

Appendix I

ASSESSMENT
OF THE PROPOSED
EXCHANGE OF DEPARTMENT LANDS
FROM THE ST. MARIES WILDLIFE MANAGEMENT AREA
FOR BURLINGTON NORTHERN INCORPORATED LANDS
IN THE SNOW PEAK-CANYON CREEK AREA IN SHOSHONE COUNTY, IDAHO

A REQUIREMENT OF
FEDERAL AID TO WILDLIFE

IDAHO DEPARTMENT OF FISH AND GAME
600 SOUTH WALNUT STREET
BOISE, IDAHO

September, 1981

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SUMMARY

The United States Forest Service (USFS) in 1979, completed a detailed study (RARE II) of the Mallard-Larkin roadless area in northern Idaho to make recommendations to the federal administration and Congress for management classification. Their recommendation for wilderness designation excluded a 51 square mile northern segment of quality elk hunting area in Canyon and Spotted Louis Creeks. The Governor has approved the USFS recommendations "with certain boundary adjustments," but the 51 square mile exclusion was not specifically named. Congress has taken no action to date. 1

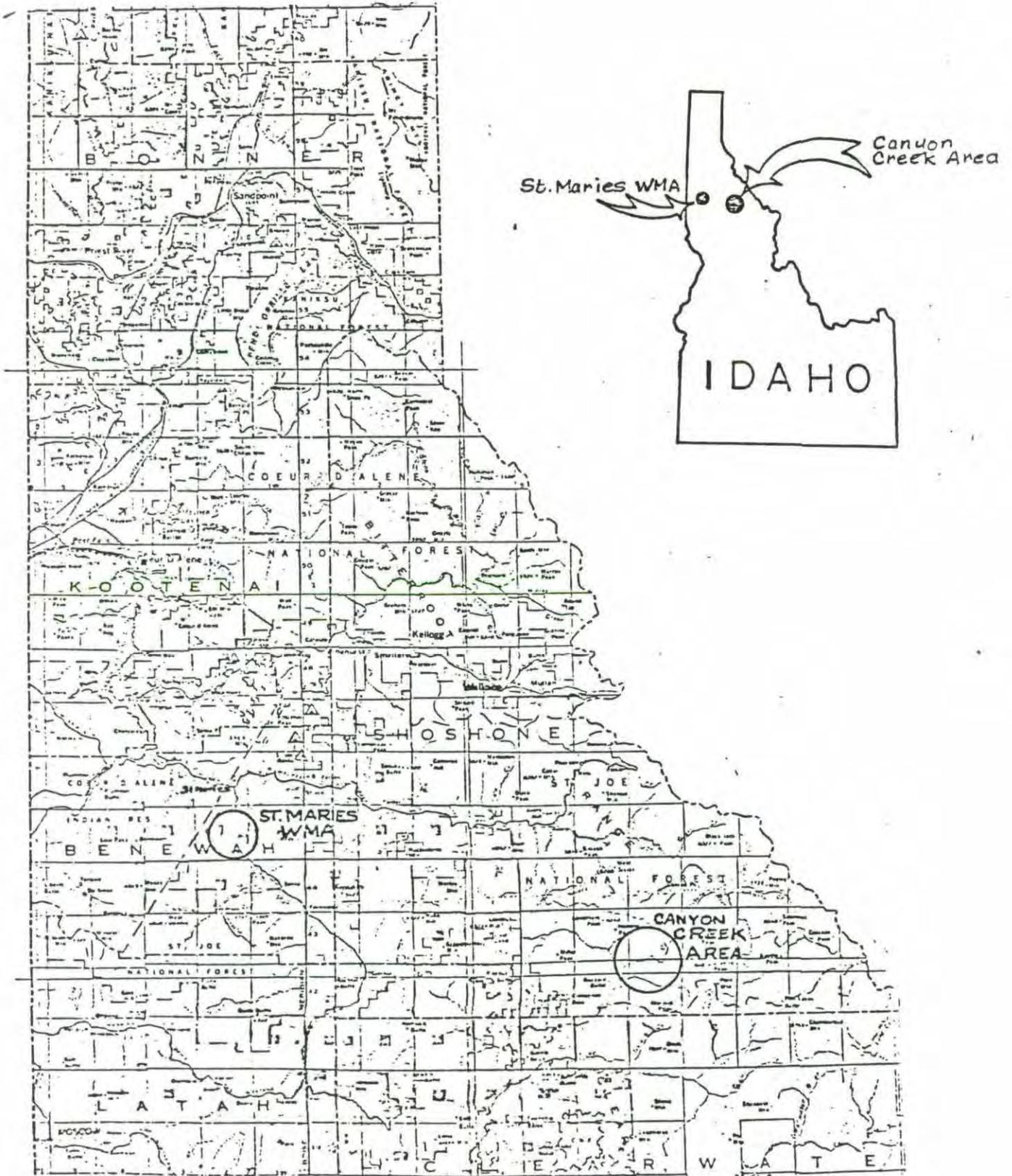
The Department of Fish and Game (Department) and Fish and Game Commission objected to the USFS exclusion and petitioned them to continue managing the area as "roadless." The USFS denied or deferred all Department requests and issued a road right-of-way to Burlington Northern Incorporated (BNI) that would allow them to log one or more of the privately-owned sections. BNI threatens to log all of their land in Canyon Creek, but there has been no logging to date in Canyon Creek although there is a road through several of their sections.

The only viable alternative, apparent at this time to the Department, is to exchange Department timber lands for BNI lands in Canyon and Spotted Louis Creeks. However, this would not completely protect the area as the USFS will not assure the Department that they will not log the intermingled U.S. lands. The only Department lands acceptable to BNI are the heavily-timbered lands within the St. Maries Wildlife Management Area. The Department has long range plans to log these same lands to open the conifer canopy to improve wildlife habitat and produce revenue. Deer and elk use of the heavily-timbered north slopes is limited now but use will increase considerably after part of the canopy is removed and there is more browse produced. BNI would manage for timber production and not deer and elk feed and cover. They have said they would continue to allow public access. 2 3

Wildlife and hunting information is limited for Canyon Creek but questionnaire returns indicate 280 hunters spent 2000 days hunting elk, deer, grouse and bear in the area in 1980. The Department regional staff estimates 400 elk summer and 200 elk winter in the area. They also estimate half of the elk and all of the quality hunting would be lost if the area is roaded and logged. Considerable watershed and fisheries values are also involved. 4

A recent timber cruise indicates there is about 60 million board feet on the St. Maries WMA lands that might be traded of which approximately 40 million board feet is marketable. The exchange would be completed on the basis of equal dollar value. 5

Public reaction in north Idaho is varied. Conservation groups generally favor the exchange, while the concerned county commissions and most of the people that hunt on the St. Maries WMA are opposed. 6



MAP 1. GENERAL LOCATION OF ST. MARIES WILDLIFE MANAGEMENT AREA AND SNOW PEAK-CANYON CREEK AREA.

