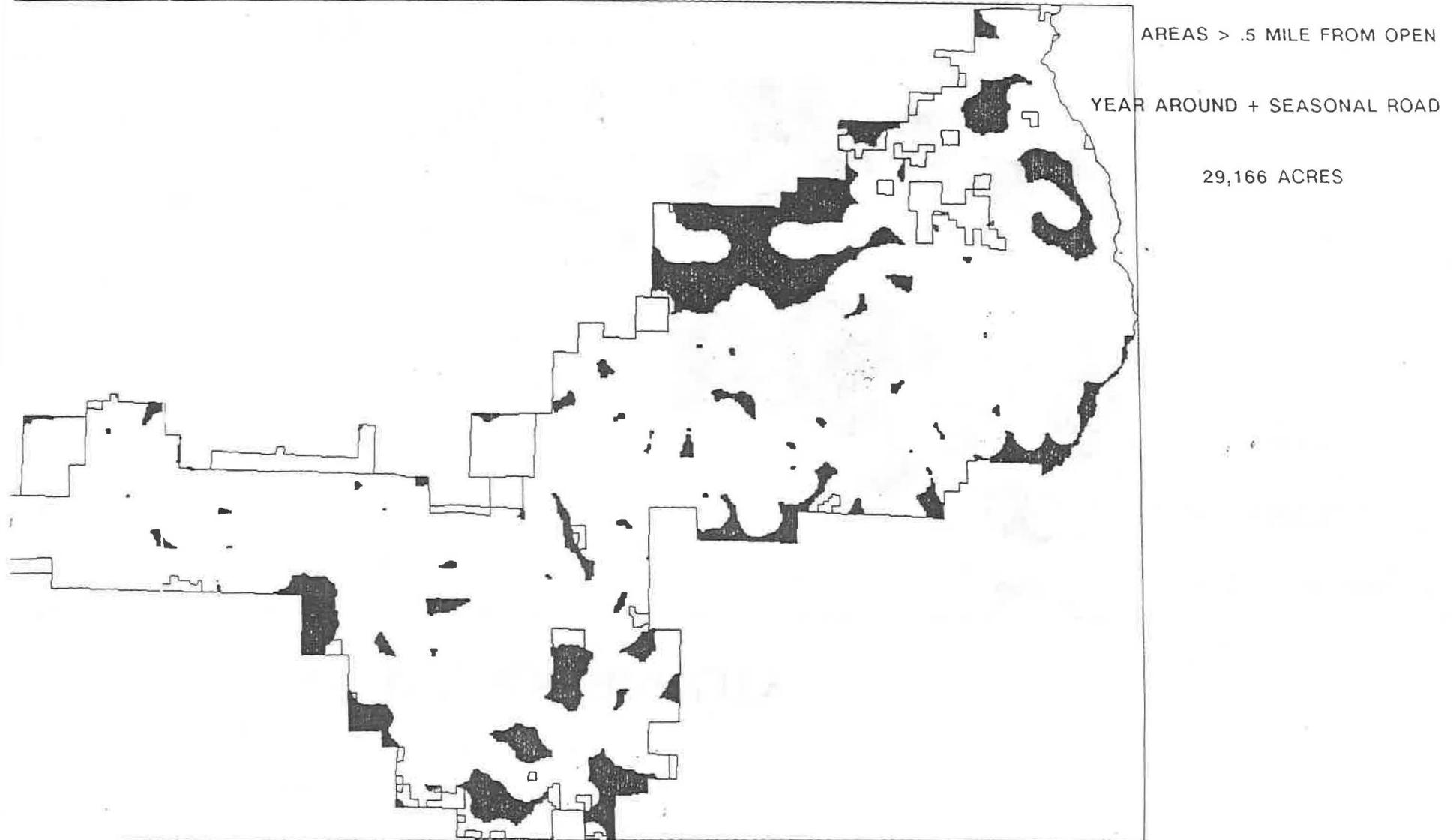


AREAS > .5 MILE FROM OPEN

YEAR AROUND ROAD

53,516 ACRES

ALT C DISTURBANCE



CUMULATIVE: Moderately high open road densities, combined with declining cover due to poor forest health, would reduce the quality of big game habitat across the District. Because of this and a high level of vulnerability, population dynamics would not achieve state management objectives. In the long-term, despite lower road densities, the type of hunting experience would remain primarily a motorized experience; although somewhat less than it currently is. The potential of reduced hunter satisfaction still remains due to declining hunter success. Entire herds may stay yearlong on the more isolated, hunter-regulated, private lands; this may financially impact many landowners.

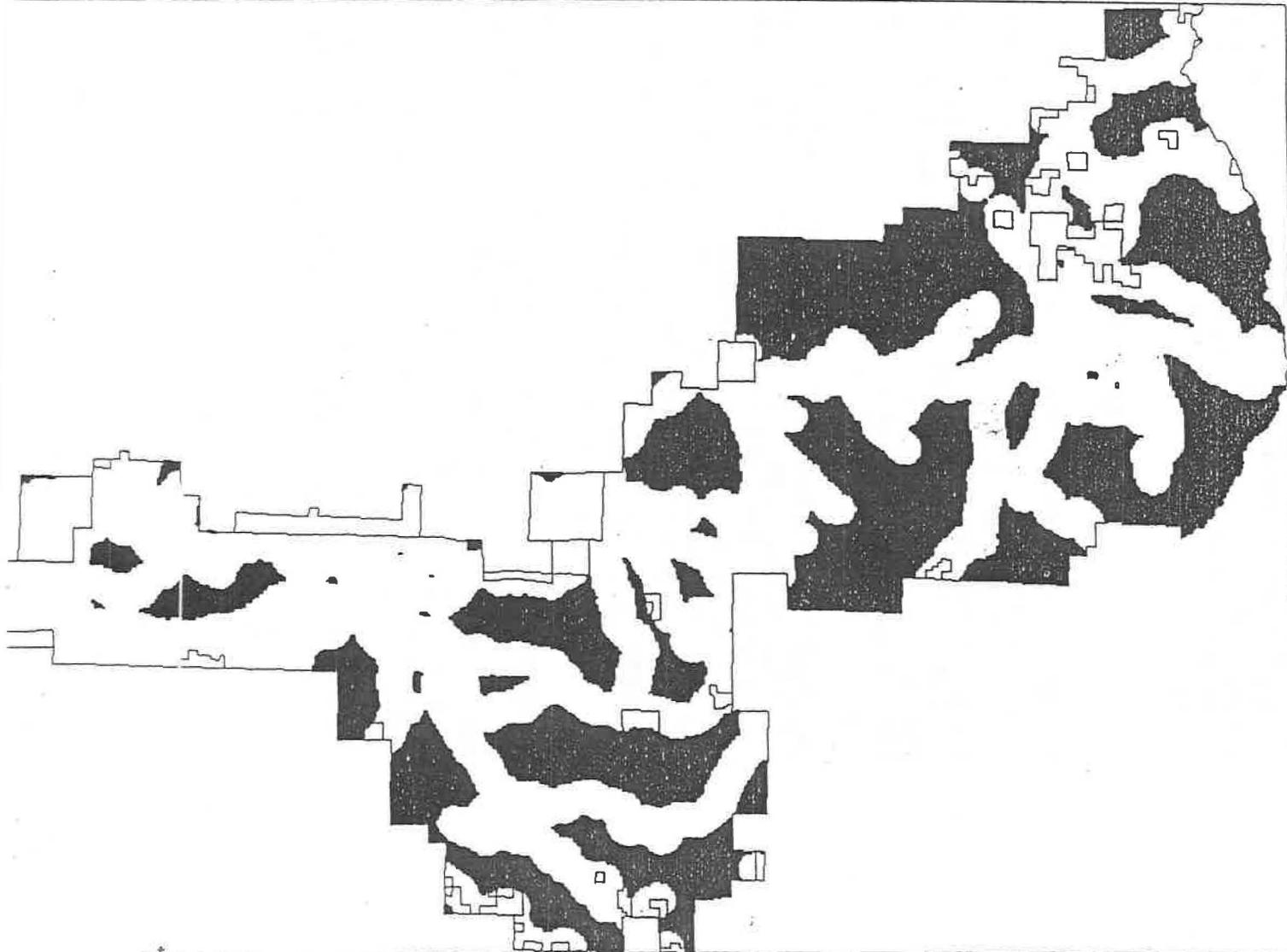
ALTERNATIVE D

DIRECT: Big Game disturbance and vulnerability would be significantly reduced because of the large decrease in road densities across the District. Big game Summer and Winter ranges would be void of all OHV and snowmobile travel during critical periods. The quality of habitat would be maximized. The quality of habitat would be high, because areas greater than a half a mile from open or seasonally open roads would increase in size, and number and be more connected.

INDIRECT: Displacement of big game animals would be reduced to the point that damage to private property could be alleviated. The bull to cow ratio would be improved and birth rate and infant survival would be greatly increased. With reduced vulnerability during hunting seasons, hunter success would be reduced, increasing the amount of mature bulls to successfully breed the cows. This would also increase the quality of trophy bulls to be harvested by hunters and improve the overall quality of hunting.

CUMULATIVE: This alternative would have numerous long-term beneficial effects on big game populations, hunter satisfaction, and animal damage control of big game upon private lands. Even with the decline in cover due to poor forest health, the quality of big game habitat would remain good across the District. Population dynamics should achieve state management objectives. In the long-term, this would increase the quality of non-motorized hunting and hunter satisfaction. Big game would be encouraged to stay yearlong on the District, reducing the financial impacts to landowners.

