

FG-N-53

AGENCY IMPACT DETERMINATION  
(Negative Declaration)

for the

ACQUISITION

of the

MOUNT HAGGIN RANCH

Prepared by  
Montana Department of Fish and Game  
Helena, Montana  
March 1975



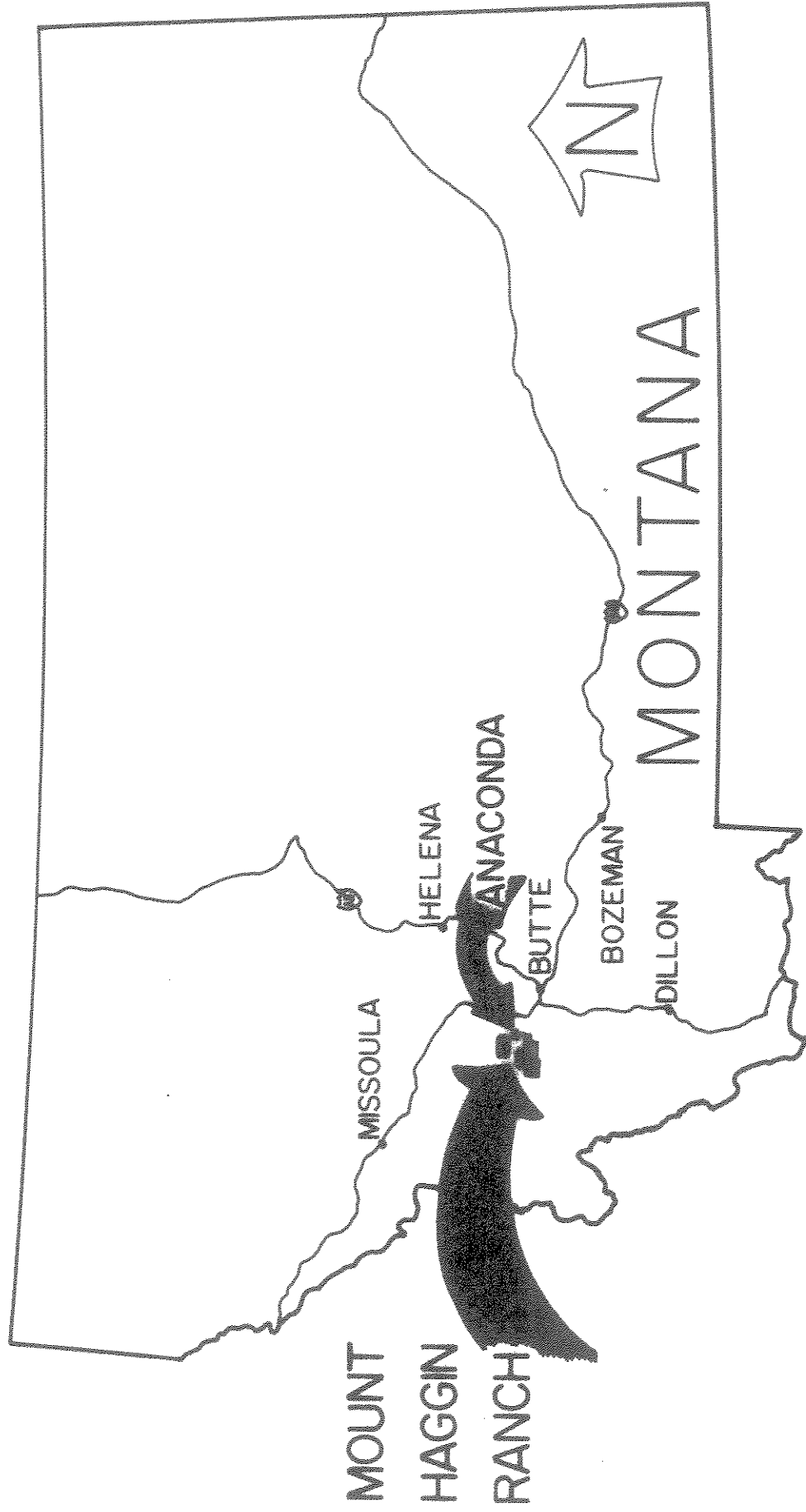
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LOCATOR MAP — MOUNT HAGGIN RANCH ACQUISITION





AGENCY IMPACT DETERMINATION  
(Negative Declaration)  
FOR THE  
ACQUISITION OF MOUNT HAGGIN RANCH

I. Description of Proposed Action

A. Approximately 112,000 acres of the 152,000 acre Mount Haggin Ranch will be purchased in two phases through the cooperative efforts of Nature Conservancy, the Bureau of Outdoor Recreation, the U. S. Forest Service and the Montana Department of Fish and Game. Up to half the value of some parcels will be donated by the current owner. See maps attached to the end of this assessment.

1. Phase one will consist of the purchase/donation of the east portion of the Continental Divide Unit by the Montana Department of Fish and Game and the purchase of Parcel B of the Continental Divide Unit by the U. S. Forest Service. Financial assistance for the entire purchase will come from the Land and Water Conservation Fund which will be used to match state funds and donated value for the Fish and Game purchase and for the entire amount of the Forest Service purchase. Phase one will take place immediately.

At this time, Nature Conservancy will secure a five year option for the purchase/donation of the remainder of the Continental Divide Unit (Parcel A) and the Lost Creek Unit.

2. Phase two will bring the remainder of the Continental Divide Unit (Parcel A) and the Lost Creek Unit into public ownership within five years as funding permits. Both parcels will be acquired by the U. S. Forest Service through Nature Conservancy with money from the Land and Water Conservation Fund. Parcel A will be donated and the Lost Creek Unit will be acquired by purchase/donation.

B. The land acquired will be managed by the U. S. Forest Service and the Montana Department of Fish and Game with the following objectives in mind:

1. The U. S. Forest Service administered lands will be studied for inclusion in the Anaconda-Pintlar Wilderness, for roadless primitive areas or for multi-use management.

2. The Department of Fish and Game administered lands will be returned to "natural areas."
  - a. Game habitat will be developed and maintained.
  - b. No domestic stock grazing will be allowed except to promote desired plant succession for good wildlife and forest management.
  - c. No timber harvesting will be allowed except to promote proper vegetation manipulation for wildlife, timber management and recreation.
  - d. Many roads will be closed; a few will be improved for public use.
  - e. Limited erosion control practices through vegetation manipulation will be adopted.
3. Both agencies will provide for a variety of recreational opportunities consistent with the ability of the resource to support such use without degradation. These will include, but are not limited to:
  - a. Mountaineering, back packing, hiking, ski touring, snowmobiling.
  - b. Hunting, fishing.
  - c. Camping, picnicking.
  - d. Nature study, scenery, wildlife and scenery photography.