I. INTRODUCTION

A. Purpose and Needs

The Department desires to continue to provide high quality hunting and fishing in a 51 square mile area in southeast Shoshone County. The area of concern includes all of the Canyon Creek drainage and the south side of the Spotted Louis Creek drainage that are tributaries to the Little North Fork of the Clearwater River. The area is owned, in a checkerboard pattern, by the United States and BNI, a land and timber holding company. The United States lands are administered by the Idaho Panhandle National Forests.

BNI personnel have stated they will enter the area with roads to extract white pine (Pinus monticola), Douglas fir (Pseudotsuga menziesii) and Grand fir (Abies sp.). Road building and logging, along with the expected increase in public use, would drastically reduce the quality of the hunting and fishing. Wildlife carrying capacity, particularly elk and deer, would be reduced during the entire time of logging and for several years thereafter. Elk hunters would enjoy better success for a few years, but the better access and fewer elk would cause a decline in success and ultimately fewer animals would be harvested. The feasibility of large scale logging in Canyon Creek is questionable at this time, but if the timber proves valuable enough, logging could begin there in 1981 using the existing road and rights-of-way through the upper portions of Buck and Canyon Creeks.

BNI already has access into one of the upper Forest Service land sections in Canyon Creek (granted May 9, 1980). If timber harvest is essential and economically feasible, USFS could require alternate methods of logging than by road. Even if the USFS does not allow further access, BNI could still log their lands that abut on the Bathtub Mountain-Surveyor's Ridge Road (Map #2 - USFS Road #201).

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Discussions during the past several years between the Department's Regional staff and the Panhandle National Forest have failed to convince the USFS of the importance of the area for quality elk hunting and the need for positive action to prevent degradation.^{1/} The Department, right now, is reluctant to assume that BNI will not take advantage of the road rights-of-way already granted by the USFS, even though present timber harvest costs from this remote area may equal or exceed log

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^{1/} Correspondence - Supervisor, Panhandle National Forests, Ralph Kizer, to Regional Supervisor David Neider, Region 1, Idaho Department of Fish and Game, November 10, 1980.

values. If higher level negotiations are also fruitless, the Department has no other way except to acquire title or wildlife easement to about 10,700 acres of lands in the Canyon and Spotted Louis Creeks drainages if the elk, deer and bear hunting quality and the existing wildlife and fisheries values are to be preserved.

BNI is not interested in selling lands, but is interested in trading for timber lands of equal value that are closer to a mill within the company's area of operation. The only suitable Department lands are the north slope portions of the St. Maries WMA in Benewah County (Map #3). BNI has also shown an interest in trading for USFS lands in the same general area.

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The act of exchange would have no significant impact on the natural environment of either area.

B. Laws, Goals, Directives

1. Laws --

Three Idaho laws are particularly pertinent to this acquisition. Title 36, Chapter 1 of the Idaho Code Statute (36-103), directs the Fish and Game Commission to preserve, protect, perpetuate and manage all the wild animals, wild birds and fish within the State of Idaho. Statute 36-104 grants authority to acquire land and waters suitable for fish and wildlife restoration, propagation and protection, and for public hunting and fishing areas by purchase, condemnation, lease, agreement, gift, exchange or other device.

Title 36, Chapter 18, allows the State to participate in the federal aid to wildlife program funded by excise taxes on arms and ammunition (PL 415, 75th Congress). Federal regulations stipulate acquisition and disposal procedures.

2. Department Goals and Policies --

Policies established by the Fish and Game Commission applicable to this acquisition include:^{2/}

"The need to acquire critical elk habitat in Idaho is recognized as an important part of a comprehensive elk management program. A land acquisition priority system will be designed and critical elk habitat acquired by the Department when available and economically feasible, in accordance with this system."

^{2/} Goals, Objectives and Policies, Volume 1, 1975-1990, Idaho Department of Fish and Game - published January, 1978.

and

"It is recognized that additional road access into big game areas is no longer desirable and, in some areas, the amount of roading is already detrimental to big game habitat and hunting. Construction of additional permanent roads into big game areas will be opposed and physical and/or legal closures of all existing and future unnecessary roads within these areas on U.S. Forest Service, Bureau of Land Management and State of Idaho lands will be advocated and supported."

3. Directives --

The St. Maries WMA was acquired with 25 percent license funds and 75 percent federal matching money from the Pittman-Robertson Federal Aid to Wildlife program. The policies of this program, administered by the U.S. Fish and Wildlife Service, must be followed in land acquisition or disposal where federal aid to wildlife is used. The present policy is that "Lands declared surplus and disposed of must be replaced in-kind or better (wildlife habitat) within three years of the disposition or the program must be reimbursed for the fair market value."^{3/}

The Idaho Fish and Game Commission must approve the exchange, declare the land surplus to Department needs and submit the proposal to the Idaho State Board of Land Commissioners. The Fish and Game Commission agreed in principle with the exchange and directed the Department, on October 25, 1979, to continue the appraisals and negotiations.

4. Interpretations --

The Canyon Creek drainage was included in the recent USFS Roadless Area Review and Evaluation Process (RARE II) as part of the Mallard-Larkin Unit number 1-300. After the review, the USFS recommended an area of 156,068 acres be designated as wilderness but Canyon and Spotted Louis Creeks, immediately north of the area, were excluded.

The Fish and Game Commission petitioned the Governor to recommend inclusion of the Canyon Creek drainage in his recommendations to the Secretary of Agriculture on administering Idaho's roadless areas.^{4/} Idaho Governor John Evans recommended to Secretary of Agriculture Bob Bergland on March 15, 1979, the Mallard-Larkin Unit be designated wilderness "with boundary adjustment."^{5/} The Canyon and Spotted Louis Creek drainages were not specifically mentioned.