ALT D VULNERABILITY

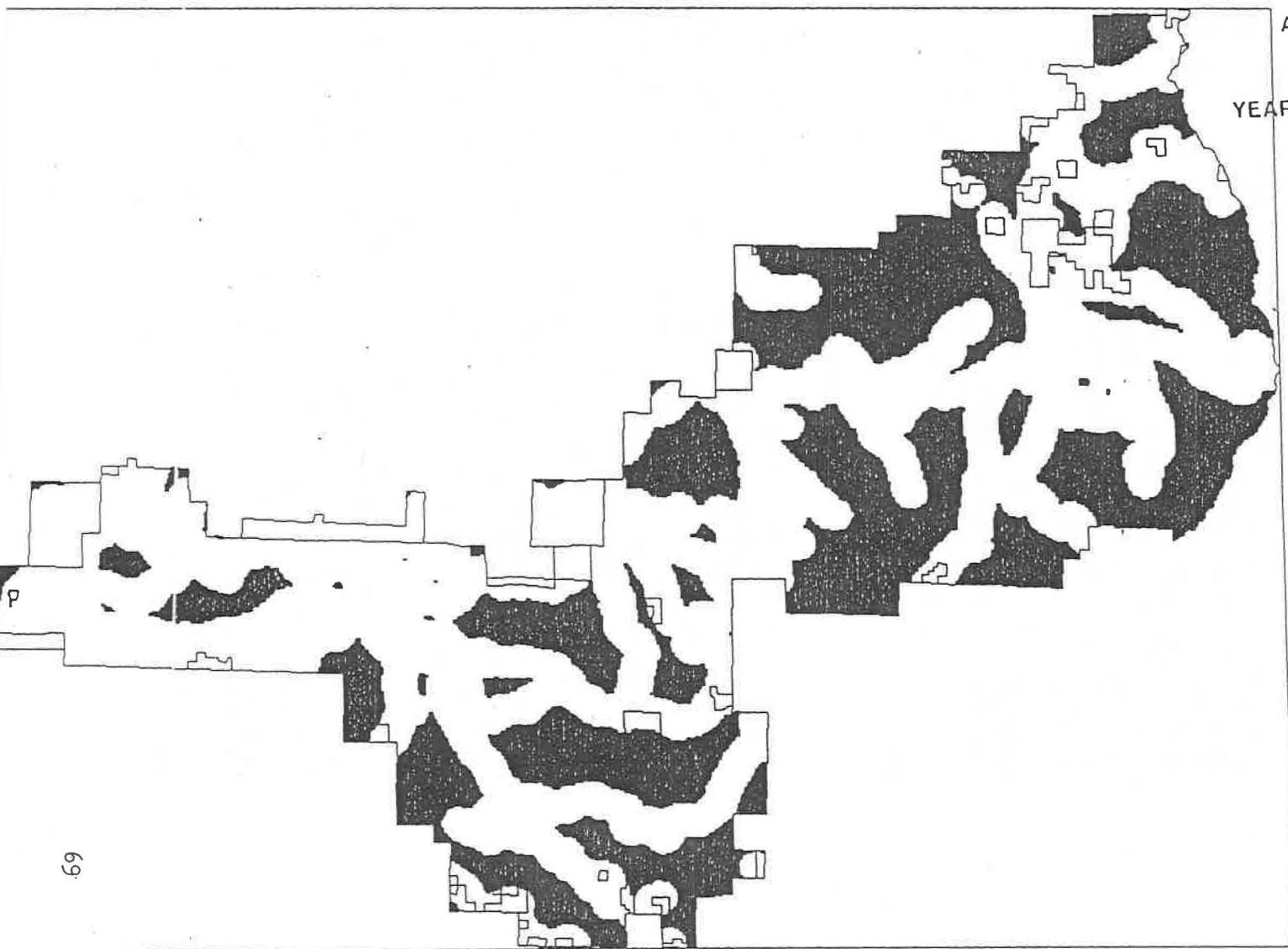


AREAS > .5 MILE FROM OPEN

YEAR AROUND ROAD

89,750 ACRES

ALT D DISTURBANCE



AREAS > .5 MILE FROM OPEN

YEAR AROUND + SEASONAL ROAD

87,132 ACRES

ISSUE 5: ADMINISTRATIVE USE

ALTERNATIVE A

DIRECT: The timing of administrative use would be limited during seasonal closures for calving/fawning in the northern part of the District and for hunting in the Texas and Wickiup areas.

INDIRECT: Change in costs of the District program of work, contracts, and permitted use should be minimal, since the current way of managing the permit system totally prohibits entry only during the hunting season in the Texas and Wickiup areas. Access for fire detection and suppression activities would not be restricted. Disturbance to big game may occur since trips on closed and seasonally closed roads may exceed the non-disturbance level (of less than 4 trips per month).

CUMULATIVE: There would be few long-term effects to the administrative use program. However, the effects of entries for administrative purposes, combined with declining cover due to poor forest health, may reduce the quality of big game habitat.

ALTERNATIVE B

DIRECT: Entry to projects would take less time since access would be available over most of the District. Some activities would not be permitted in Summer Range from May 1 through June 30 to reduce stress to big game during calving and fawning. Also, some activities would not be permitted in Winter Range from December 15 through April 14 to reduce disturbance to big game which are already stressed by the weather and a limited food supply. However, since the activities which are best implemented during these times would be permitted, effects should be minimal. Opportunities for special uses, such as firewood collection, christmas tree cutting, etc. may increase because of additional access. Access for fire detection and suppression activities would not be restricted.

INDIRECT: Costs associated with District projects, contracts, and permitted uses would be reduced, because more areas would be accessible by motorized methods. Contractors and permittees would experience the same benefits. Because more of the District would be accessible to the public, some project costs may also increase due to a greater emphasis on visual management. There should be little additional disturbance to big game from administrative access, since so many roads will already be open to public use.

CUMULATIVE: The reduction in project costs, resulting from more access, may provide opportunities for expanding resource management programs.

ALTERNATIVE C

DIRECT: Access for some activities would not be permitted in Summer Range from May 1 through June 30 to reduce stress to big game during calving and fawning; access would be restricted again from August 15 through December 14 to decrease big game vulnerability and improve the quality of hunting. In some cases, the period of permitted access in Summer Range would be extended through October 14 to allow more time to complete projects. Access would also be limited in Winter Range from December 15 to April 14 to reduce disturbance to big game already stressed by the weather and a limited food supply. However, access for activities which are best implemented during these times would be permitted, so the effects to District programs, contracts, and permits should be minimal. Security areas would only allow access for projects which would directly or indirectly benefit big game habitat. Fire suppression would be unrestricted in all areas of the District.

INDIRECT: Project costs would greatly increase because project preparation in areas limited to nonmotorized access would require more time and personnel. For instance, if the work day consists of eight hours and it takes 30 minutes to walk a mile and the project site is 3 miles from the nearest open road, then access to and from the project would take three hours; only five hours would be spent on actual work. This access time would further increase if supplies or equipment are needed to complete the task. Deadlines and limited time for project preparation would require additional personnel. Contractors bidding on a project requiring nonmotorized access would increase the price of their bid. As a result of all of these factors, some programs may be reduced or completely eliminated--especially if heavy equipment or lots of supplies are needed. Permittees would also experience an increase in their business costs. Detection of fires could be affected during seasonal restrictions to administrative use, but suppression would be unrestricted District-wide. Even so, suppression would take longer because time would be spent opening closure devices to access the fire (this concern would be most evident with closures requiring the removal of earthen, log, or boulder barriers). Disturbances to big game would be closely regulated through the permit system.

CUMULATIVE: Some programs or portions of programs would be cancelled. Opportunities for special uses may be largely reduced - the greatest effect would be to firewood collection. Fires may affect more ground since detection and access may take longer. In the short-term, the reduction in administrative access would reduce disturbance to big game; in the long-term the quality of big game habitat may be improved as open road densities are reduced.

ALTERNATIVE D

DIRECT: Entry to projects would take more time since access would be limited to nonmotorized methods over most of the District. Equipment and supplies may not be available without motorized entry. Contractors and permittees would experience the same difficulties. Opportunities for special uses, such as firewood collection, christmas tree cutting, etc. may decline as access becomes very limited. Fire detection would rely mostly on air reconnaissance, but suppression activities would be allowed unrestricted entry. Disturbance to big game would be greatly reduced.

INDIRECT: The cost of projects would significantly increase; in some cases this may cause projects to be dropped. Contracts may not be bid upon due to logistical difficulties and excessive costs. Permittees will experience a rise in their cost of business and may be forced to go elsewhere. Because fires may not be detected as early, more ground may be affected by fire before suppression activities begin. The quality of big game habitat should improve.

CUMULATIVE: Entire District programs would cease to exist. The affected program of most concern would be tree improvement; without motorized access to genetically superior trees across the District, identification, development, and maintenance of these trees and collection of their cone crop would be impossible. This could affect forest health in the long-term, as seed from disease-resistant, fast-growing trees is no longer available. Stands of trees not planted from genetically superior seed will not produce cover for big game as quickly, may be more susceptible to insect and disease attack, and would take longer to produce trees large enough for harvest. Though wildlife habitat may be improved by a reduction of access in the short-term, it may actually decline because of slower growing, less healthy cover over the long-term. Special users may be forced to go somewhere else for their products or may have to do without. Local economies and communities may be affected as contractors and permittees are forced to work elsewhere.