## II. Description of Existing Environment

### A. Location

1. The Mount Haggin Ranch is located in southwestern Montana near the town of Anaconda.
2. It is almost entirely in Deer Lodge County except for small encroachments into surrounding counties as follows:  $1\frac{1}{2}$  square miles in south end of Powell County,  $6\frac{1}{2}$  square miles in southeast corner of Granite County, and  $8\frac{1}{2}$  square miles along the west boundary of Silver Bow County.
3. Two Properties
  - a. Lost Creek Unit. This unit surrounds Lost Creek State Park north of Anaconda, lies within the Deerlodge National Forest and contains approximately 41 square miles.
  - b. Continental Divide Unit. This unit is south of Anaconda, beginning in the foothills on the north side of the Continental Divide, across the Divide to the foothills of the Beaverhead National Forest on the south; beginning at the Anaconda-Pintlar Wilderness on the west to the Deerlodge National Forest on the east. It contains approximately 139 square miles.

### B. Visual Setting

1. High mountain peaks and ridges of bare granite or limestone raise to elevations of over 10,000' M.S.L. along the Continental Divide.
2. High mountain valleys of meadows, lakes and streams.
3. Timber covered mountain slopes.
4. Grassy foothills dissected by numerous perennial and intermittent streams to lower elevations at about 6,000' M.S.L.
5. Higher elevations are roadless or nearly roadless.
6. Populated and agricultural areas in the valley bottom along Warm Springs Creek not included in the proposed acquisition. The town of Anaconda lies midway between the Lost Creek and Continental Divide Units.

7. Vegetation varies with elevation ranging from high elevation white barked pine, alpine, fir and spruce forests, and grass and forb meadows, to lodgepole pine and Douglas fir forests of commercial size (the lowest elevations of which have been grazed, logged and are partially roaded). The foothill vegetation is mostly grassland.

## C. Physical Environment

### 1. Geology

#### a. Lost Creek Unit

- (1) Sedimentary rocks of limestone, sandstone and quartzite in west mountains.
- (2) Eastern mountains areas are igneous granites.
- (3) Faults and igneous intrusions occur in the sedimentary formations.

#### b. Continental Divide Unit

- (1) Mountains are of sedimentary limestone, sandstone and quartzite except in southeast where volcanic basalts occur.
- (2) Igneous granite intrusions and faulting occur throughout the area.
- (3) Valleys are of alluvial gravels, clays and silt of recent geologic origin.

#### c. Mineral Rights

- (1) Mineral rights to about 62% of the property are retained by the U. S. Government. The remainder are held by the Anaconda Company or to a very limited extent, private individuals.
- (2) There are no known major mineral deposits in the area. There is, however, commercial extraction of gold taking place to the west and of tungsten and gold to the southwest.
- (3) The area has been extensively prospected in the past, but no known activity is presently taking place.

## 2. Ground Water

- a. Quality high with approximately 40 parts per million total dissolved solids in springs and seeps in mountains to 700 parts per million total dissolved solids for water bearing gravels of the alluvial valleys.
- b. Ground water consists of springs and seeps mainly with gravels yielding very limited supplies even where deep.

## 3. Surface Water

- a. Also high quality. Not contaminated by mine acids or chemical fertilizers.
- b. In some limited locations, sedimentation caused by placering, road building, over grazing or other lack of vegetative cover is a problem. These are few and isolated instances, however.
- c. Surface water consists of over 20 mountain lakes, numerous ponds, 155.5 miles of trout streams, springs and intermittent streams.

## 4. Soils

- a. Soils are thin on high slopes and are of the gray ash horizons.
- b. In the valleys brown soils of deeper profile occur.
- c. Along streams dark, poorly drained soils of high organic matter are found.
- d. In the vicinity of the smelter at Anaconda (five miles from the stack) soils have, in the past, been contaminated to sterility with heavy metals. However, the two units are located far enough away so that damage there was less severe. Stack emission controls introduced about 15 years ago have permitted the affected areas on both tracts to begin to recover. Vegetation, though not thriving, is making gains each year. Browse and grass cover in the affected areas appear to be improving and pioneer tree species such as aspen are again appearing in the more severely affected areas.

## 5. Air Quality

Prevailing winds in the Deer Lodge valley at Anaconda at stack height (Anaconda Smelter) are from southwest in fall and winter, and are predominantly from southwest in spring and summer, but are recorded from all directions during that period.

Inversions occur approximately 40% of the time as an annual average, and therefore, the Deer Lodge valley has a high potential for air pollution.

The main sources of pollution in the valley at Anaconda are sulfur dioxide, which is discharged from the smelter at the rate of 722 tons per day, and particulates consisting of zinc, arsenic, lead, copper and various sulfates at the rate of 31 tons per day.

The sulfur dioxide emissions are usually within the state and federal standards but exceed those standards occasionally for short periods of time. The conditions are improving and will continue to improve as new control equipment is installed.

Particulate pollution frequently exceeds the standards but the new bag house, when completed, will remove 99% of the particulate emissions. (Emission measurements were taken in the valley.) Neither the Lost Creek Unit nor the Continental Divide Unit is "downwind" from the stack and both units are far enough away so that these emissions have not been a significant problem in recent years. Even in the early years of massive air pollution, the damage to soils and plants was much less severe on the proposed acquisition than in the valley near the smelter. The area proposed for purchase is recovering from that past pollution.

## 6. Climate

- a. Precipitation varies from 80 to 100 inches annually in the high alpine areas to less than 20 inches in the east slope valleys.
- b. Temperatures range from a maximum of 90°F. in the lower valleys to minus 40°F.
- c. The nearest recording station is in Anaconda at elevation 5,300' M.S.L. and is therefore not meaningful for the project area.

- d. Spring and early summer are usually cloudy and cool with frequent showers.
- e. Snow melt occurs in early summer for higher areas.
- f. June is normally the wettest month, February the driest.
- g. Summer skies are usually clear, but frequent thunder showers occur.

## 7. Vegetation

### a. Vegetative Types

- (1) Vegetative types within both units are essentially typical of high western mountain regions. Much of the Continental Divide Unit is above timberline with mountain tops and rocky ridges supporting only sparse alpine vegetation.
- (2) Lower elevations of both units support extensive stands of timber with lodgepole pine and Douglas fir being the predominant species. Whitebarked pine, alpine larch, spruce and aspen are also common. The understory consists of a variety of browse species, forbs, grasses and sedges.
- (3) Mountain parks and meadows are dispersed throughout the timber stands. Fescues, bluegrass and bluebunch wheatgrass are the predominant species.
- (4) Much of the Lost Creek Unit supports extensive stands of native bunchgrasses on lowlying open ridges.