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^{3/} Federal Aid Manual, Federal Aid to Wildlife, Revised 1973, 50 CFR, 80.5.

^{4/} Letter to Governor Evans from Idaho Fish and Game Commission, February 20, 1979.

^{5/} Letter to Secretary of Agriculture from Governor John Evans, March 15, 1979.

The USFS entered the first road right-of-way construction and use agreement with BNI on August 20, 1969, before enactment of the National Environmental Policy Act. The USFS believes this agreement and their Organic Act of June 4, 1897, requires them to grant road rights-of-way to any BNI land. This decision was appealed by the Department, but was denied by R. Max Peterson, Chief, U.S. Forest Service.^{6/}

An opinion of U.S. Attorney General Benjamin R. Civiletti on June 23, 1980, advised the USFS on issues concerning access rights of private landowners. He concluded that the USFS erred in construing the Organic Act of 1897 provided all private landowners located in the National Forest a right of access, but he also pointed out that a Congressional land grant may have also granted right of access. Deputy Chief Thomas C. Nelson summarized the opinion to Regional Foresters.^{7/}

A California court case on RARE II areas that were not included in the wilderness recommendation and regulated to multiple use classification is very similar to the Canyon Creek problem and the USFS decision to grant a right-of-way to BNI. The California case enjoined the USFS from taking any action that would change the wilderness character until an environmental impact statement was prepared and properly reviewed.^{8/}

C. Concerns

1. Department concerns Without Trade:

- a. The major concern is the probable loss of high quality fish and wildlife habitat in Canyon Creek from roading and skidding to harvest timber, resulting in a decline of hunting and fishing quality and fish and wildlife populations. The drainages north of Canyon Creek have examples of what logging can do to prime elk range.

Roads in the Canyon Creek drainage will impact elk two ways:

- (1) Roading in the Canyon Creek drainage will increase the vulnerability of elk to harvest which will cause more restrictive harvest regulations.

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^{6/} Correspondence - Idaho Fish and Game Commission and Chief, United States Forest Service, R. Max Peterson, November 17, 1980.

^{7/} Opinion and Summary - Deputy Chief, USFS, T. C. Nelson to Regional Foresters, June 26, 1980.

^{8/} U.S. Dist. Court Judge Lawrence K. Karlton decision, Eastern District, California, January 8, 1980, Civil #S79-523.

- (2) Rooding will, besides displacing at least 5 acres of habitat per mile, disrupt movement patterns and adversely affect essential habitat components. Fern glades and wallows that are numerous on the area, are examples of special habitat components that could be destroyed by rooding.

The Department regional staff estimates that rooding and timber harvesting in Canyon Creek, as it has been done in nearby drainages, will reduce the elk population by at least 50 percent for a short time. This assumes that only half of the roads will be closed after logging and that there will still be 3 miles of open road per square mile left. The Department also assumes that both BNI and USFS will log in Canyon Creek.

A survey of Idaho hunters was conducted and published by the University of Idaho in 1971.^{9/} The survey showed most residents and nonresidents (75 and 73 percent, respectively) thought no more roads were needed in the State for big game hunting.

- b. The Department is also concerned for the fishery that could be exploited and depreciated considerably from siltation as well as increased fishing pressure.

2. Department concerns with trade:

- a. If the timbered lands of the St. Maries WMA are traded away the Department is concerned about the loss of revenue. Recent appraisals indicate the marketable timber on the lands that may be traded away has a sustained annual yield of about 1.15 MMBF.
- b. Another Department concern is that the lands traded away may not always be open to the public for hunting, particularly in those areas where there is active logging, even if there is an access covenant in the deed. 12
- c. A third Department concern with the trade is the probability that BNI would manage the newly-acquired lands for timber production and not deer, elk or grouse habitat. Timber companies in north Idaho are using herbicides, fire and conifer plantings to reduce shrub, forb and grass competition on company lands. 13

^{9/} Wildlife and Range Experiment Station Bulletin #7, Univ. of Idaho, 1971.

d. There is a question of concern to the Department of why BNI has not already logged their lands in Canyon Creek that are on USFS road #201 (Map 2), unless more log volume was needed to make logging economically feasible. 14

3. Community concerns:

a. Benewah, Kootenai and Shoshone County Commissions are concerned that the exchange is not in the best interests of their constituents. All three commissions have signed a joint resolution on file with the Department opposing the exchange. 15

b. Several St. Maries residents who hunt on the St. Maries WMA vigorously oppose the exchange because they are concerned about the possible loss of access and big game populations.

c. Most of the sportsmen in north Idaho and eastern Washington are concerned about the possible loss of quality hunting and wildlife habitat in Canyon Creek.

4. Lumber Industry concerns:

A major logging company in north Idaho that is also interested in acquiring the same timber on the St. Maries WMA is concerned that the exchange may be contrary to the intent of the National Environmental Protection Act and the Resources Planning Act. The adjacent and intermingled USFS lands in Canyon Creek were recommended for release to multiple use management by the USFS after the Mallard-Larkin (D1-300) RARE II evaluation. This company avers that single-use management by the Department of BNI lands for wildlife habitat will constrain USFS timber management to the extent that the area will remain roadless and unsuitable for timber management or other conflicting uses.

D. Consultation Description

The following consultations are pertinent to the acquisition: 16

1. Idaho Panhandle National Forest -

In 1980 there were numerous telephone conversations, conferences and correspondence with various staff members. Also, Gene deReus, Department, and Arlan Jacoby and Merle Richmond, U.S. Fish and Wildlife Service, met with John

Criswell, U.S. Forest Service, on August 13, 1980, to discuss constraints, interpretations and laws concerning management of Canyon Creek and the exchange proposal.

2. Benewah and Shoshone County Commissions -

There were informal and formal meetings, public hearings, and individual communication to explain the proposal, its losses, gains and values, culminating in a joint formal resolution, also signed by Kootenai County Commission, opposing the exchange.

3. Idaho Clearinghouse Routing and Review -

Routing will be completed prior to the Fish and Game Commission decision.

4. Conservation Organizations -

Several presentations and explanations were made to 14 sportsmen and resource-oriented organizations and many individuals in north Idaho.

5. Potlatch Corporation -

There were several letters and telephone discussions where the proposal was described.

6. Public Hearings - St. Maries and Wallace - December 3 & 4, 1980 -

The proposal was described and testimony accepted and recorded.