OTHER ISSUES

(6) Watershed, Fisheries, Soils, and Riparian Areas

Road surface and related soil compaction can increase the quantity of water entering a stream. Ditches and other water diversion structures concentrate the flow of water into a single point of entry, instead of allowing it to naturally disperse over a wide area. This increases the force of runoff, which may cause increases in the amount of woody debris and sediment entering the stream. On roads to be obliterated, waterbars will be constructed. On other roads, waterbars and other drainage structures will be constructed and maintained. These measures will disperse runoff, preventing erosion caused by flow concentration.

Roads and road related activities also contribute to soil erosion and increased sedimentation (soil particles in the stream). When a road is constructed, vegetation and the organic layer of soil (both of which protect the soil surface) are removed, making the soil highly susceptible to erosion. When a road is closed, the vegetation eventually recovers. However, seedbed preparation and seeding accelerate this recovery, reducing the road's susceptibility to erosion earlier than with natural regeneration. If a road remains open to traffic, sediment can be generated from the surface, even on aggregate-surfaced roads. Vehicles driving on a road cause ruts that can range from a slight indentation to several inches deep. Water runs down these ruts, picking up sediment and speed. When this water finally leaves the road, it can enter a stream and carry the sediment downstream until the water slows down enough to allow the sediment to settle out. This is a particular problem when a road is located too close to a stream. All of this contributes to a loss of soil, a decline in water quality (sediment and nutrient loading), and deposition of sediment on spawning gravels causing a decline in the quality of fish habitat.

Roads which are poorly located or constructed may pose the greatest threat to these resources. Inadequate stream crossings can wash out, and can wash material used to construct the crossing into the stream. Roads in riparian areas, which were created from vehicles driving overland or on old skid trails, also cause damage to these resources because no erosion control devices have been built into these roads.

The recent Columbia River Basin Anadromous Fish Habitat Management Policy and Implementation Guide provides further motivation to obliterate existing local roads not required to meet current or future integrated resource objectives.

The interdisciplinary team considered identifying these concerns as a key issue. However, they felt that this issue was so important that all alternatives must provide protection for these resources, so detailed mitigation measures (see Chapter 2, pages 23-31) were adopted instead. Because open and seasonally open roads also cause negative effects to big game, the key issue of *Effective Big Game Habitat* should also give an indication of the effects to watershed, fisheries, soil, and riparian areas; the alternative which best satisfies big game needs should also satisfy these concerns. A decrease in miles of open road, especially during wet seasons, would directly decrease the amount of traffic-caused sediment moving down the drainages. Closing roads would allow road maintenance efforts to focus on a lesser number of open miles thus increasing the quality of road maintenance on those open roads; traffic on roads remaining open would cause less sediment. (Road maintenance activities are designed to help maintain drainage structures and roadway drainage patterns, thus minimizing soil movement and stream sedimentation from roads.)

Culverts that are unstable or at risk of failure would be stabilized; on roads to be obliterated, they would be removed permanently. On other closed roads, they would be removed and the stream channel stabilized until they could be replaced through a project. On open and seasonal roads, unstable culverts would be replaced as soon as possible.

If, through implementation and monitoring, previously unidentified roads are discovered in riparian areas, they may be closed and obliterated, unless they are identified as needed for resource management.

(7) Forest Health

Forest health is indirectly linked to Access and Travel Management in several ways. Most obvious is the current need to provide access to salvage dead and dying stands of timber followed by the need to rehabilitate areas affected by insects and disease. Access is also important for fire suppression, use of fire as a rehabilitation tool, tree planting and silvicultural

treatments, grazing livestock, and a variety of other resource management activities which can determine the health of the forest. Also of concern is the health of the forest ecosystem as a whole: vegetation, wildlife, watersheds, soil, and fish habitat can all be affected by proper and improper management of roads.

A detailed study of the wide-spread impacts of declining forest health on the Malheur, Umatilla and Wallowa-Whitman National Forests is documented in the Blue Mountains Forest Health Report (William R. Gast, et. al., 1991), which identifies seven strategies for addressing the forest health issue. Three are applicable to Access and Travel Management:

- Issue 3 Utilize fire and silvicultural means to restore and maintain forest health in the Blue Mountains within the framework of the desired future conditions described in the forest plans.
- Issue 4 Improve coordination of Forest Service land management activities between adjacent landowners and other government agencies to insure that forest health concerns are addressed.
- Issue 5 Promote integrated resource analysis to insure adequate consideration of forest health needs in terms of biological diversity, long-term productivity, watershed values, insect and disease management, and cumulative effects on a landscape scale.

The ability to implement these strategies was considered in alternative design, specifically with respect to administrative use. Roads which are designated for closure, but are determined necessary to achieve the salvage and rehabilitation objectives may be closed by means which reasonably allow administrative and permitted access. Salvage and rehabilitation projects would also be a means of achieving the final closure objective following completion of those activities.

(8) Access for Fire Suppression

Access for potential suppression activities was considered in alternative design. Roads which are designated for closure, but determined necessary for potential suppression needs, would be closed by means which allow reasonable access for fire suppression.

Roads closed with an earthen barricade could be reopened in an emergency using a dozer or similar equipment.

(9) Noxious Weeds

A District-wide survey of noxious weeds was completed in 1991. A list of weeds and a map of known populations found on the Heppner Ranger District is maintained at the District office. At this time, populations appear to be confined to areas near or along roads. Because soil-disturbing activities can increase the spread of undesirable or exotic plants, mitigation measures were developed to minimize or avoid such an effect. These mitigation measures are listed on pages 23-31 of Chapter 2.

Hand pulling of noxious weeds was conducted in the summer of 1991 and eliminated plants in 98 percent of the known populations on the District. However, since seeds already in the soil can remain alive for years, treatment would need to continue. The Umatilla National Forest Noxious Weed Management Plan contains additional information on noxious weeds and can be obtained at the District office in Heppner or the Supervisor's office in Pendleton.

(10) Access for Disabled & Senior Citizens

This concern was considered throughout the planning process of Access and Travel Management. A group of local citizens participated in over 20 public meetings; each of these citizens represented a special interest, one of which was for disabled & senior citizens. The key issue of *Road-oriented Recreation* includes this issue and by measuring the amount of road-oriented activities available, it also shows access opportunities for disabled or senior citizens. Roads of varying road standards that access a variety of landscape types District-wide have been designated as open, either yearlong or seasonally. Vehicles are allowed to drive up to 300 feet off of these open roads for access to dispersed recreation areas. Many closed roads will be available for OHV use, and this plan does not restrict non-motorized access.

(11) Yearlong Access on Bull Prairie Road

This double lane paved road provides access from State Highway 207 into Bull Prairie Lake Recreation Area. Before the road was asphalt surfaced, yearlong access had

been allowed as with any other open road. After the asphalt surface was constructed, the road remained open yearlong for a while, but vehicles using tire chains began damaging the new surfacing. Because this became costly to repair, the District closed the road during the winter months.

During an Access and Travel Management public working group meeting in the winter of 1991, this concern was discussed. People who were traveling State Highway 207 could no longer visit the site without driving a great distance out of their way while the road was closed. Considering both this and the mild winters of recent years, the District decided to open the road yearlong and close it only as conditions become undesirable.

(12) Access to Private Land

This issue was considered during the planning of Access and Travel Management. This interest was specifically represented by one member of the Public Working Group. Forest Service roads that access private lands were carefully considered and, in most alternatives, every effort was made to allow for access to those lands. Roads not under Forest Service jurisdiction, such as state and county roads, were considered open unless closed by those governments. Alternatives were designed to maintain the current management (open, seasonal, or closed) of cost share roads.

(13) Access for Snowmobiles/OHVs From Blake Ranch

Every alternative provides snowmobile and OHV users some form of access to the District from Blake Ranch. In alternatives B, C, and D, access for OHV users is limited to designated routes through Summer Range. Linking OHV and snowmobile routes between the Heppner Ranger District and North Fork John Day Ranger District was considered, but no opportunities were identified at the time of this document.

(14) Access for Personal Uses

Firewood gathering, berry picking, Christmas tree cutting, mushroom gathering, and other personal uses are connected to the key issue of *Road-oriented Activities*. Measurements for this key issue will also indicate the opportunities for various types of personal uses. In cases of heavy demand, these amenities are further

controlled and monitored through special use permits and are also covered by the key issue of *Administrative Use*.

(15) Minimal Access Available to Areas Not Managed for Timber

Many of the roads that the Forest Service manages on the Heppner Ranger District were constructed for the purposes of timber management, and more roads do exist in land managed for timber. However, many roads were not constructed, but were created by forest users driving overland year after year. This situation is common on scab flats. The Access and Travel Management planning process did not focus on closing roads of either nature. A wide variety of road standards accessing all types of landscapes District-wide have been designated as open, either yearlong or seasonally. These may vary from two lane paved roads to wheel tracks that wind out through rocks and sagebrush on the scab flats.

(16) OHV/Passenger Vehicle Safety Conflict

Safety is a concern when these types of traffic are mixed. Every alternative was designed to insure that in no case were OHV's and passenger vehicles designated on the same road at the same time. According to state law, it is illegal to drive an OHV on an open road unless it is licensed and meets other highway safety requirements. This plan is not intended to supercede any existing federal, state, or local laws.

(17) Road Jurisdiction/Maintenance

Roads on Forest Service Land, but under state or county jurisdiction, were considered open unless closed by those governments. Management of these roads is the responsibility of those governments and will not be affected by this document. Use of Forest Service roads by those agencies while managing roads under their jurisdiction on Forest Service land will be subject to the provisions of this document.

For the most part, cost share roads were designated as open yearlong. Only those cost share roads that are currently closed or seasonal were considered closed or seasonal in alternative design. Current management of these roads will continue until a revision of the cost share agreement has been signed.