### b. Vegetation Modifications

- (1) Vegetation on portions of both units has been modified as a result of sulfur dioxide and heavy metal contamination from the smelter and extensive logging of lowlying areas. During the past 15 years, the control of lethal emissions has allowed for some recovery. Pioneer species such as aspen and open stands of second growth lodgepole and Douglas fir have largely reclaimed these areas.

- (2) No extensive logging has taken place since the early 1900's, and regrowth stands of Douglas fir and lodgepole with grass and browse understory now predominate.
- c. Key Areas (Lost Creek Unit). The middle and lower bunchgrass ranges of the Lost Creek Unit provide key winter range for resident elk and mountain sheep. Pockets of chokecherry, mountain maple and serviceberry enhance the winter range for these species and provide an important winter food source for resident mule deer.
- d. Key Areas (Continental Divide Unit). Within the mid-elevation portions of this unit are found key calving grounds. During the spring of the year, open stands of timber interspersed with mountain meadows are utilized by the large Fleecer Mountain elk herd. During the summer months, elk utilize the high eastern portions of this unit, and both elk and mule deer traverse it during spring and fall migrations.

## 8. Animals

### a. Game Animals (Lost Creek Unit)

- (1) Due to great diversity in habitat types, this unit supports a variety of game species. Elk, mule deer, big horn sheep and moose are the major big game species. All of these species utilize portions of the unit year-round with elk and mule deer migrating from high alpine summer range to lower grass covered ridges and brushy draws in the winter.
- (2) Mountain sheep occur in the high country during the summer and move to lower elevations in winter.
- (3) A small mountain goat population inhabits the steep, rocky terrain in the Lost Creek drainage throughout the year, and numerous moose utilize the high marshy meadows and willow bottoms.
- (4) Black bear and mountain lion also occur in the area.



b. Game Animals (Continental Divide Unit)

- (1) Elk, mule deer, mountain goats and moose are common to this unit.
- (2) Elk utilize the high western portions during the summer and pass through the middle and eastern portions during migration to wintering areas. A portion of this unit provides key calving areas for the large Fleecer elk herd.
- (3) Mule deer also migrate through the lower areas to and from winter range and inhabit the middle and higher elevations during the summer.
- (4) Moose, although not abundant, are found in this unit along willow bottoms and adjacent forests in winter and in high marshy meadow areas and forests during other seasons of the year.
- (5) The high western portions of this unit provide year-round habitat for mountain goats.
- (6) Black bear and mountain lion also occur in the area.

c. Game Birds (Lost Creek and Continental Divide Units). Both units support the three common species of mountain grouse: blue, Franklin's and ruffed. The blue grouse are predominantly in the higher regions and on the lower ridges and slopes during the spring. Franklin's grouse occur in the forest areas while ruffed grouse are more common along the streams in the middle and lower elevations.

d. Non-game Wildlife (Lost Creek and Continental Divide Units)

- (1) A great variety of non-game animals and birds inhabit both units. An abundance of rodents and other small mammals support larger predatory species.
- (2) A large variety of birds, both resident and migratory, utilize the diverse habitat types in these units.

- (3) The stately sandhill crane nests in the southwest portion of the Continental Divide Unit.
- e. Endangered or Threatened Species (Lost Creek and Continental Divide Units). The units formerly provided habitat for grizzly bear and wolf. These species do not presently occur but habitat may support these animals in the future.
- f. Fur bearers which occur include martin, mink, beaver, muskrat, bobcat, coyote and fox.
9. Fish (Lost Creek and Continental Divide Units)
  - a. The more than twenty high mountain lakes and 155.5 miles of streams in both units provide habitat for a number of game fish species.
  - b. Cutthroat, rainbow and eastern brook trout are the predominant species and are found throughout both units. Dolly Varden are also common but are primarily confined to lower reaches of larger streams.
  - c. Smaller tributary streams in the upper drainages are utilized as spawning grounds by migratory populations.
  - d. A few of the larger drainages provide habitat for limited whitefish populations.
  - e. Fish distribution by species

DRAINAGE

Deep Creek	- 8 mi.	- cutthroat, rainbow, greyling, whitefish, eastern brook
Sullivan Cr.	- 9 mi.	- no information
French Gulch	- 4.5 mi.	- rainbow, eastern brook, cutthroat
California Cr.	- 7 mi.	- cutthroat
American Creek	- 6 mi.	- cutthroat
Seymour Creek	- 5 mi.	- eastern brook, cut- throat

(continued)

E. Fork  
LaMarche Cr. - 2 mi. - eastern brook, cutthroat

Six Creek - 4 mi. - no information  
45.5 miles

Fishing is fair to good in the lower reaches of all streams. Flows are two to four cubic feet per second.

Ten Mile Lakes - no fishery reported by Fish and Game or by the Forest Service.

Lost Creek - 11 mi. - cutthroat, rainbow, eastern brook, Dolly Varden

Tributaries - 9 mi. - utilized for spawning and rearing

Mill Creek )  
Willow Creek)- 47 mi. - cutthroat, eastern  
Clear Creek ) brook, Dolly Varden

Tributaries - 43 mi. - utilized for spawning and rearing

110 miles

Mill Lake - cutthroat - little information.

There are a number of lakes and ponds on which no information is available.

#### D. Human Environment

##### 1. Land Use

As of 1970, the major use of land in Deer Lodge County was for agricultural purposes, comprising over 60% of the land area. (It is of interest that Mount Haggin encompasses 45.5% of the agricultural land.<sup>1</sup>) Most of the remaining land area is federal non-cropland, filling 33.5% of the county, with the remainder in urban-built-up, small water areas, and other uses.

<sup>1</sup> Montana Data Book, Montana Department of Planning and Economic Development, 1970.

a. Transportation Systems

- (1) Lost Creek Unit. Only one improved road in the area, that which runs up the Lost Creek drainage and serves Lost Creek State Park. The road is graded and graveled to Lost Creek Falls. There it becomes an unimproved trail impassable except by all wheel drive vehicles. The road serves only the park and provides fire access to the high country beyond. No traffic counts were available for the Lost Creek road, although there were average daily totals on 48 traveling past Secondary 273. There were 2,045 cars per day average, with an out-of-state percentage of approximately 2%.
- (2) Continental Divide Unit. One major road, Secondary Highway 274, crosses the unit and the Continental Divide from Anaconda on the north to the Big Hole Valley on the south. This road is not maintained for winter travel except on a low priority basis. Numerous unimproved roads and trails penetrate the area, especially at the lower elevations. Traffic counts varied from 325 average daily counts near Anaconda to 180 average daily counts near the Divide (summer and fall counts) to 149 near the Big Hole River. Traffic counts on Highway 43 west of 274 are 367 vehicles and 316 vehicles east of 274, averaging out-of-state traffic at 8.2%.
- (3) Highway U.S. 10A serves east-west traffic to Anaconda in the valley but does not encroach upon either unit. 10A ranges from average daily totals of 2,985 just west of Highway 190 to 3,643 average daily totals west of Opportunity to 3,653 average daily totals west of Anaconda. Much of this traffic is for commuting to Butte.