7. North Idaho College -

Two presentations were made describing the proposal.

8. Other North Idaho Civic Organizations -

Several presentations were made to civic clubs describing the proposal.

9. Other -

a. People attending the Governor's St. Maries "Capital for a Day" on October 31, 1980, were advised of the proposed land exchange.

- b. The U.S. Fish and Wildlife Service has been a constant reviewer and advisor on the disposal of Department lands and the acquisition of the BNI land.

II. ENVIRONMENTAL ASSESSMENT - ACQUISITION

A. Description of the Snow Peak-Canyon Creek Area

1. Vicinity --

The Snow Peak-Canyon Creek area of the proposed exchange lies in the Little North Fork of the Clearwater River drainage (Map #1). The area includes the east side of Spotted Louis Creek and all of Canyon Creek and its tributaries including Caribou, Buck, Badger, Triple and Lightning Creeks. Snow Peak at 6,760 feet and the most prominent landmark, is 18 airline miles southeast of Avery, Idaho. The entire area contains about 32,640 acres, all in Shoshone County.

2. Climate --

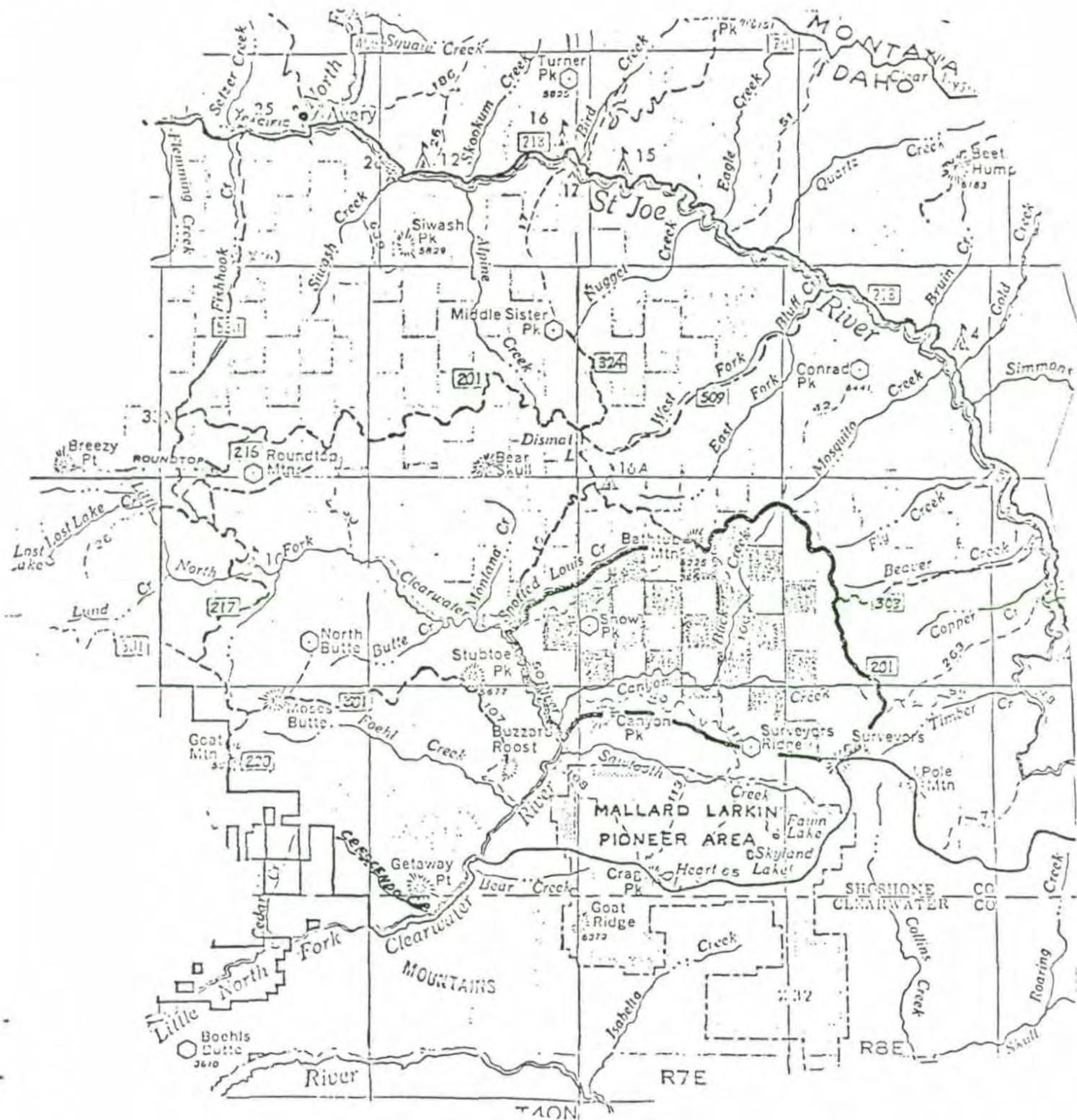
Annual precipitation in the area averages 40 inches with about 60 percent in the form of snow. In the summer, the average daily temperature is 64°F. with a range from 40 to 100°F. In the winter, the average daily temperature is 28°F. with a range from -20 to 40°F.

The first snowfall may occur by mid-September in the upper elevations. The first permanent snow is in late October most years. Snow stays in the upper elevations generally until June. The lower elevations are usually snow free from March through October. Snow depths in the upper elevations may reach ten feet.

3. Physiography --

Elevations of the area range from 2300 feet above sea level at the mouth of Canyon Creek to just under 7000 feet at Snow Peak. Forty percent of the area lies over 5000 feet. Most of the area is steep and broken with only level ground found on ridge tops. Slopes along the stream breaks usually exceed 50 percent while slopes of the general area vary from 30 to 40 percent.

The basic parent rock of the area is about half quartzite and half mica-schist. Soils in the area range from moderately to severely erosive. There is a wide diversity of



17. MAP 2. SNOW PEAK-CANYON CREEK AREA - SHOWING BURLINGTON NORTHERN INC. LANDS (SHADED)

soil on the area ranging from very shallow, rocky and droughty to deep and sometimes boggy.

There are no known commercial deposits of minerals within the area. The BNI lands are not presently open to mineral entry. The original land grant to the Northern Pacific Railroad on July 2, 1864, excluded mineral rights. (Thirty-eighth Congress, Session 1, Chapter 217, 1864.)