(18) Management of Roads Not Shown on Maps

It is recognized that at this time, the most up-to-date map of the Heppner Ranger District does not show all roads that actually exist on the ground. Some of these roads are over-grown and are no longer driven; however, many are still in use. Generally, these roads were either created by vehicles driving overland, or constructed as temporary roads for a timber sale, but were never closed. Unless a road is identified as open (or seasonal) under this document, it will be considered closed. As these roads are discovered, a determination will be made as to whether it should be designated as an open or seasonal road. Amendments to road designations will be made periodically and recorded on a Road Management Objective form (see Appendix B).

(19) Access Management May Affect the Well-Being of Local Communities

Closing roads and denying land managers, contractors, and permittees access to commodities on Heppner Ranger District may cause an increase in the cost of forest resources, including but not limited to timber and associated by-products and livestock grazing. The degree to which these costs would increase would be directly related to the type of access (motorized or nonmotorized) that available to these users. It is possible that a large amount of access restrictions could cause activities such as timber harvest or livestock grazing to become too costly; local mills, ranchers, and associated businesses could close. However, such access is considered administrative use and is treated differently than access for the general public under this plan. Effects of contractor and permittee access and the well-being of local communities is addressed in the key issue of *Administrative Use*.

(20) Access to Minerals and Oil Claims

This concern refers to closing or obliterating existing roads to mineral or oil claims. However, mineral operators are entitled to Forest access in connection with mineral operations (36 CFR 228.12) access to a claim by road, trail, bridge, etc. will not be constructed or improved, nor shall any other means of access, including but not limited to OHV's, be used until the operator has received written approval from an authorized Forest Service Officer. Prior to obtaining written approval from an authorized Forest Service Officer, operators of

mineral or oil claims will be required to abide by the provisions of this document. Non-motorized access to mineral or oil claims is not affected.

Certain considerations must be addressed in every environmental analysis and resulting projects. These are:

CONSUMERS, CIVIL RIGHTS, MINORITY GROUPS, AND WOMEN

Although National Forest roads provide access to consumer goods and job opportunities, no quantitative output, lack of output, or timing of output associated with Access and Travel Management would affect the civil rights, privileges, or status quo of consumers, minority groups, and women.

PRIME FARMLAND, RANGELAND, AND FORESTLAND

Management of access and travel on the Heppner Ranger District will not affect the current land class.

WETLANDS AND FLOODPLAINS

Moist wetland-type patches occur within the Heppner Ranger District. These areas will be avoided and/or excluded from road obliteration or other major soil disturbances resulting from road closure. Other means will be utilized as provided in General Water Quality Best Management Practices, (USDA, Forest Service Pacific Northwest Region, 11/88). These protection measures are judged to meet the intent of Executive Order 11990.

There are no inland or coastal floodplains meeting the intent of Executive Order 11988 within the District. Riparian areas would be protected as provided for streams (Class I through Class IV) in General Water Quality Best Management Practices.

THREATENED/ENDANGERED SPECIES OF PLANTS AND WILDLIFE

Site-specific surveys of threatened, endangered and sensitive plants will be completed prior to any ground disturbance. The survey will be completed in an appropriate phenologic window for determining such species' existence on the Heppner Ranger District. All seeps, springs, bogs, and other wet areas which can provide habitat for some threatened, endangered, and

sensitive plant species would be protected. Habitat for sensitive plants and animals would be managed to ensure that the species do not become threatened or endangered through Forest Service actions [Forest Plan page 4-90].

CULTURAL RESOURCES

Because of known land use by Native Americans on and adjacent to the District, information has been shared with the Confederated Tribes of the Umatilla Indian Reservation and the Confederated Tribes of the Warm Springs Reservation and the Yakima Indian Nation throughout the environmental analysis process. These three Indian Nations are presently being contacted for a personal presentation in order to gather comments on the proposed alternatives. Through conversations with Native American groups, some roads may be kept open or opened on a seasonal basis to provide access to cultural traditional properties such as resource use areas, cemeteries, and religious places. This will be done in accordance with the National Historic Preservation Act of 1966, National Register Bulletin 38 and the American Indian Religious Freedom Act of 1979.

As road closure projects develop from the Access and Travel Management program, cultural resource reviews will be completed prior to project implementation. Cultural resource surveys will examine installation of physical barriers on those roads where closures will require new construction of gates, guardrail barricades, earthen barricades, or subsoiling of road segments or removal of culverts to reinforce closures. Every effort will be made to avoid conflicts between cultural resources and road closure projects. All projects would be managed to comply with 36 CFR 800 and Forest Service Manual 2360. Requirements for consultation with State Historic Preservation Officer would be followed before, during, and after a project. Confidentiality of cultural resource site locations will be maintained according to 36 CFR 296.18. In the event that any previously undetected and/or subsurface cultural resources are located, all project activities would cease in that area until further analysis could be conducted by the Forest Archeologist. This shall be done in accordance with Forest Service Manual 2361.23 and timber sale contract clause C6.24 (when road closure activities are performed as part of a timber sale contract).

IRREVERSIBLE AND IRRETRIEVABLE EFFECTS

Irreversible commitment of resources refers to a loss of future options with nonrenewable resources. If a road with aggregate surfacing were to be obliterated, an irreversible loss of the aggregate would occur; there would be no way to recover that rock after obliteration had taken place. Otherwise, there would be no irreversible effects to roads from road obliteration projects under this plan.

Irretrievable commitment of resources refers to loss of production of renewable resources. There may be a loss of road-oriented recreation for some forest users, depending on which alternative is selected. This plan would call for the obliteration of some roads, and actually return roadbeds to resource production. If a road had been obliterated and was later needed for resource management, it could be used again if reconstructed. The amount of reconstruction required would depend on the extent to which it was obliterated.

No unavoidable adverse effects, over and above those addressed in the EIS for the Forest Plan [Forest Plan FEIS page IV-232], have been identified.

CHAPTER 4: LIST OF AGENCIES AND INDIVIDUALS CONSULTED

The Heppner Ranger District obtained public involvement through:

- * publishing of notices in the East Oregonian and the Heppner Gazette-Times
- * news articles in the Heppner Gazette-Times
- * poll of hunters and dispersed recreationists using the Heppner Ranger District. Questions covered both recreation management and motorized vehicle access. Refer to the analysis file for actual responses.
- * public invitation to Open Houses on March 28 and November 14, 1991 at the Heppner Senior Citizens Center. This was advertised through newspaper advertisements and posters displayed at local gas stations and the post office.
- * public meetings held in the town of Heppner on the following dates: January 15, 1991, January 29, 1991, and March 30, 1992. The January 29 meeting resulted in the selection of 11 individuals to form a Public Working Group which would represent the main interests detailed in the January 15 meeting and work further on the project.
- * Public Working Group (list of names on page 83) which met 23 times to review the project, assist in development of Alternative C, and consult on other aspects of the project. Comments from the Public Working Group were also considered by the IDT during development of alternatives B and D (Alternative A representing "No Action").
- * telephone conversations and personal meetings

A list of publics contacted is in the project analysis file at the District office. Comments resulting from these contacts were incorporated into the project design. Letters and documentation of contacts is located in the project analysis file.

Following are several lists of participants who contributed in the design, analysis, and preparation of this document in the form of technical assistance, information, and/or personal views:

TABLE 3: INTERDISCIPLINARY TEAM

NAME	POSITION	YEARS	DEGREE
Don Finley	IDT Leader/ District Engineer	25	
Janel Lacey	Writer/Editor	2	B.S. Forest Resource Management
Al Scott	District Wildlife Biologist	11	B.S. Wildlife and Fisheries Management
Les Moscoso	Recreation Forester	5	B.S. Recreation Management
Ralph Walker	District Silviculturist	15	B.S. Resource Conservation Certified Silviculturist in Regions 5 and 6
Candi Eighme	Fuels Technician	8.5	
Kent Bowers	Civil Engineer P.E.	4	B.S. Civil Engineering Licensed Professional Engineer
Warren Plocharsky	Small Sales Forester/Law Enforcement	30	B.S. Forest and Wildlife Management
Jim Van Winkle	Range Technician/ Wildlife Biologist	10	B.S. Wildlife Science
Don Kenison	Reforestation Technician	27	

TABLE 4: PUBLIC WORKING GROUP

NAME	SPECIAL INTEREST
Kit George	Motorized Recreation
Mike Vejraska	Senior and Disabled Citizens
Bob Van Schoiack	Grazing Permitees
Dean Robinson	Nonmotorized Recreation
Don Stoeber	Snowmobiles/OHVs
Ed Tanarsky	Timber Management - Kinzua

Dave Pranger	Morrow County Soil and Water Conservation/Noxious Weed Control District
Gene Hale	Blake Ranch
Lee Palmer	Private Landowners
Ray French	Other Road Agencies
Bob Krein	Oregon Department of Fish and Wildlife
Russ Morgan	Oregon Department of Fish and Wildlife

TABLE 5: CONSULTANTS

NAME	POSITION
Bob Bowen	GIS Coordinator
Tonya Bowers	Public Relations/Clerical
Roger Williams	Former District Ranger
Barney Lyons	Acting District Ranger

LIST OF REFERENCES

ADMINISTRATIVE USE

Don Kenison, District Reforestation Technician
Larry Aragon, District Tree Improvement Forester
Candi Eigme, District Fuels Technician
Les Moscoso, District Recreation Forester
Al Scott, District Wildlife Biologist

BIG GAME

Canfield, J.E. 1991. "Applying Radiotelemetry Data to Timber Sale Effects Analysis in the Harvey-Eightmile Drainages in West-Central Montana". ELK Vulnerability - a symposium. Montana State University, Bozeman, MT. April 10-12, 1991.