I.S. 90, the primary carrier of Montana's east west traffic, passes east of the units between Butte to the east and Deer Lodge to the north. There are three counts pertinent to the interstate; before reaching the 10A cutoff to Anaconda, the 48 cutoff to Anaconda, and a midpoint between

these positions. Not surprising, the counts were 4,925, 3,727 and 3,348 respectively, reflective of commuting to Butte and the state hospitals from Anaconda.

- (4) The city of Anaconda is served by passenger bus transportation directly and by Amtrack rail service and Western and Northwest Airlines at Butte 30 miles to the east.
- (5) Numerous truck lines and the Burlington Northern and Milwaukee Railroads carry freight to and from the area.
- (6) The Butte, Anaconda and Pacific Railroad carries ore concentrate from the copper mines in Butte to the Anaconda Co. smelter at Anaconda.
- (7) Out-of-state traffic was measured at two locations; at Nissler Junction which is the intersection of Interstate 90 and 91, and at Garrison Junction, the intersection of 90 and 12. Nissler Junction averaged 18% out-of-state traffic, which is lower than the 35.7% figure for Garrison Junction. The Nissler figure is lower due to the larger amount of local traffic through the area.

b. Utility Systems

- (1) No major utility networks cross either unit.
- (2) One small telephone line and a local electrical distribution line cross the Continental Divide Unit near the highway right-of-way. These lines serve ranch facilities and residences between the Big Hole and Deer Lodge Valleys.
- (3) A major power transmission line corridor through the valley roughly near I.S. 90 is being studied presently. It will not cross the proposed acquisition. No corridors or services being studied or suggested leave the valley in this area.

- (4) In the valley where the town of Anaconda and the smelter are located, numerous power, gas and water lines exist. These are, at some points, visible from the two units but in all cases are some miles distant.

c. Subdivision Activity

Subdivision activity in the county was minimal in 1974 as only 34.923 acres were filed in the Clerk and Recorders Office<sup>1</sup> for Deer Lodge County. When contacted, that office stated that subdivision was slow, being mostly lots around Anaconda. No large projects were planned or started in the 70's.

2. Population Distribution

- a. As of the 1970 census, Deer Lodge County had a population of 15,652 persons, 9,771 of whom lived in the county seat, Anaconda. According to the census data from 1940, both the county and Anaconda are loosing population. (See Table 1-1.)

TABLE 1-1 Population Trends for Anaconda, Deer Lodge County, and Montana, 1940, 1950, 1960 and 1970, and Associated Change				
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
Anaconda	11,004	11,254	12,054	9,771
% change		2.3%	7.1%	(18.9%)
Deer Lodge County	13,627	16,553	18,640	15,652
% change		21.5%	12.6%	(16.0%)
State	559,681	591,024	674,767	694,409
% change		5.6%	14.2%	2.9%
Source: U. S. Bureau of Census, Census of Population, Selected Years 1940, 1950, 1960 and 1970				

Anaconda is a major population center for Deer Lodge County. After population increases in the 40's, 50's and 60's, there was a decrease of approximately 3,000 persons in the county and approximately 2,300 for Anaconda. Deer Lodge County, according to population estimates, increased by 148 persons to 15,800 between 1970

<sup>1</sup>Phone conversation, Deer Lodge County, Clerk and Recorders Office, January 31, 1975.

and 1973.<sup>1</sup> It is not known what fluxuations in the economy and the copper industry will do to the Anaconda population and Deer Lodge in the future.

- b. The surrounding counties of Silver Bow, Powell and Granite raise potential "local" users to 67,030 people. A still larger attendance area (100 miles radius) including the cities of Missoula, Helena, Bozeman and Dillon, brings the prospective recreational populace (regional) to 142,475 persons within a two hour drive of Anaconda.

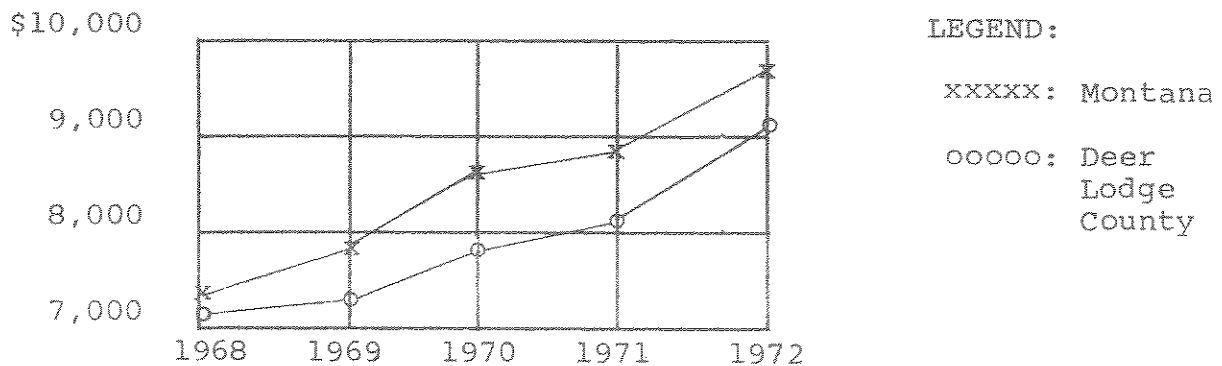
### 3. Income

Deer Lodge County has a high average income when compared to other counties in the state due to the presence of the Anaconda Company's smelter works in the town of Anaconda. (See Chart 1-1.)

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CHART 1-1  
Total Average Income, Deer Lodge County  
and Montana, 1968, 1969, 1970, 1971 and 1972

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Source: Regional Employment and Income Survey files, Department of Intergovernmental Relations, State of Montana.

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From 1968 to 1972, Deer Lodge County's average income was slightly less than the average for the state as a whole. Presently, it lags by approximately \$500 annually per worker. Current fluxuations in the copper industry would have considerable effects on the income of the county.