Prospecting has occurred in the past but there is no evidence of recent mining activity in the area. The USFS has withdrawn from mineral entry the tops of Surveyor's Ridge and Snow Peak, the area at the mouth of Canyon Creek, Granite Peak, and the area around Mammoth Springs.

4. Vegetation --

The USFS habitat types identified are Douglas Fir-Ninebark, Western Red Cedar-Pachistima, Alpine Fir-Pachistima, Mountain Hemlock-Beargrass and Mountain Hemlock-Menziesia (false huckleberry). The diversity of habitat types is highly desirable and accommodates more species and numbers of wildlife than nearby areas with less diversity.

The two Mountain Hemlock types are found near the ridge tops at the higher elevations, usually 5500 feet and over. They are considered poor producers of timber. About 25 percent of the area is in these two types.

The Douglas Fir-Ninebark type is found on the severe, south facing river break slopes. The potential growing ability of this type is normally good, but in the Canyon Creek area these lands seem unable to support young trees. The severe exposure, intense surface heats, and the loose, erodible soils, typical of these sites, probably prevent small trees from getting a start. Roughly 15 percent of the area is in this type.

The Alpine Fir-Pachistima type is found at the higher elevations generally just below the Mountain Hemlock types. This type is considered a low to medium producer of timber. It covers another 25 percent of the area.

The Western Red Cedar-Pachistima type is found at the lower elevations--usually under 4700 feet--and is considered a medium and better timber producer. This type comprises

about 35 percent of the area and contains a number of moist brushy areas. There are many snow slide tracks and areas of high surface moisture. Tree establishment is slow or improbable in many of these brush areas.

Much of the area was burned in 1910 and again in 1926. Portions of the burn areas are covered with conifers 60-65 years old. Pockets, generally in the heads of the drainages missed by the fires, are stocked with mature conifers. The severe, south facing river breaks have scattered brush with only an occasional conifer or group of conifers.

5. Wildlife and Fish --

a. Wildlife

Elk density in the Canyon Creek area is as high in the summer as any area in the Panhandle. The winter range there is limited in size and is in only fair to poor vegetative condition.

Canyon Creek is a portion of the Department's Big Game Management Unit 9 which includes all of the Little North Fork of the Clearwater River drainage upstream from Crescendo Creek on the west side of the drainage and Bear Creek on the east side of the drainage. The Department evaluates the elk population trends by winter counts when snow conditions permit. Following is a summary of these counts made on the winter range.

WINTER ELK POPULATION SUMMARY

	<u>Av. 1950-68</u>	<u>1969</u>	<u>1971</u>	<u>1972</u>	<u>1975</u>	<u>1976</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Canyon Creek	113	121	209	98	--	--	117	--	155
Unit 9	174	167	281	298	98	153	238	78	339

Although counts have varied over the years, there are at least 200 elk in the normal winter population in Canyon Creek, but elk move in and out during the winter as weather demands. The winter range should be outside the area of direct influence from any logging in Canyon Creek.

The elk summer range in Canyon Creek is presently understocked with an estimated population of 400 head (8.0 elk per square mile). The annual big game harvest there now may be 35 to 50 elk, 25-35 deer and 10-20 black bear (Ursus americanus). There are both mule (Odocoileus hemionus) and white-tailed (Odocoileus virginianus) deer in the area. An occasional moose (Alces alces) has been seen.

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Canyon Creek is one of the best black bear hunting areas in north Idaho. This is probably due in part to the large huckleberry basins with fairly consistent berry crops.

There are an estimated 35 mountain goats (Oreamnos americanus) on Snow Peak. Approximately 60 goats have been transplanted from this mountain since 1960. Smaller goat herds are found on Spotted Louis and Sawtooth Peaks. These ranges are predominantly rocky and thin soiled and are incapable of producing much timber and would be outside the area directly influenced by logging. Department management goals stress protecting and sustaining these goat herds.

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Other animals found in the Canyon Creek drainage include coyote (Canis latrans), otter (Lutra canadensis), beaver (Castor canadensis), mink (Mustela vison), marten (Martes americana), pika (Ochotona princeps), hoary marmot (Marmota caligata), lynx (Lynx canadensis), bobcat (Lynx rufus), snowshoe rabbit (Lepus americanus), and a number of smaller rodents. Wolverine (Gulo luscus), fisher (Martes pennanti) and osprey (Pandion haliaetus) are found occasionally. Golden eagles (Aquila chrysaetos) are believed to nest in the area but no nests have been located.

Upland game birds found in the area include ruffed (Bonasa umbellus), blue (Dendragapus obscurus) and spruce (Canachites canadensis) grouse. Blue grouse populations in this area are some of the highest in the Idaho panhandle.

There are several beaver colonies in Caribou, Papoose, Buck and upper Canyon Creeks.

Numerous nongame bird species are found on the area.

There are approximately 2,500 acres of big game winter range in the area of concern found mostly below 4000 feet in elevation on south facing slopes along the Little North Fork of the Clearwater and near the mouth of Canyon Creek. Most of this range is in fair to poor condition, probably accounting for the understocking of elk on the adjacent summer range.

b. Fish

Game fish in Canyon Creek and the Little North Fork of the Clearwater River include westslope cutthroat (Salmo clarki), rainbow trout (Salmo gairdneri), mountain whitefish (Prosopium williamsoni) and Dolly Varden (Salvelinus malma).

Steelhead trout spawned in Canyon Creek until 1972 when Dworshak Dam completely blocked the run.

The excellent ratio of pools to riffles make these waters highly productive. On August 15, 1973, Department personnel sampled the Little North Fork in the vicinity of Canyon Creek. A total of eight rod hours of effort yielded 89 fish for a catch rate of 11.1 fish per hour:

<u>Species</u>	<u>Number</u>	<u>Average Length</u>	<u>Largest Fish</u>
Rainbow Trout	67	9.6 inches	11.0 inches
Cutthroat Trout	18	9.7 inches	16.5 inches
Mountain Whitefish	3	12.9 inches	13.8 inches
Dolly Varden	1	11.8 inches	11.8 inches

A similar sampling was conducted in 1979. One hundred five fish in 21 rod hours of effort for a catch rate of 5 fish per hour:

<u>Species</u>	<u>Number</u>	<u>Average Length</u>	<u>Largest Fish</u>
Rainbow Trout	58	7.0 inches	11.5 inches
Cutthroat Trout	44	8.7 inches	13.2 inches
Mountain Whitefish	2	12.0 inches	12.8 inches
Dolly Varden	1	12.2 inches	12.2 inches

Water flows were higher in mid-July of 1979 than in mid-August of 1973 (a drought year). Therefore, catch rates were lower as fish were not as concentrated.