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Hillis, J. Michael, Michael J. Thompson, Jodie E. Canfield, et. al. 1991 "Defining Elk Security: The Hillis Paradigm". Elk Vulnerability - a symposium. Montana State University, Bozeman, MT. April 10-12, 1991.

Hurley, Mark A. and Glen A. Sargeant 1991. "Effects of Hunting and Land Management on Elk Habitat Use, Movement Patterns, and Mortality in Western Montana". Elk Vulnerability - a symposium. Montana State University, Bozeman, MT. April 10-12, 1991.

Lyon, L.J. 1983. "Road Density Models Describing Habitat Effectiveness for Elk". Journal of Forestry. 1981 pp. 592-595.

Lyon, L.J., T.N. Lonner, J.P. Weigand, C.L. Marcum, et. al. 1985. Coordinating elk and timber management. Final report, Mont. coop. elk-logging study. Mont. Dept. Fish, Wildl. Parks, Bozeman. 53 pp.

Perry, Charles, and Robert Overly. 1977. Impact of roads on big game distribution in portions of the Blue Mountains of Washington, 1972-1973. Wash. Game Dept. Appl. Res. Sect. Bull 11, 39 p. Olympia.

Thomas, J.W. (Tech. Editor). 1979. Wildlife Habitats in Managed Forests - the Blue Mountains of Oregon and Washington. Agric. Handbook No. 553. U.S. Forest Service.

ECONOMIC ANALYSIS

Mike Helvey, North Fork John Day District Engineer
Nelson Geraths, Forest Maintenance Supervisor
John Heddle, Forest Contract Officer Representative
Joani Bosworth, Forest Public Affairs Assistant
Warren Plocharsky, Heppner District Law Enforcement Official
Don Finley, Heppner District Engineer

NOXIOUS WEEDS

U.S. Department of Agriculture. Forest Service. Pacific Northwest Region. 1989. Noxious Weed Management Plan, Umatilla National Forest.

RECREATION

U.S. Department of Agriculture. Forest Service. Pacific Northwest Region. 1990. Land and Resources Management Plan, Umatilla National Forest.

The Pennsylvania Trails Program. Division of Outdoor Recreation. Bureau of State Parks. June, 1980. Nonmotorized Trails/An Introduction to Planning and Development.

U.S. Department of Agriculture. Forest Service. Pacific Northwest Region. 1991. Recreation Opportunity Guide, Umatilla National Forest Supervisor's Office.

WATERSHED AND FISHERIES

Rick Van Der Zweep, District Hydrologist.

**APPENDIX A -
FOREST PLAN MANAGEMENT AREA STANDARDS AND
GUIDELINES**

APPENDIX A
FOREST PLAN MANAGEMENT AREA STANDARDS AND
GUIDELINES

GLOSSARY

A

Access

Usually refers to a road or trail route over which a public agency claims a right-of-way for public use; a way of approach.

Access Management

The management and distribution of Forest Users.

Access Management Plan

The development of travel management policies that consider the development, maintenance, and protection of all Forest resources.

Activity

Actions, measures, or treatments that are undertaken that directly or indirectly produce, enhance, or maintain Forest and rangeland outputs, or achieve administrative and environmental quality objectives. Forest Service activity definitions, codes, and units of measure are contained in the Management Information Handbook (FSH 1309.11).

Administrative Use

Work activities performed by Forest Service employees, permittees, and contractors on "closed roads" or within closed areas.

Alternative

One of several policies, plans, ways, or projects proposed for decision making.

Anadromous Fish

Those species of fish that mature in the sea and migrate into streams to spawn. Salmon and steelhead are examples.

Analysis Area

A delineated area of land subject to analysis of (1) responses to proposed management practices in the production, enhancement, or maintenance of forest and rangeland outputs and environmental quality objectives, and (2) economic and social impacts. (FSM 1905)

Appropriated Funds

Monies authorized by an act of Congress which permit Federal agencies to incur obligations and to make payments out of the U.S. Treasury for specified purposes.

Archeology

The scientific study of the physical characteristics of cultural resources undertaken to describe, examine, and interpret former ways of life and their remains.

Arterial Road (Forest)

A road that provides service to large land areas and usually connects with public highways or other Forest arterial roads to form an integrated network of primary travel routes. The location and standard are often determined by a demand for maximum mobility and travel efficiency rather than specific resource management service. It is usually developed and operated for longterm land and resource management purposes and constant service.

B

Barricade

A traffic control device constructed with the intent to continually block a road to use.

Best Management Practices (BMP)

Methods, measures, or practices (including technological, economic, and institutional considerations) selected by an agency to meet its nonpoint source control needs. BMP's include, but are not limited to, structural and nonstructural controls and operation and maintenance procedures. BMP's can be applied before, during, and after pollution-producing activities to reduce or eliminate the introduction of polutants into receiving waters (40 CFR 130.2).

Big Game

Large animals that are normally hunted for sport. On the Heppner Ranger District, these include Rocky Mountain elk, mule deer, white-tailed deer, and Pronghorn Antelope.

Big Game Summer Range

A range, usually at higher elevation, used by deer and elk during the summer season. Summer ranges are usually much more extensive than winter ranges.

Big Game Winter Range

A range, usually at lower elevation, used by migratory deer and elk during the winter months; usually more clearly defined and smaller than summer ranges.

C

Capital Investment

An input that increases the stock of natural or manmade resources (assets) needed to maintain or increase the flow of outputs in the future. Benefits resulting from capital investment are normally recouped in a time period in excess of 1 year.

Clean Air Act

The 1963 Clean Air Act legislation as adopted by Congress and amended in 1967, 1969, 1974, and 1977.

Closed Road

An intermittent service road in maintenance level I that is closed to all vehicular traffic for more than one year. The closure may be ordered under 36 CFR 261, in which case the road is signed with a standard "Road Closed" sign.

Roads on which motorized traffic has been excluded by means other than an order such as guardrail barricade, earthen barricade, blockage, or by obscuring the entrance. A closed road is still an operating facility on which motorized traffic has been removed yearlong and remains on the Forest Road Transportation System.

Closure

An administrative order restricting either location, timing, or type of use in a specific area.

Code of Federal Regulations (CFR)

A codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government.

Collector Roads (Forest)

These roads serve smaller areas than a Forest Arterial Road, and are usually connected to a Forest Arterial Road or public highway. Collects traffic from Forest local roads and/or terminal facilities. The location and standard are influenced by both long-term and multi-resource service needs, as well as travel efficiency. May be operated for either constant or intermittent service, depending on land use and resource management objectives for the area served by the facility.

Compaction

The packing together of soil particles by forces exerted at the soil surface, resulting in increased soil density.

Concern

A point, matter, or question that that has been raised and must be addressed in the planning process.

Constant Service Road

A long-term road developed and operated for continuous or annual recurrent service.

Cultural Resources

Physical remains of districts, sites, structures, buildings, networks, or objects used by humans in the past. They may be historic or prehistoric, archeological, or architectural in nature. Cultural resources are fragile and are nonrenewable.

Cumulative Effects

The impact on the environment which results from the incremental impact when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

D

Dispersed Recreation

A general term referring to recreation use outside a developed recreation site that includes activities such as scenic driving, hunting, backpacking, and any recreation in primitive environments.

E

Ecosystem

An interacting system of organisms considered together with their environment; for example, marsh, watershed, and lake ecosystems.

· Effects

Environmental consequences resulting from a proposed action. Included are direct effects, which are caused by the action and occur at the same time and place; and indirect effects, which are caused by the action and are later in time or further removed in distance, but which are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Effects and impacts as used in this statement are synonymous. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic quality, historic, cultural, economic, social, or health; whether direct, indirect, or cumulative. Effects also may include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial (40 CFR 1508.8).

Endangered Species

Any species of animal or plant that is in danger of extinction throughout all or a significant portion of its range as determined by the Secretary of the Interior in accordance with the 1973 Endangered Species Act.

Environmental Analysis

An analysis of alternative actions and their predictable short- and long-term environmental effects, incorporating the physical, biological, economic, social, and environmental design arts and their interactions.

Environmental Assessment

The concise public document required by the regulations for implementing the procedural requirements of the National Environmental Policy Act. (40 CFR 1508.9,2)

Environmental Impact Statement (EIS)

A statement of the environmental effects of a proposed action and alternatives to it. It is required for major federal actions under Section 102 of the National Environmental Policy Act (NEPA), and released to the public and other agencies for comment and review. It is a formal document that must follow the requirements of NEPA, the Council of Environmental Quality (CEQ) guidelines, and directives of the agency responsible for the project proposal.

Erosion

(1) The wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitation creep; or (2) detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

F

Fisheries Habitat

Streams, lakes, and reservoirs that support fish populations.

Floodplain

The lowland and relatively flat areas adjoining inland and coastal waters (including debris cones and flood-prone areas of offshore islands) including , at a minimum, those areas subject to a 1 percent or greater chance of flooding in any given year (100 recurrence).

Forest Development Transportation System

Those facilities including forest development roads, trails, and airfields in the transportation network and under Forest Service jurisdiction.

Forest Service Handbook (FSH)

For Forest Service use, directives that provide detailed instructions on how to proceed with a specialized phase of a program or activity.

Forest Service Manual (FSM)

A system of manuals which provides direction for Forest Service activities.

Forest Road

A road wholly or partly within, or adjacent to, and serving the National Forest System and which is necessary for the protection, administration, and utilization of the National Forest System and the use and developments of its resources.

G

Goal

A concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad, general terms and is timeless in that it has no specific date by which it is to be completed. Goal statements form the principal basis from which objectives are developed.