Data from the Employment Security Division of the Department of Labor and Industry showed a slightly different economic picture. But, this data is

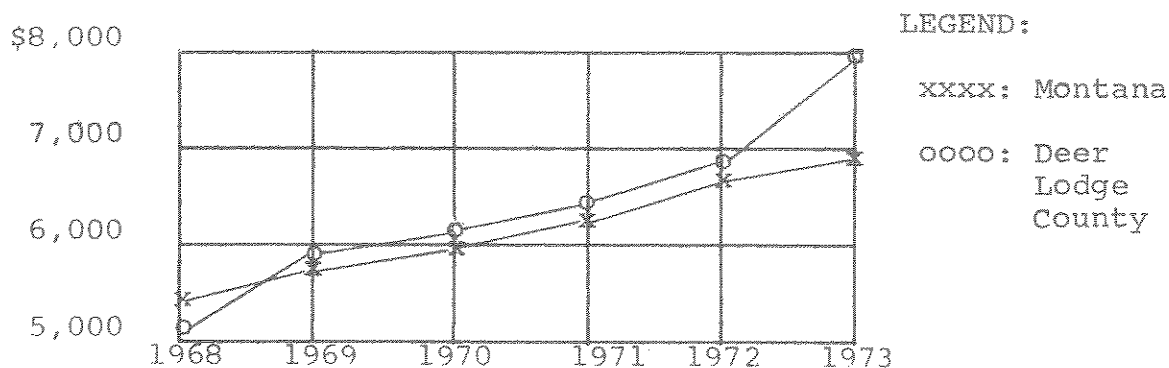
<sup>1</sup>Bureau of the Census, Current Population Reports, Population Estimates, July 1, 1972 and 1973.

based solely on employment covered by unemployment insurance and hence is less comprehensive than the Regional Employment and Income Survey data prepared by the U. S. Commerce Department. It does, however, show the economic position of Deer Lodge County and the state for this category of employment. (See Chart 1-2.)

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CHART 1-2  
Average Income from Employees  
Covered by Unemployment Insurance

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Source: Industrial Wages, Wage Earners, Employers by Counties and Industries in Fiscal 1973, Department of Labor and Industry

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Deer Lodge County has had a larger average income than Montana since 1969, making a large increase in 1973. This increase is construction employment engaged in building a new plant and making modifications at the Anaconda Company facilities. This employment continued through 1974, with completion in early 1975.

#### 4. Employment

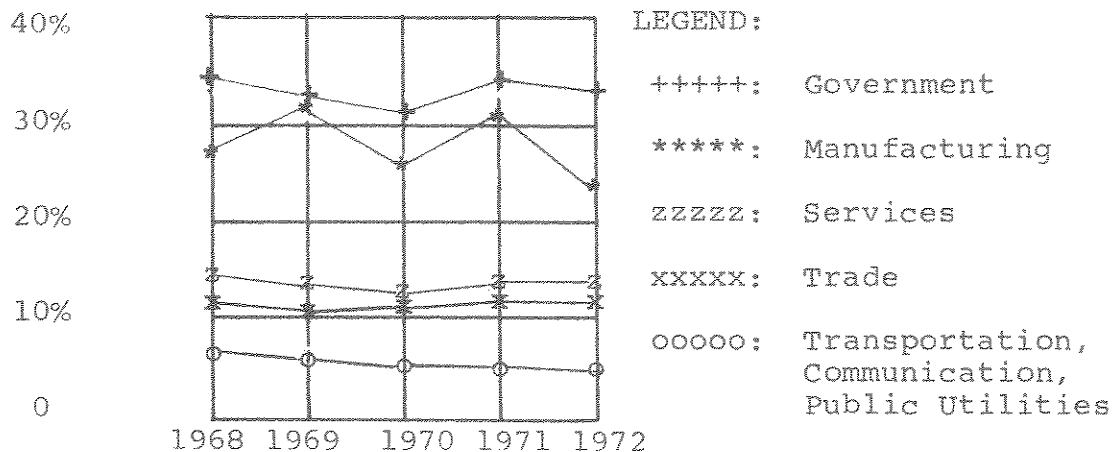
Getting substantiable data on employment by type in Deer Lodge County is difficult because of disclosure problems in the presentation of results. Federal law will not allow the disclosure of employment or income data in instances where one firm makes up the entire classification. This is the case in Deer Lodge County where the Anaconda Company controls mining and manufacturing. Hence, one must interpolate figures to gain an approximate understanding of employment by type.

Government is the largest employer in Deer Lodge County. This employment type is extraordinarily high due to the presence of Warm Springs State



Hospital and Galen State Hospital. As would be expected, manufacturing was second, receiving over 25% of the county employment. (See Chart 1-3.) Services, trade, transportation, communication and public utilities follow in respective order. Gross employment has increased from 5,460 persons in 1968 to 6,253 persons in 1972.<sup>1</sup>

CHART 1-3  
Employment by Type, Wage and Salary.  
Employment, Deer Lodge County, 1968, 1969,  
1970, 1971 and 1972. Top 5 Industries.



Source: Regional Employment and Income Survey files, Department of Intergovernmental Relations, and Industrial Wages, Wage Earnings, Employers by Counties and Industries in Fiscal 1968, 1969, 1970, 1971 and 1972, Employment Security Division, State of Montana.

Note: REIS files, except manufacturing in 1968, deleted mining and manufacturing for disclosure purposes. Data from Employment Security Division was substituted for the deleted items, making the new totals within 99.3, 98.8, 97.6, 108.1 and 98.7 percent respectively--the difference due to different specifications and other classification.

## 5. Ranch Economics

### a. Employment and Uses

#### (1) Agriculture

Since November of 1972, Ankony Angus held a contract with Mount Haggin Ranch for the grazing of cattle. They discontinued

<sup>1</sup>Regional Employment and Income Survey files, Department of Intergovernmental Relations, State of Montana, 1968-1972, Employment by Type.

operations in 1974, selling their cattle, although the exact reason for this move was not available to the writer. They had been paying \$300,000 a year for grazing rights to the property. Currently, Mount Haggin Ranch is grazing cattle although information about the locations and number of cattle was not available.

Estimates of grazing capacity show 4,000 to 6,000 animal units during the grazing season. Further, it was estimated that pasture fees run from \$.25 to \$.33 per day per aum. These figures were quoted in April of 1974, which given the present state of the cattle industry may be unrealistically high. (These are base figures for the Ankony Angus payment.)

The manager of the Mount Haggin Ranch estimated that employment ranges from 30 persons in the summer to 6 persons in the winter. He implied that these are full capacity employment figures, utilizing the grazing capacities to the fullest. Some of the grazing capacity is not included in the prospective purchase area, making an exact specification of ranch agricultural employment difficult.

(2) Timber

Current timber activity on the ranch is by Louisiana Pacific, which bought out Northern Timber and Northern's contract with Mount Haggin. As of this writing, approximately 10,000 acres have been cut, removing about 34 million board feet of timber. Forest Service personnel estimated that 90% of marketable timber has been removed from the contract area, leaving only less desirable and less accessible timber.

Little logging was done last year on the ranch, involving at the most one crew of four to six people and an associated crew of about twelve persons doing slash clean-up. The crews have been working from May to around December or January as snow levels permit.