Canyon Creek was also sampled in 1979 and it provided excellent angling for 8-11" rainbow and cutthroat trout. Anglers have reported catching numerous small cutthroat in Buck Creek and its many beaver ponds.

The Little North Fork of the Clearwater is undoubtedly the last remaining river system in the panhandle that provides excellent fishing for wild trout with fairly liberal general regulations. This is due solely to the area's remoteness and lack of roads.

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Most of the Little North Fork fish spawn in the small tributaries, including Canyon Creek, because the Little North Fork lacks suitable spawning gravel. Extensive reaches of Canyon and Spotted Louis Creek contain the highest category of spawning habitat identified by the USFS in their fisheries habitat inventories. These stream sections also represent the best spawning areas in the entire Little North Fork drainage.

In addition to providing high quality rearing and spawning habitat and excellent angling, Canyon Creek also contributes to flow stability and water quality of the Little North Fork.

Siltation from roads and logging of the Canyon Creek drainage would reduce the important spawning and rearing habitat of Canyon Creek and depreciate the fishery values and aesthetics. Road access would provide considerably more public fishing opportunity and possible excessive harvest of fish stocks in Canyon Creek and the Little North Fork of the Clearwater River.

6. Rare and Endangered Species --

There are no known rare, endangered or threatened animals or plants in this area. It is possible that the Northern Rocky Mountain Wolf (Canis lupus irremotus) will be seen there in the future as several reports of wolves have been made by Clearwater National Forest personnel since 1976 (Northern Rocky Mountain Wolf Recovery Plan).

7. Human Use --

This area is enjoyed by various users including hunters, fishermen, photographers, backpackers, summer campers and sightseers.

The existing trail network (about 73 miles in Canyon and Sawtooth Creeks) with seven trailheads is sufficient access for present recreational activity. Most of the trails are also suitable for trail cycles.

It is estimated that approximately 200 elk hunters visited the area of concern in 1980. If they average a 7.1 day stay, then there were about 1400 elk hunter days expended in the Snow Peak-Canyon Creek area in 1980. It is estimated they killed 40 elk. The area is used by hunters from about September 1 when the bear season opens until about October 20 when all general hunting seasons presently close. Most of the deer harvest is made incidentally by elk hunters. It is estimated another 80 hunters spent 600 days hunting the other wildlife in the Canyon Creek area.

One licensed outfitter was available in this area in 1980. The residence of hunters using Game Management Unit 9, of which Canyon Creek is a part, is as follows:

HUNTER RESIDENCE

<u>County</u>	<u>Percent</u>
Kootenai	30
Bonner	11
Benewah	5
Shoshone	4
Other Counties	25
Nonresidents	24

A few trappers have trapped marten in the area through the years, but the remoteness and costs limit such use. Regional personnel know of only one trapper who planned to trap the area during the 1980 season.

The total number of anglers fishing this area is not known, but use may be increasing.

8. Economic and Sociological Values --

Other than hunting, fishing, other recreation and watershed, the most important economic value of the area, although

limited, is timber production. Any timber removed from the Canyon Creek area would probably be trucked to St. Regis, Montana, the closest mill, and the harvest and milling would not benefit the Idaho economy.

Conversely, Unit 9 elk hunters spend most of their direct hunting expenditure in north Idaho. Canyon Creek elk hunters may spend as much as \$114,000 each year in north Idaho.

A recent timber cruise on the BNI lands to be acquired indicated there is 115 MMBF of saw logs and pulp wood of which about 75 percent presently has commercial value (86 MMBF). Road construction costs are abnormally high in this topography. Without federal subsidy, logging may not be economically feasible.

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9. Management Needs --

The major Department goal is to maintain and manage the Snow Peak-Canyon Creek area as roadless backcountry quality elk habitat. The small elk winter range in the drainage, mostly on U.S. lands, needs improvement. After acquisition, this work could be done through a cooperative agreement with the USFS. There are approximately 1,000 acres of range which should be treated by prescribed burning, hand slashing of browse plants, hand planting of browse plants and broadcast seeding. There should also be some removal of small evergreens to retard the seral advance. The estimated costs would be \$100,000 over a five-year period. Approximately 32 percent or \$32,000 would be spent on land acquired from BNI. Range rehabilitation there would also benefit black bear as well as elk and deer.

Timber harvests could be incorporated into a management program if techniques are developed that do not require roads and are economically feasible. Timber removal, if done properly, could increase big game carrying capacity.

Watershed protection is a major consideration in any Department management plan.

B. Alternatives

1. Introduction

- a. Several alternatives were considered and rejected. These include:

- (1) Title Purchase (possible condemnation).
The alternative was rejected because BNI representatives stated they would not sell. Also the cost would far exceed the Department's land acquisition fund unless the purchase could be spread over a long period. Condemnation might not be acceptable to the people in this area.
 - (2) Wildlife Easement on BNI Land. The alternative is not acceptable to BNI since it would prevent normal management of their lands and would be similar to title purchase. Cost should be at least 80 percent of title purchase.
 - (3) Cooperative Agreement with BNI. BNI could still log and would still need roads for their logging. This is not acceptable to the Department.
- b. Three alternatives are considered in response to the concerns and needs discussed in preceding sections. These are:
- (1) USFS to trade for BNI lands and manage the block for wildlife.
 - (2) Department to trade for BNI Canyon Creek land and assume the USFS will cooperate in managing for wildlife.
 - (3) No action - Accept the possibility of limited roading in the area and that logging activity might be extended over a long period of time.

2. Alternatives Discussed

- a. The first alternative considered is that the USFS would trade BNI for their Canyon Creek land and manage the block for wildlife and recreation. The USFS would exchange National Forest land outside this block for the intermingled BNI land in the Canyon Creek area. Land appraisals and balance of values would be required. The exchange must be approved by the U.S. Congress. At this time, the USFS has not been able to consummate an exchange agreement with BNI. This alternative would not adversely affect the natural environment. Instead

the Canyon Creek area could be maintained in its present roadless condition which would satisfy the Department objectives. The environment would be somewhat enhanced with the expected vegetational development on the winter range. Without a cooperative wildlife management program and also without any habitat improvement, the elk population and the quality big game hunting would be maintained at present levels if there is no logging from roads on U.S. lands. Hunting and fishing pressures would remain the same.