Guideline

An indication or outline of policy or conduct that is not a mandatory requirement (as opposed to a standard, which is mandatory).

H

Habitat

The place where a plant or animal naturally or normally lives and grows.

Habitat Effectiveness Index (HEI)

A relative value of habitat conditions for Rocky Mountain elk expressed as a percentage based on the potential of the habitat type to provide cover, the quality of existing cover, and the miles of road open to motorized vehicle traffic.

Historic

Refers to the period of time for which there are written records (after European contact). In Region 6, the historic era begins roughly 1800 A.D. with the first explorers who kept journals.

Historic Property

Any prehistoric or historic district, site, building, structure, or object included in the National Register, or eligible for inclusion in the National Register of Historic Places. This includes artifacts, records, and remains located within or associated with these properties.

Historic Site

Site associated with history, tradition, or cultural heritage of national, state, or local interest.

I

Indicator Species

A selected wildlife species (or group of species) which is presumed to indicate the habitat needs of other species.

Interdisciplinary Team (IDT)

A group of individuals with different training assembled to solve a problem or perform a task. The team is assembled out of recognition that no one scientific discipline is sufficiently broad to adequately solve the problem.

Irretrievable

A term that applies to the loss of production, harvest, or use of natural resources. For example, some or all of the timber production from an area is lost irretrievably while an area is serving as a winter sports site. The production lost is irretrievable, but the action is not irreversible. If the use changes, it is possible to resume timber production.

Irreversible

A term that describes the loss of future options. Applies primarily to the effects of use of nonrenewable resources, such as minerals or cultural resources, or to those factors, such as soil productivity, that are renewable only over long periods of time.

Issue

A point, matter, or question of public discussion or interest to be addressed or decided through the the planning process.

Intermittent Service Road

A road developed and operated for periodic service and closed for more than one year between periods of use.

J

Jurisdiction

The legal right to control or regulate use of a transportation facility. Jurisdiction requires authority, but not necessarily ownership. The authority to construct or maintain a road may be derived from fee title, an easement, or some other similar method.

K

Knutson-Vandenberg Act (KV)

Legislation authorizing the collection of money from timber sale receipts for reforestation, stand improvement, or mitigation projects on timber sale areas.

L

Long-Term Road

A road which is developed and operated for long-term land management and resource utilization needs, and which may be operated for constant or intermittent service.

Local Road (Forest)

A forest road which connects terminal facilities with forest collector, forest arterial, or public highways. Usually, forest local roads are single purpose transportation facilities.

M

Maintenance

The upkeep of the entire forest development transportation facility including surface and shoulders, parking and side areas, structures, and such traffic-control devices as are necessary for its safe and efficient utilization.

Management Area

The land on which a certain management strategy is applied.

Management Direction

A statement of multiple-use and other goals and objectives, the associated management prescriptions, and standards and guidelines for attaining them.

Management Indicator Species

A species selected because its welfare is presumed to be an indicator of the welfare of other species using the same habitat. A species whose condition can be used to assess the impacts of management actions on a particular area.

Management Strategy

Management practices and intensity selected and scheduled for application on a management area to attain multiple-use and other goals and objectives.

Mitigation

Mitigation includes: (1) Avoiding the impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the effected environment; (4) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (5) compensating for the impact by replacing or providing sustitue resources of environments. (40 CFR Part 1508.20)

Mitigation Measures

Action to avoid, minimize, reduce, eliminate, or rectify adverse impacts of management practices.

Monitoring

A process to collect significant data from defined sources to identify departures or deviations from expected plan outputs.

Motorized Access

Open to all motorized vehicles.

Motor Vehicles

Any vehicle which is self-propelled including passenger vehicles, OHV's, and snowmobiles. Also includes any vehicle which is propelled by electric power obtained from batteries, but not operated on rails.

Multiple Use

The management of all the various renewable surface resources of the National Forest System so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land, for some or all of these resources or related services, over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some lands will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output (36 CFR 219.3).

N

National Register of Historical Places

A register of cultural resources of national, state, or local significance maintained by the Department of the Interior.

Noxious Weed

Those plants which pose a threat to multiple use (i.e., recreation, wildlife, aesthetics, watersheds, soils, agriculture, etc.) on National Forest System Lands and on adjacent agricultural lands.

O

Objective

A concise, time-specific statement of measurable planned results that respond to preestablished goals. An objective forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving identified goals.

Obliterated Road

A road over which travel has been and will continue to be denied, the entrance obscured, and the wheel tracks or pathway is no longer continuous and suitable for travel. It includes roads obliterated by natural processes such as revegetation or other natural occurrences, and for which the drainage is not in need of further attention. An obliterated road has been returned to the resource management purposes established for that area. Obliteration by natural processes may be supplemented by artificial methods to obtain vegetative cover within ten years after the last activity as required by the National Forest Management Act. The obliterated road will be removed from the Forest Development Transportation System.

Off-Highway Vehicle (OHV)

Any motorcycle, moped, three-wheeler, four-wheeler, or other motorized off-highway recreation vehicle that travels on two or more low-pressure tires and has a saddle for the operator.

Open Roads

Roads where motorized vehicle use is permitted yearlong. A road open to motorized vehicles does not mean in all cases that the road is usable by all classes of motorized vehicles; some roads are designed and maintained for use of high clearance vehicles only while others are maintained for use by low clearance vehicles.

P

Passenger Vehicle

Any four (or more) wheeled vehicle with an enclosed or open-air area where the driver and passengers are seated including but not limited to jeeps, pickups, and sedans.

Permittee

One who holds a permit to perform a special activity such as grazing livestock, commercial mushroom gathering, or firewood cutting on national forest lands.

Personal Use

Normally used to describe the type of permit issued for removal of wood products (firewood, post, poles, and Christmas trees) from national forest land when the product is for home use and not to be resold for profit.

Prehistoric

A time period before written records for an area back to when first entered by human beings. The time of human existence studied primarily by archeologist.

Prescribed Burning

The skillful application of fire to natural fuels under conditions of weather, fuel moisture, etc. that allows confinement of the fire to a predetermined area and produces the intensity of heat and rate of spread to accomplish planned benefits to one or more objectives of silviculture, wildlife management, grazing, or hazard reduction.

Primitive Recreation

Those types of recreational activities associated with unroaded land-e.g., hiking, backpacking, cross-country travel.

Project

An organized effort to achieve an objective identified by location, timing, activities, outputs, effects, and time period and responsibilities for executions.

Public Working Group

A group of local citizens that represent local interests who have worked with the Forest Service throughout the Access and Travel Management planning process.

R

Recreation Opportunity

The availability of choices for user to participate in the recreational activities they prefer within the settings they prefer.

Regulated Use

Active form of facility management utilizing regulations and appropriate enforcement to secure and ensure compliance with management direction.

Regulations

Refers to the Code of Regulations for implementing the National Forest Management Act, 36 CFR, Part 219.

Renewable Resources

Resources that can be used indefinitely, when the use rate does not exceed the ability to renew the supply.

Resource

Anything which is beneficial or useful including animals, plants, minerals, fossils, cultural remains, a location, people, a view, an experience, etc. Resources, in the context of land use planning, vary from commodities such as timber and minerals to scenic view points, recreation opportunities, or cultural resources.

Restricted Use

A passive form of facility management relying on (1) voluntary user compliance with signs provided at or on the facility, or (2) commercial user compliance with contractual requirements outlined therein.

Riparian

Pertaining to areas directly influenced by water. Riparian areas usually have visible vegetation or physical characteristics reflecting this water influence. Streambanks, lake borders, or marshes are typical riparian areas.

Riparian Areas

A geographically delineated area with distinctive resource values and characteristics that is comprised of aquatic and riparian ecosystems. This includes floodplains, wetlands, and all areas within a horizontal distance of at least 100 feet from the normal line of high water of a stream channel or from the shoreline of a standing body of water.

Road Density

The number of miles of roads per square mile of land.

Roadless Area (Inventoried)

An area generally at least 5,000 acres in size, or adjacent to an existing Wilderness and undeveloped.

Road Maintenance Level

Defines the level of service provided by, and maintenance required for, a specific road, consistent with road management objectives and maintenance criteria.

Level 1: Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period is one year or longer. Basic custodial maintenance is performed.

Level 2: Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration.

Level 3: Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities.

Level 4: Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds.

Level 5: Assigned to roads that provide a high degree of user comfort and convenience. Normally, these roads are double-lane and paved, or aggregate surfaced with dust abatement.

Road Management Objectives (RMO)

Defines the intended purpose of an individual road based on management area direction and access management objectives. Road management objectives include design criteria, operation criteria, and maintenance criteria.

Road Management Plan

A document which provides information to determine the proper mix of development, traffic management, and maintenance of the existing road system to best serve resource objectives.

S

Salvage

The removal of recently-dead trees.

Scoping Process

A process in conjunction with Environmental Analysis which identifies issues and concerns which are within authority of the Forest Service to resolve.

Seasonal Roads

Roads where public, commercial, and Forest Service motorized vehicle use is permitted, but for only certain periods during the year. When a seasonal road is open, it is managed as an open road. When the road is not open, it is treated as a closed road with respect to use. Maintenance activities will be that dictated by the maintenance level of the road while open.

Sediment

Solid material of any size, both mineral and organic, that is in suspension, and is being transported from its site of origin by air, water, gravity, or ice, or has come to rest on the earth's surface either above or below sea level.

Sensitive Species

Those species that have appeared in the Federal Register as proposed for classification and official listing as endangered or threatened species, that are on an official state list, or that are recognized by the Regional Forester as needing special management to prevent their being placed on Federal or State lists.