The future of logging on the Mount Haggin Ranch is not known if this acquisition is not undertaken. Much of the marketable timber is gone and much regrowth is needed before timbering can again occur.

b. Taxes - Ranch

Personal and property taxes paid by Mount Haggin Ranch in 1973 amounted to \$54,876.07, including livestock. Property taxation on the ranch in 1974 was \$37,527.00 which includes taxes in Deer Lodge, Silver Bow, Granite and Powell Counties (92.8% in Deer Lodge, followed by Silver Bow, Granite and Powell respectively.) Personal taxes were \$15,974.00 in 1974 from Deer Lodge County. Total taxation in 1974 was \$53,501.00, a slight decrease from 1973 due to decreased cattle numbers on the ranch.

6. Recreational Opportunities

- a. The Mount Haggin Ranch and immediate vicinity (Hunting Districts 212, 213, 214 and 319) have been largely accessible for public use. The major activities and opportunities are listed below together with estimates of the recreational use.

(1) Big game hunting (1973 data)

Mountain goats	45 permits
Moose	35 permits
Elk	
Hunters	5,274
Hunter days	26,745
Harvest	738
Deer	
Hunters	5,249
Hunter days	25,827
Harvest	1,374

- (2) Upland bird hunting. No estimates of use or harvest.

- (3) Mountain lake and stream fishing. Lost Creek is the only stream for which user information is available. It had a fishing pressure of 200 fisherman days/year in 1968-1969.

- (4) Garrity Cave, a largely unexplored, beautiful limestone cavern located in the Lost Creek Unit. No user information available.
- (5) The area also provides opportunities for hiking, back packing, mountain climbing, ski touring, snowmobiling and nature study. Since this is now private property, user information is not available.

b. In addition, the property adjoins other outstanding natural areas.

- (1) Lost Creek State Park is surrounded by the Lost Creek Unit. It is a day use and camping area located in a deep limestone canyon. In addition to the beautiful and rugged canyon, Lost Creek Falls are a popular feature. A rough estimate of use is 10,000 visitor days for the summer months, the period the park is accessible.
- (2) Deer Lodge and Beaverhead National Forests. User day (12 hours); estimates by U. S. Forest Service.

	<u>LOST CREEK</u>	<u>WEST/HIGH WAY 274</u>	<u>EAST/HIGH- WAY 274</u>
Big game	500	2,000 (Mill Cr.)	500
General small game	50	200	100
Bird hunting	175	200	200
Camping	800	20	-0-
Picnicking	1,500	300	20
Lake fishing	-0-	200	-0-
Stream fishing	200	900	200
Snowmobiling	200	2,000	2,000
Horse riding	100	300	400
Cross country	50	100	50
Hiking	200	200	50
Cycling	250	250	50
Garrity Cave	100	-0-	-0-
4x4 pleasure driving	300	200	300
Gathering forest products	300	200	300
	<u>4,725</u>	<u>7,070</u>	<u>4,170</u>

- (3) Anaconda-Pintlar Wilderness. Recreation use in the wilderness is rapidly increasing. While total visitor use is still

relatively small, a wilderness experience requires great dispersion between recreationists.

<u>YEAR</u>	<u>VISITOR DAYS</u>	<u>CHANGE OVER PRIOR YEAR</u>
1970	18,500	
1971	21,700	+17%
1972	24,700	+14%
1973	26,300	+ 6%

During August 1973, the wilderness was closed because of fire danger.

- (4) The proposed Continental Divide trail will pass through the center of the southern unit.

- c. Currently, most recreationists visiting the Mount Haggin area are from the Anaconda-Butte vicinity. Since quality data is not available, only estimates can be made concerning the economics of recreation in the proposed acquisition area. The Forest Service estimated 15,965 user days in the Lost Creek Unit and the Continental Divide Unit either side of Mill and Deep Creeks (adjacent to Highway 274). If applicable data were available for western Montana, values could be assigned for the monetary reward equivalent received from spending a day hunting or fishing, for example. These figures, if available then, could be translated into economic benefits to the participants in recreational activities.

Some work has been done in selected locales estimating monetary worth of recreation, i.e. the Southeast. Values have been estimated from \$20 to \$40 for a day of fishing. Using the figure \$20/day/person, an economic value of \$30,000 for the proposed site would be realized. No attempt will be made at this point to calculate these values but simply to identify their existence.

## 7. Historical and Archaeological

No archaeological or historical sites have been identified on the area.

### III. Environmental Impact of Proposed Action

#### A. Visual Setting

1. The aesthetics of the lower regions of each property will be improved with the closing and re-vegetating of some of the numerous roads and trails. The numbers, locations and lengths of road thus affected cannot be determined until studies are performed.
2. A more natural environment will also result where better range management allows over-grazed areas to recover. (However, the greatest livestock impact has been on the lowest elevations which are not a part of the acquisition.) The situation on the proposed acquisition has been improving recently due to the relatively small number of livestock using the lower elevations as summer range. The ranch foreman was not able to provide specific information about the numbers of animals or acres involved.
3. Logging operations. As stated previously, almost all of the commercial value timber has been harvested. When the existing timber contract expires, no more logging will be permitted on Department of Fish and Game administered lands within the proposed acquisition except under carefully controlled conditions to enhance game habitat. The U. S. Forest Service will maintain areas which have wilderness and primitive characteristics and will conduct multiple-use planning studies on the remaining area under their administration.

In any event, the timber industry related activities will be greatly curtailed, if not eliminated entirely in the future as a result of this acquisition. This, too, will enhance the natural environment by eliminating the associated road and noise intrusions as well as the erosion and other problems common to logging operations. Then, of course, the scars from the actual harvests will no longer be created and those already there will heal.

4. In general, the visual setting will be unchanged or improved by the proposed action.
5. Public littering, while a problem, should not increase significantly because the area is now open to public use.

6. Fire danger, too, should not be significantly higher.

## B. Physical Environment

### 1. Geology

No environmental impact will result from the proposed action.

Due to the complex geology of this site and because of the other known mineral deposits in the vicinity, the area would be considered in the upper one-fourth of all areas in Montana of interest for mineral exploration. New methods of exploration and development are further incentives to engage in this activity. The commercial values would probably be in industrial metals rather than phosphate, etc.

Because the area has been heavily prospected in the past and no development resulted, we do not expect it to occur in the foreseeable future. However, the acquisition of this property would not preclude exploration or development as mineral rights are not a part of the acquisition.

### 2. Ground Water

No appreciable effect expected. What little effect there is should be beneficial. Allowing the logged areas to regenerate and the ground cover to proliferate should create a better watershed which will retain snow cover longer. The result should be improved, though probably not significantly improved, ground water supplies.