The USFS will not say whether they are willing to trade land to block up U.S. ownership or what their management objectives will be until their management plan is completed in 1982.^{10/} They have already granted road rights-of-way to BNI for logging some of the private sections in the higher portions of the drainage, near the Bathtub-Surveyor's Peak road. The Department is concerned that logging will commence prior to enactment of the USFS plan. The Department and the Commission at this time are unwilling to take the chance that logging, if done, will be confined to just those lands adjacent to the existing road or that the USFS will manage for quality elk hunting after 1982. Consequently, USFS acquisition may not be a viable alternative at this time.

- b. The second alternative considered is the Department would acquire selected BNI land in the Canyon Creek area and manage them for quality elk hunting and present day wildlife and public use values. This will require appraisal of both properties, negotiations and adjustments for an equal value exchange. The exchange of land must be approved by the Idaho Fish and Game Commission, the Idaho Board of Land Commissioners, and the U.S. Fish and Wildlife Service.

The USFS has stated that they are unable to assure like management on intermingled U.S. lands if the Department acquires the BNI lands. Thus, the Department has no guarantee the USFS would not log the U.S. lands and condemn rights-of-way through the new Department lands.

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There would be no adverse environmental impact to the acquisition of the private lands by the Department. Such problems would arise only if the Department or the USFS did not acquire the private lands and BNI proceeded with their road construction and logging.

^{10/} Correspondence - Supervisor, Panhandle National Forests, Ralph Kizer, to Regional Supervisor David Neider, Region 1, Idaho Department of Fish and Game, November 10, 1980.

Without development to improve the habitat, the elk and other big game populations are expected to remain stable or to gradually decrease. Hunting pressure would stay about the same. Winter range improvement would increase stocking of the elk summer range and the additional elk would possibly attract a few more hunters.

c. No Action.

No action would mean the Department would not acquire the BNI land in Canyon Creek and would keep the lands in the St. Maries WMA. BNI might exercise the road rights-of-way across U.S. lands and harvest their timber. The Department assumes the USFS would manage the public lands for multiple use which includes timber harvesting using the same primary access roads plus additional roads to be built.

Roading and associated logging practices could reduce the summer elk populations by at least 50 percent for several years.

Elk and possibly deer harvests would increase for a few years and then drop to present levels or below. The quality of big game hunting would decrease but the number of big game hunters using the area would increase as would user days. Big game hunter success would probably be less after the first two years.

Fishing pressure would increase but catch rate and size of fish would decline. Fish production would also go down. Other uses, except backpacking, may increase with access.

Logging activity would adversely impact the environment. There would be a decrease in vegetative cover. The cut banks and fills of road construction would allow increased erosion and siltation of the streams. The vegetation would be altered and there would be the noise and dust of logging for several years.

USFS acquisition of BNI lands and subsequent management for timber production would be an alternative very comparable to "no action."

ALTERNATIVES

CONSIDERATIONS	USFS to Acquire BNI Lands		Dept. to Acquire BNI Lands	No Action	
	Manage for Public Use	Manage for Timber	Manage for Hunting & Fishing	Without Logging	With Logging
Elk Populations	+	--	++	+	--
Other Big Game	+	--	+	+	--
Hunting & Fishing Quantity	+	++	+	+	++
Hunting & Fishing Quality	+	--	+	+	--
Watershed Protection	+	--	+	+	--
Community Acceptance	++	-	+	+	-
Idaho Economic Potential	+	--*	+	+	--*
Totals	+8	-9	+8	+7	-8

* Possible logging and milling by Montana Company(s).

++ = Exceeds present levels.

+ = Equals present levels.

- = Below present levels.

-- = Far below present levels.

C. Affected Environment

The change of ownership and the management of the area for wildlife will not significantly alter the environment.

The soils, vegetation, air, water and wildlife as well as any historical or archeological sites would not be changed by Department acquisition. Vegetation manipulation after acquisition to improve carrying capacity for resident wildlife would

retard or restore seral succession. Vegetative ground cover would be as dense or more dense than it is now.

III. ENVIRONMENTAL ASSESSMENT - DISPOSAL OF PORTIONS OF THE ST. MARIES WMA

A. Introduction - Purpose and Need

The disposal would be completed only by exchange for BNI lands in Canyon Creek. The purpose and need of acquisition are described in part II. The exchange will be based on equal dollar values as determined by independent timber cruisers and land appraisers acceptable by both parties and subsequent negotiations.

The Department will retain portions of the southern segments of the St. Maries WMA that contains most of the important deer winter range. The majority of public uses, such as hunting, fishing and camping presently occur on the segments to be retained. The road developments, fence construction, and forage improvements done by the Department are also on these lands.

B. Description

The following description of the area will include the entire wildlife management area and not just the segment proposed for exchange.