Sensitivity Level (Recreation)

A particular degree or measure of viewer interest in scenic qualities of the landscape.

Short-Term Facility

A facility developed and operated for a limited period of time which will cease to exist as a transportation facility after the purpose for which it was constructed is completed, and the occupied land is reclaimed for natural resource purposes.

Site Productivity

Production capability of specific areas of land to produce defined outputs such as cubic feet/acre/year, etc.

Silviculture

The art and science of controlling the establishment, composition, and growth of forests to meet the desired future conditions and management objectives.

Snowmobile

Self-propelled vehicles that: 1) are capable of traveling over ice or snow, 2) use endless belt tread or cleats in contact with surface as means of propulsion, 3) are steered wholly or in part by skis, sled-type runners, or endless track, and 4) are not registered as a vehicle other than as a snowmobile.

Standards and Guidelines

Principles specifying conditions or levels of environmental quality to be achieved.

Stream Channel

Any channel which carries water flow during some part of the year including permanent, intermittent, and ephemeral streams.

Suitability

The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices.

T

Temporary Road

Those roads needed only for the purchaser's or permittee's use. The Forest Service and the purchaser or permittee must agree to the location and clearing widths. Temporary roads are used for a single, short-term use, e.g., to haul timber from landings to Forest development roads, access to build water developments, etc.

Threatened Species

A plant or wildlife species officially designated by the U.S. Fish and Wildlife Service as having its existence threatened in a localized area, such as state or province or lesser area, because its habitat is threatened with destruction, drastic modification, or severe curtailment or because of over-exploitation, disease, predation, or other factors.

Tiering

Refers to the coverage of general matters in broader environmental impacts statements (such as National program or policy statements) with subsequent narrower statements or environmental assessments (such as regional or basin-wide program statements, or ultimately, site-specific statements) incorporating, by reference, the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. (40 CFR 1508.28)

V

Vegetative Management

Activities designed primarily to promote the health of the crop forest cover for multiple-use purposes.

W

Water Quality

The biological, physical, and chemical properties of water to make it suitable for given specified uses.

Wetlands

Areas that are inundated by surface or ground water with a frequency sufficient to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Under normal circumstances, the area does or would support a prevalence of vegetative or aquatic life.

Wheel Tracks

Any set of two parallel wheel marks on the ground which have been established for or used by motorized vehicles with four wheels and of a width exceeding 40-inches.

Wildfire

Any wildland fire not designated and managed as a prescribed fire within an approved Prescription.

E2 TIMBER AND BIG GAME

Manage forest lands to emphasize production of wood fiber(Timber), encourage forage production, and maintain a moderate level of big game and other wildlife habitat.

DFC

4-182 Dispersed recreation opportunities of all types will be available for a variety of users. However, management of roads will result in a noticeable amount of travel restrictions in some areas.

S&G

4-182 Provide the opportunity for road oriented, walk-in, and horseback activities. Motorized access may be limited to designated roads, trails and areas.

Trail and associated facilities construction, reconstruction, and maintenance are permitted.

4-183 Off-highway vehicle (OHV) use is permitted on designated roads, trails, and areas where compatible with big game habitat effectiveness, recreation, and other resource objectives.

Elk habitat will be managed to achieve a habitat effectiveness index of no less than 45, including discount for roads open to motorized vehicular traffic.

4-185 Roads may be closed to motorized use in order to meet big game habitat objectives, meet recreation and other resource objectives, and/or reduce maintenance costs.

D2 RESEARCH NATURAL AREA

Goal - Preserve naturally occurring physical and biological units where natural conditions and processes are maintained.

DFC

4-175 Use, except for scientific and educational purposes, will be generally discouraged.

S&G

4-175 All recreation OHV use will be prohibited.

Existing trails will remain and be maintained as long as the RNA objectives are not compromised. Travel should be restricted to the trails.

New trails will not be constructed, unless needed for research purposes.

4-176 New transportation facilities are not acceptable.

E1 TIMBER AND FORAGE

Goal - Manage forest lands to emphasize production of wood fiber (Timber) and encourage production of forage.

DFC

4-178 Recreational opportunities will be available for hunters, fisherman, off-highway vehicle operators, and other motorists.

S&G

4-178 Provide the opportunity for mostly road-oriented recreation activities. Motorized access may be limited to designated roads, trails, and areas.

Trail and associated facilities construction, reconstruction, and maintenance are permitted.

Off-highway vehicle (OHV) use is permitted. OHV use may be restricted where damage to soil and water resources is occurring and/or public safety is threatened.

4-179 Elk habitat will be managed to achieve a habitat effectiveness index of at least 30, including discounts for roads open to motorized vehicular traffic.

4-180 Roads may be closed to motorized use in order to meet resource objectives and/or to reduce maintenance costs.

C8 GRASS-TREE MOSAIC (GTM)

Goal - On areas known as grass-tree mosaic (GTM), provide high levels of potential habitat effectiveness, high quality forage for big game wildlife species, visual diversity, and protect erosive soils.

DFC

4-171 Recreation opportunities of all types will be available throughout the area. Through portions of the area, recreationists will be able to enjoy motorized activities. Vehicle access will be restricted on many roads year-round and others seasonally during winter big game use periods, and on important calving areas during the spring and early summer.

S&G

4-171 Areas mapped as roadless (1984) within the GTM will remain roadless.

4-172 Access will be mostly for walk-in and horseback opportunities.

Off-highway vehicle (OHV) use is permitted and will normally be restricted to designated trails or closed roads. Motorized use will be permitted on designated open roads.

Trail and associated facility construction, reconstruction, and maintenance will be permitted.

4-173 All management activities will be regulated during the big game winter use period of December 1 through March 30 or April 15.

4-174 Roads will be closed to motorized use, as needed, to meet big game habitat effectiveness objectives.

Where no other feasible and economical options exist, roads may be constructed, reconstructed, and maintained through the area to provide access to other management areas, as long as they are consistent with the stated visual, watershed, and wildlife objectives.

Trail and associated facility construction, reconstruction and/or maintenance are permitted as long as consistent with overall objectives of wildlife management.

4-159 Off-highway vehicle use is permitted on designated roads and trails where compatible with big game and other wildlife species' habitat effectiveness, recreation, and other resource objectives.

4-161 Roads will be limited to minimum standards necessary for timber harvesting.

Road construction, reconstruction, and maintenance are permitted, consistent with the primary overall objective of wildlife habitat management.

C5 RIPARIAN (FISH AND WILDLIFE)

Goal - Maintain or enhance water quality, and produce a high level of potential habitat capability for all species of fish and wildlife within the designated riparian habitat areas while providing for a high level of habitat effectiveness for big game.

DFC

4-163 Dispersed recreation activities of all types will be abundant and available for a variety of users. Quality riparian management will assist in meeting anadromous and resident fish productivity goals.

S&G

4-163 Provide for mostly road oriented recreation opportunities and for walk-in or horseback, with some OHV opportunities in isolated areas.

Off-highway vehicle (OHV) use is permitted but limited to designated routes.

Trail and related facility development and maintenance are permitted. Manage trails to protect wildlife and fish habitat, and water quality values.

4-165 New roads should be located outside the riparian area (except for crossings) unless alternatives are determined to have higher adverse impacts to resources.

Water quality and fisheries habitat problems caused by roads will be corrected.

Off-highway vehicle (OHV) use will be permitted on designated routes. OHV use will be curtailed by closures where this use is determined to be detrimental to wintering big game species.

Trail and associated facility construction, reconstruction, and/or maintenance shall be permitted. Trail activities and use will be curtailed by closures where and when determined to be detrimental to wintering big game species.

Elk habitat will be managed on designated big game winter ranges to achieve a habitat effectiveness index of no less than 70, including discounts for roads open to motorized vehicular traffic.

4-153 All management activities will be restricted where necessary, during the big game winter use period of December 1 through March 30.

4-154 Road construction, reconstruction, and maintenance are permitted, except during the winter and spring big game use periods.

Roads will be closed to motorized use as needed, and especially during the winter use period, to meet big game habitat effectiveness objectives, unless the roads are needed as through routes to access private lands.

C4 WILDLIFE HABITAT

Goal - Manage forest lands to provide high levels of potential habitat effectiveness for big game and other wildlife species with emphasis on size and distribution of habitat components (forage and cover areas for elk, and snags and dead and down materials for all cavity users). Unique wildlife habitats and key use areas will be retained or protected.

DFC

4-158 Emphasis will be apparent on managing roads, providing security for big game, protecting important calving and fawning areas, and providing for a quality hunting experience. Road closures and other management techniques will result in a noticeable amount of travel restrictions accross the area. Dispersed recreation opportunities of all types will be available, but motorized access may be limited.

S&G

4-158 Access should mostly be for walk-in or horseback opportunities on roads, trails, and areas will generally be closed to motorized use, with some motorized use opportunities on open roads and trails.

C2 MANAGED OLD GROWTH

Goal - Provide and protect sufficient suitable habitat for wildlife species dependent upon mature and overmature lodgepole pine forest stands, and promote a diversity of vegetative conditions for such species.

DFC

4-147 Dispersed recreation opportunities will be available in the younger stands but motorized opportunities will be limited in older stands.

S&G

4-147 Access will be mostly for walk-in or horseback opportunities on roads closed to motorized use, with some open road opportunities.

No developed recreational opportunities or facilities are permitted.

Motorized vehicle use will be restricted to the designated routes (roads and trails) necessary to cross the area and/or to provide access for activities occurring in adjacent management areas.

4-148 A low level of human disturbance with few, if any, open roads within the stand.