### 3. Surface Water

In no case will the surface water resources be degraded. In some isolated cases where overgrazing, roads or logging or old mining activities have caused erosion and sedimentation, some limited reclamation may be attempted. The objective would be to improve the stability of affected streams. However, in most cases, sound game and habitat management practices will allow natural recovery of the problem areas. The results should be continued long-range improvements to the surface water resources.

#### 4. Soils

No harmful effects expected. Beneficial effects would be realized by the reduced erosion which would result from revegetation of roads and trails, logged or over-grazed areas. This would be small in scale and mainly natural revegetation which would occur because of improved management practices.

Heavy metal contamination of soils from previous smelter operations at Anaconda will persist, but concentrations in the topsoil should gradually decrease by leaching and plant growth. If local problem areas of sufficient concentration to inhibit natural processes of rehabilitation are found, appropriate treatment of soil in the problem area may be undertaken to assist natural recovery.

#### 5. Air Quality

Air quality will not be adversely affected and could be slightly improved with the elimination or reduction of dust and noise pollution caused by timber industry activities.

#### 6. Climate

No significant effect.

#### 7. Vegetation

- a. Again, no harmful effects expected. The general condition of the grasses and browse should improve where over-use has caused degradation in the past. However, this has not been a widespread problem so dramatic changes will not occur. Long-term improvements are expected in the areas affected by the historic fume damage and the heavy mineral contamination of the soil from the reduction works at Anaconda. This recovery will occur naturally and gradually, but careful management of game species and elimination of domestic stock grazing will speed the recovery.

It is expected that the diversity of plant species will increase as soil contamination is reduced by natural processes.



- b. Forage which was formerly used by livestock will be consumed by expanded game herds which will, in turn, be harvested by hunters. Unused forage will provide litter to improve plant diversity, range conditions, lessen surface water runoff and erosion and improve water percolation and ground water supply.

8. Animals (Lost Creek and Continental Divide Units)

Long-range impacts will be beneficial.

- a. Enhancement of the basic vegetation resource, especially on winter range areas, will benefit all wildlife populations through enhancement of essential food and cover.
- b. Closer surveillance and control of off-road vehicle use will minimize winter range disturbance to game animals.
- c. Established game management procedures, including census and trend counts, vegetative analysis and controlled harvest, will assure the maintenance of healthy, productive game populations.
- d. Wildlife populations will also be benefited by putting this important habitat in public ownership and under control of the Department of Fish and Game and the U. S. Forest Service.

9. Fish (Lost Creek and Continental Divide Units)

Long-range impacts will be beneficial.

- a. Enhancement of the vegetation resource will benefit the fisheries habitat through watershed protection and enhancement of stream flow regimes.
- b. Curtailment of logging, closure of roads, control of off-road traffic and road improvement should aid in improving sedimentation and other fish habitat problems.
- c. Sections of streams disturbed through past mining and logging activities can be manipulated to accelerate natural healing.
- d. Established fisheries management procedures will assure the continuance of healthy, wild trout populations.

- e. Studies will be undertaken to establish information on the numerous lakes, ponds and streams for which there is little or no fisheries information currently available.

## C. Human Environment

### 1. Land Use

Mount Haggin Ranch is of such a large size that the acquisition by the Department of Fish and Game and the U. S. Forest Service will substantially change land use patterns in Deer Lodge County. This change in ownership will reduce agricultural lands by over 40%, changing the uses to which these lands will be put, i.e. from commercial grazing and timbering to recreational and wildlife uses and habitat.

#### a. Transportation Systems

There are no major transportation systems on the property except Secondary Highway 274 which crosses the Divide, and the gravel road to Lost Creek State Park. Deer Lodge County will retain control and maintenance of Highway 274 as in the past. Lost Creek road will receive work when funds are available for improvements. No changes are planned for the proposed acquisition, with the exception of the closure of some unimproved trails on the properties.

Major work on roads would be necessary if any major subdivision activity occurs in the area. This could eventually mean paving roads and much higher maintenance costs to keep existing roads in operable condition because of increased traffic use.

#### b. Utility Systems

The only change in utility systems would occur if increased subdivision activity were stimulated by the purchase of the proposed areas. Electricity, gas, oil and sewage facilities, for example, would need to be expanded if subdivision activity were to occur, particularly the "second-home-in-the-woods" type of development.

c. Subdivision Activity

A major impact is the potential for subdivision activity around Anaconda and the purchase lands. This potential was a primary reason in the decision to purchase these lands for the public, sensing the already increased pace of land speculation around the state. There are no large tracts of private land enclosed in the property, and much of the land is mountainous in nature. Any associated subdivision development would occur in the fringes of the purchase, particularly in the prime bottom land of the ranch which is being privately sold. Besides the impact to the land, there would be social and economic costs to the surrounding populace caused by substantial subdivision projects.

2. Population Distribution

- a. Present population trends for Deer Lodge County (and Anaconda as well) indicate a slowly decreasing population. The acquisition will have minimal effect upon these populations unless significant second home subdivision occurs.
- b. Transient populations in the area will increase as the new status of the area becomes public knowledge. Since the surrounding population (100 miles) is growing, use of the area proposed for purchase will increase. It cannot be overstated that use probably will not show substantial increases in yearly totals in the immediate future, but rather, there will be a gradual increase as more persons become acquainted with the area.

3. Income

- a. Deer Lodge County's income will be affected by the purchase of the Mount Haggin Ranch. Estimated income loss from occupations at the ranch or associated with the ranch is \$103,807.44/year. This breaks down to \$80,605.44 which would be lost from timber extraction on the ranch based upon the same level of work as in 1974. 1974 employed one crew of four persons and twelve persons doing slash clean-up. An average wage of \$139.94/week was used to calculate the income loss,

using six months time for the crew and two months for the slash clean-up. Now, this is an upper limit estimate since most marketable timber has been harvested and assumes the timber contract is cancelled. Also, slowdowns in the timber industry could have detrimental effects upon harvests in isolated areas, as are many of the remaining areas of the Mount Haggin Ranch.

- b. Agricultural income lost to the county is estimated at \$23,202.00 based upon information supplied from the ranch manager and the acreage of the ranch. It was assumed that the capacity of the ranch is 4,000 head of which 1,000 can still be run on the remaining portion of the ranch not sold. (The prime portions of the ranch land are not going to be sold, but will remain in the hands of Mount Haggin.)
- c. It was estimated that three permanent persons and eighteen part-time persons would be displaced by the purchase, at an average yearly income of \$3,867.00. The part-time persons were assumed to be employed two months per year.
- d. On the positive side, the Department of Fish and Game would hire a full-time game manager at a yearly wage of \$12,500 to \$13,000. Potential Forest Service employment is not known at this time since their anticipated use of the area is subject to study.

#### 4. Employment

Employment impact will be the loss of seven full-time positions and thirty part-time jobs, or the comparable loss of eight year-round jobs. (The difference is due to the full-time status in the timber sector representing six months in the woods.) The decrease in the timber employment has been gradually occurring as the area becomes more depleted and the usable timber more scarce. This means the loss of employment would have occurred in a short time even if the timber contract is not cancelled. Information on whether the ranch workers are mainly summer/student help in the part-time situation, or if any of the displaced workers can be used elsewhere in the ranch was not available at the time of this writing.

## 5. Ranch Economics

- a. The Department of Fish and Game will pay Deer Lodge County all property taxes on their acquisition land, which is an estimated \$18,552.55 based on 1974 property taxes. The remaining land acquired by the U. S. Forest Service will not produce property tax revenues. However, if grazing or timber harvesting occur on these lands, 25% of these revenues will go to Deer Lodge County.
- b. Losses of personal property and livestock taxes are estimated to be \$11,980.75 based again upon 1974 figures. These figures were derived by assuming a resulting livestock capacity and tax base which is 25% of the original capacity, and personal property and livestock taxes (\$15,974.00).
- c. Therefore, based upon 1974 figures, an estimated \$28,236.00 of tax revenue per year will be lost to Deer Lodge County from the Mount Haggin Ranch acquisition.

## 6. Recreational Opportunities

- a. The preservation and enhancement of outdoor recreation activities would be the most significant beneficial impact. This activity will increase at least as fast as population growth and will probably exceed population growth as the resource is improved.
- b. All existing opportunities will be enhanced by the proposed action.
  - (1) Big game hunting and upland bird hunting will be improved through improved habitat and proper control of access and hunters.
  - (2) Fishing will be improved as proper land management allows stream banks to heal and shoreline vegetation to recover. These benefits will be small as the existing fishery is good in most cases.
  - (3) Garrity Cave can be protected, explored and developed if found desirable.

- (4) Scenic vistas which are important to hikers, back packers, mountaineers, cross-country skiers and most other outdoor recreationists will be preserved and enhanced. This will result from natural revegetation after unnecessary roads and trails are closed, logging is stopped and domestic grazing is eliminated.
- (5) Access to and the integrity of the east end of the Anaconda-Pintlar Wilderness will be preserved.
- (6) Possibly developed sites for camping and picnicking would eventually be added in compatible areas.
- (7) In addition to the closing of unnecessary roads, others will be improved for better access, aesthetic appearance and erosion control.
- (8) Again, the most important impact is the perpetuation of this natural area for public use.

## 7. Historical and Archaeological

Even though no sites have been identified on the proposed acquisition, the possibility remains that there may be significant features present. If there are, the impacts on these yet unidentified sites should be beneficial or insignificant. Preserving the property as a natural area is the best way to protect these potential discoveries.

#### IV. Mitigating Measures Included in the Proposed Action

- A. Control of access and some types of use such as snow-mobiles and trail bikes and all terrain vehicles will help to offset damage to terrain that the anticipated increased public use will bring. Roads and trails which are to be used will be maintained to minimize erosion.
- B. Litter containers at developed areas and educational signing to "pack out what one packs in" will help offset the increased littering which will result from increased public use.
- C. The Department of Fish and Game pays counties in lieu of taxes on real property. This will mitigate approximately 50% of that tax loss. It should also be noted that the commissioners and legislative representatives of Deer Lodge County, as well as various other officials in the adjacent counties, have voiced approval and vigorous support of the proposed action.

While the U. S. Forest Service does not pay in lieu of taxes, 25% of the revenue which may be derived from timber sales or grazing leases in the future will be rebated to the counties involved. No estimate can be made at this time except to say the revenue will be minimal.

V. Unavoidable Adverse Impacts

- A. Regardless of controls exercised, some damage to soils and vegetation will occur due to increased use.
- B. Litter will probably continue to be a problem and could be expected to increase with use despite public education campaigns, use of litter barrels and enforcement.
- C. It is estimated that \$28,236/year in taxes will be lost to Deer Lodge County. Due to the limited size of the purchase in Powell, Granite and Silver Bow Counties, the impacts there will be insignificant.
- D. It is estimated that \$91,307.44/year will be lost in personal income from the purchase of the ranch. It should be noted that these employment opportunities were decreasing at the ranch and hence the dollar value would have decreased by itself without the purchase.
- E. The equivalent of eight year-round/full-time jobs will be lost each year. Again, the industries were declining and eventually the jobs would have been phased out anyway.



## VI. Short-Term Use Versus Long-Term Productivity

There is no conflict here. The short-term use will enhance the long-term productivity by perpetuating the natural resources of the area. Non-renewable resources will be untouched. Careful harvesting of some renewable resources such as game animals will increase their numbers while at the same time improving habitat.

## VII. Irreversible and Irretrievable Commitments of Resources

- A. A lesser harvest of presently harvested renewable resources could be expected. It should be noted that the harvest of the renewable resources has been declining in recent years. The most accessible timber has been cut and only about 10% of the merchantable timber on the existing contract remains. It is unlikely that much of that timber would be taken. As pointed out earlier, the agricultural economic base for the ranch is less sound than for other private uses to which it could be put. Consequently, the renewable resources may not be harvested to a great extent even if the property remained in private ownership.
- B. Fuel consumption by recreation users will increase but will be offset at least in part by decreased agricultural and industrial activity.

## VIII. Alternatives to the Proposed Action

### A. No Action

While the Mount Haggin Ranch is now quite accessible and open to the public, it is unlikely that buyers from the private sector would leave it so. The current market value of the ranch exceeds its economic value for agricultural or timber production. The private buyer would probably have one of two motives for purchase. One motive would be the tax advantage of the non-profitable agricultural enterprise plus a private hunting estate. This type of buyer typically closes all private land to the public and blocks access routes to the national forests. The second motive would be profit through subdivision and development. Public purchase of these lands would be the best way to preserve their long-term productivity and public use for future generations.

### B. Acquire Less Land

This is less desirable for the following reasons:

1. The land now described is important for the proper management of animal and land resources both on the property and on adjacent public lands.
2. The land now described provides continuity and guarantees access to existing public lands.
3. All of the land now described contains important natural features and resources which are of value recreationally. A small parcel would limit the tremendous variety of opportunities and resources now available in the large tract. These include alpine peaks, lakes, streams, meadows, forests and foothills. The size alone is an important value which assures the user "elbow room," open space and solitude if he desires it.
4. The seller is not interested in selling the area on a selective basis, and even if he were the price per unit area would be much higher. One economic unit, the low valley agricultural land, has already been excluded from the proposal.



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