Restrict motorized vehicle use within managed old growth units to open roads and trails in all age classes older than 80 years for the ponderosa pine and mixed conifer types, and older than 60 years for the lodgepole pine type. Most roads in these areas should be closed to motorized use.

C3 BIG GAME WINTER RANGE

Goal - Manage big game winter range to provide high levels of potential habitat effectiveness and high quality forage for big game species.

DFC

4-151 Most roads and trails will be closed to vehicle traffic during the winter and there will be minimum human disturbance to big game during this period.

S&G

4-152 Access will be mostly for walk-in or horseback opportunities on trails or closed roads, with some road-oriented activities.

4-120 A wide spectrum of transportation facilities (ranging from high-standard, double-lane paved roads to low-standard, single-lane dirt roads and trails) to developed sites can be constructed, utilized, operated, and maintained.

4-120 Access roads should be managed to encourage passenger car traffic, normally at Traffic Service Level A.

C1 DEDICATED OLD GROWTH

Goal - Provide and protect sufficient suitable habitat for wildlife species dependent upon mature and/or overmature forest stands, and promote a diversity of vegetative conditions for such species.

DFC

4-144 Vehicle use is also normally restricted, but will occur on designated routes (roads and trails) to access other parts of the Forest.

S&G

4-144 Access will be mostly for walk-in or horseback opportunities on roads closed to motorized use, with some open road opportunities.

Motorized vehicle use will be restricted to only those designated routes (roads and trails) necessary to cross the area and/or provide for activities occurring in adjacent management areas.

Roads and trails are permitted but will be limited to the number and miles necessary to meet surrounding area objectives, while minimizing impacts to wildlife in the old growth units.

Most roads (and areas) in dedicated old growth units should be closed; restrict motorized vehicle use to designated open roads and trails.

Most roads (and areas) in dedicated old growth units should be closed; restrict motorized vehicle use to designated open roads and trails.

A5 ROADED NATURAL

Goal - Provide dispersed recreation opportunities in an area characterized by a predominantly natural to near natural appearing environment with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment.

DFC

4-111 Recreation opportunities of all types will be abundant and available throughout the area, with emphasis on motorized use and some trail and cross country opportunities in a natural appearing environment.

S&G

4-111 Provide for mostly road oriented opportunities and for walk-in or horseback activities in a natural to slightly altered environment.

Trail and associated facility construction, reconstruction, and maintenance shall be permitted including trails for OHV use.

Off-highway vehicle (OHV) use is permitted. Motorized use may be limited to trails and roads; snowmobile use is acceptable on an area-wide basis.

4-115 New roads shall be permitted and will be designed and constructed to blend with the natural characteristics of the landscape.

A6 DEVELOPED RECREATION

Goal - Provide recreation opportunities that are dependent on the development of structural facilities for user conveniences where interaction between users and evidence of others is prevalent.

DFC

4-117 Recreation facilities such as roads, buildings, ski lifts, loading/unloading ramps, boat docks, bulletin boards, picnic tables, campsites, and others shall be evident in moderate to heavily modified sites.

S&G

4-119 OHV use will be restricted to the roads and trails within the developed sites and managed to minimize conflicts between users.

A3 VIEWSHED 1

Goal - Manage the area seen from a primary travel route, use area, or water body, where forest visitors have a major concern for the scenic qualities as a natural appearing landscape.

DFC

4-100 Recreational opportunities will be mostly road oriented.

S&G

4-100 Provide the opportunity for mostly road oriented activities.

Off-highway vehicle (OHV) use is allowed. OHV use may be limited to designated roads, trails, and areas.

4-103 New roads and trails will be permitted and will be located, designed, and constructed to be mostly unnoticeable from the main travel route.

A4 VIEWSHED 2

Goal - Manage the area seen from a travel route, use area, or water body where some forest visitors have a major concern for the scenic qualities as a natural appearing to slightly altered landscape.

DFC

4-106 Recreation opportunities will be mostly road oriented.

S&G

4-106 Provide the opportunity for mostly road oriented activities.

Off-highway vehicle (OHV) use is allowed. OHV use may be limited to designated roads, trails, and areas.

4-109 New roads and trails will be permitted and will be designed and constructed to meet the partial retention and modification visual quality objectives.

FOREST PLAN MANAGEMENT AREA STANDARDS AND GUIDELINES

RECREATION

4-47 Provide Forest recreationists with freedom of choice in selecting sites, areas, routes, and activities to meet their recreation needs.

4-48 Maintain recreation as an important component of access management.

4-50 Limit motorized vehicles to roads, trails, and areas which are designated for use in the Umnatilla National Forest Motorized Access and Travel Management Plan.

Access roads to developed sites should be operated and managed to permit passenger car traffic.

Ensure that off-highway vehicle (OHV) use is managed to protect other resources, promote safety of users and minimize conflicts with other uses.

Use OHV prohibitions only where needed to minimize disturbance of wildlife, provide a range of recreation opportunities, or to protect the soil and water resources.

A1 NONMOTORIZED DISPERSED RECREATION

Goal - Provide nonmotorized recreation opportunities in an area characterized by a predominantly natural or natural appearing environment with minimum sights and sounds of human activity.

Desired Future Condition (DFC)

4-95 Little or no evidence of motorized use, restrictions, and controls will exist. Existing wheel tracks and primitive roads will revert to natural conditions or be used as trails.

Management Areas Standards and Guidelines (S&G)

4-95 Access will be mostly for remote walk-in or horseback activities in an area generally free of roads. Off-highway vehicle (OHV) use will not be permitted, (Exception--snowmobile access route from Cutsforth Park area to Kelly Prairie is permitted.)

4-96 No roads will be developed. Existing wheel tracks will be closed to motor vehicle use and converted to trails.

APPENDIX B - ROAD MANAGEMENT OBJECTIVE FORM

ROAD OBJECTIVES AND MANAGEMENT PLAN
(Revised 2/91)

ROAD NUMBER _____
New/Update _____

ACCESS MANAGEMENT AREA _____
District HEPPNER

I. RESOURCE MANAGEMENT OBJECTIVES

A. Recreation (Check all that apply)

Hunting	___	Winter Sports	___
Campground	___	Other Dispers.	___
Woodcutting	___	Rec. Homes	___

B. Commercial Activity

1. Forest Service

Timber	Year	MMbf	Timber	Year	MMbf
Sawlog	___	___	Sawlog	20	___
Cull/Chip	___	___	Cull/Chip	20	___

2. Private

Timber	Year	MMbf	Timber	Year	MMbf
Sawlog	___	___	Sawlog	20	___
Cull/Chip	___	___	Cull/Chip	20	___

C. Administrative: Consider grazing allotments, administrative access (silviculture, fire, wildlife), safety, etc. Is there a need to manage for these? (Y/N) ___

Access private land? (Y/N) ___ Right of Way? (Y, N, or NA) ___

Cost share road? (Y/N) ___ Cooperator? _____

II. TRAFFIC REQUIREMENTS

Vehicle Characteristics	Present Use		Projected Use	
	During Comm. Use	Between Comm. Use	During Comm. Use	Between Comm. Uses
A. Recreational				
High Clearance (1)	___	___	___	___
Low Clearance (1)	___	___	___	___
Motor Home (1)	___	___	___	___
Road Strength (2)	___	___	___	___
Trailer Length (ft)	___	___	___	___
B. Commercial				
Trucks/yr (3)	___	___	___	___
Lowboys/yr (3)	___	___	___	___
Light Vehicles/yr (3)	___	___	___	___
Road Strength (2)	___	___	___	___
C. Administrative				
High Clearance (Y/N)	___	___	___	___
Low Clearance (Y/N)	___	___	___	___

(1) Road management Strategy (ENcour, Acept, DIScour, ELim, Prohib)

(2) LS = Limited Str. WW = Wet Weather ES =Ext. Season AW = All Weather

(3) Estimated number of vehicles per year

III. RESOURCE MANAGEMENT OPERATION AND MANAGEMENT OBJECTIVES

Vehicle Characteristics	Present Use		Projected Use	
	During Comm. Use	Between Comm. Use	During Comm. Use	Between Comm. Uses
<u>A. Recreation</u>				
Restrictions (Y/N)	—	—	—	—
Advisory Signs (Y/N)	—	—	—	—
Seasonal Closure (dates)	to	to	to	to
Entrance Device (1)	—	—	—	—
Closed (Y/N)	—	—	—	—
<u>B. Commercial</u>				
Restrictions (Y/N)	—	—	—	—
Weekends/Holidays (Y/N)	—	—	—	—
Seasonal Closure (dates)	to		to	
<u>C. Administration</u>				
Restrictions (Y/N)	—	—	—	—
Closure same as for Public? (Y/N)	—	—	—	—

(1) Gate, Barricade, Sign, Tributary, Cross-Ditch, Camouflage, None

IV. MAINTENANCE LEVELS	Operational	Objective
Forest Service	—	—
Commercial	—	—

Note: Level 3 and above roads subject to Highway Safety Act.

V. REMARKS (Constraints due to environment or safety; deficiencies due to physical or management constraints)

DESIGN VEHICLE _____
 BEGIN / END MILEPOST ____/____
 DESIGN SPEED ____ MPH
 QUAD(S) _____
 MANAGEMENT SECTION TERMINI _____ to _____

CRITICAL VEHICLE _____
 SERVICE LIFE (S, LI, LC) ____
 TRAFFIC SERVICE LEVEL (ABCD) ____

PREPARED BY: _____
 APPROVED BY: _____

DATE: _____
 DATE: _____

DISTRICT RANGER Y/N ____