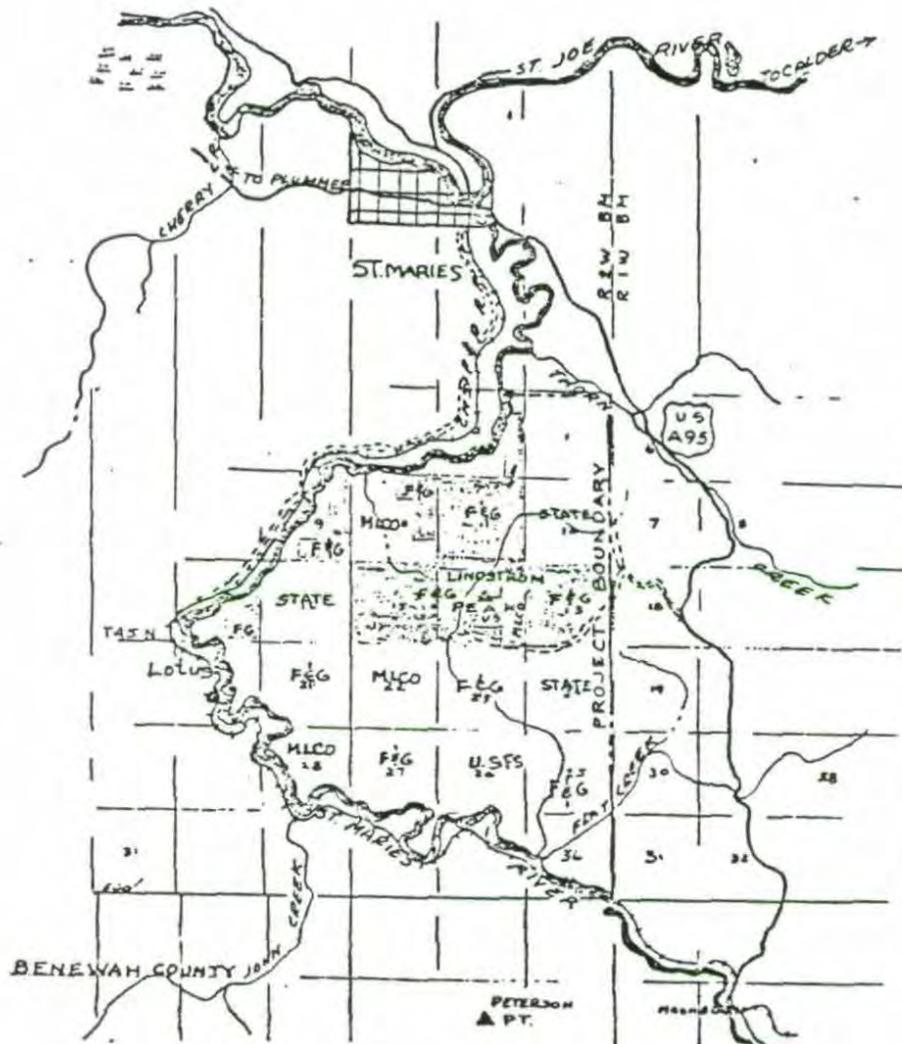
1. Location

The St. Maries Wildlife Management Area is located about five miles south of St. Maries in Benewah County. It is enclosed within the curve of the St. Maries River on the south, west and northwest, and the range line between 1 and 2 west, township 45 North, B.M. on the east. The Department owns 6,040 acres and leases 2,531 acres from Idaho Department of Lands and 2,000 acres from the Milwaukee Land Company (lands now owned by Potlatch, Incorporated). Lindstrom Peak, at 4695 feet, is the dominant landmark and is near the center of the WMA.

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2. Climate

Annual precipitation in the area averages 24 inches with about 40 percent in the form of snow. In the summer the average temperature is 64°F. with a range of 40° to 100°F. In the wintertime, the average daily temperature is 29°F. with a range of -20° to 45°F. The first snowfall may occur by mid-October.



MAP 3. ST. MARIES WILDLIFE MANAGEMENT AREA - SHOWING LANDS PROPOSED TO BE EXCHANGED (SHADED)

The first permanent snow usually falls late in November. Snow stays in the upper elevation until late April most years. The lower elevations are generally snow free from March through November. Snow depths are usually 2 to 4 feet with depths of 6 feet some years. The St. Maries River normally does not freeze above the head of navigation which is one mile downstream from the Lotus siding (See map #3).

3. Physiography

Elevations of the area range from 2130 at the St. Maries River near Lotus to 4695 at Lindstrom Peak. The two general soil types on the management area are moderately deep, well-drained sedimentary loam having a high volume of volcanic ash. They are erosive.

Huckleberry-type soils are found on protected northerly slopes, swales and flat, timbered lands and usually overlay weathered shale.

Ardenvoir-type soil is found on southwesterly exposures and on ridge tops. Weathered shale and basalt outcroppings are found throughout the area.

The north and west slopes fall steeply to the St. Maries River. The south and east slopes are more gradual and interspersed with abruptly rolling hills. There are three permanent streams within the management area. Smoke Chaser and Flat Creeks flow south from Lindstrom Peak and Syringa Creek flows north.

There is no known mineralization of commercial significance on Department land. A quartz location was filed for a portion of Section 24, T45N,R2W,B.M. but its significance is not known.

4. Vegetation

Shrub species found on the WMA, primarily on the south and east slopes, in order of abundance are: ocean spray (Holodiscus discolor), ninebark (Physocarpus malvaceous), snowberry (Symphoricarpus albus), shiny-leaf ceanothus (Ceanothus velutinus), willow (Salix scouleriana), redstem ceanothus (Ceanothus sanguineus), elderberry (Sambucus coerulea), and boxwood (Pachistima myrsinites).

The lowland habitat class is primarily cedar-hemlock with much of the uplands and wetter areas of the mid-elevations being the highly productive Douglas fir-grand fir class.

Ponderosa pine (Pinus ponderosa) is the predominant species of the dry southwest slopes and along the bluffs above the river. Alder (Alnus spp.), bog birch (Betula glandulosa), and sedges (Carex spp.) are found along the wet meadows adjacent to the streams. Western red cedar (Thuja plicata) frequently grow in the more stable stream bottoms. Dry grassy meadows are common above the river bluffs where the soils are too shallow to support taller forms of plant growth.

The north facing portion of the area is covered with dense timber stands of commercial quality timber. Species composition is approximately 17 percent Ponderosa pine, 50 percent Douglas fir and western larch (Larix occidentalis), 14 percent grand fir, 7 percent Idaho white pine, 4 percent western hemlock (Tsuga heterophylla), 5 percent western red cedar, and 3 percent lodgepole pine.

Portions of the south slopes are also covered with dense stands of timber. The balance there is fairly open stands of Ponderosa pine with grass and shrub understory and some brushfields.

Management has been directed towards opening the dense overstory by small clearcut timber sales and subsequent broadcast burning of the slash to promote regeneration of desirable browse plants such as redstem ceanothus, boxwood, bitter cherry (Prunus emarginata), mountain maple (Acer glabrum) and elderberry. This type of vegetation management has been successful for providing big game feed, but progress has been slow due to problems with Department administrative authority and the time constraints of the Department of Lands to conduct sales. Since this program was initiated in 1967, seven clearcuts totalling 105 acres have been completed. The last sale, 44 acres in 1977, was completed in October, 1978.

5. Wildlife and Fish

a. Wildlife

The resident population of white-tailed deer is estimated to be 250. Approximately 75 mule deer also live on the area. There are about 50 resident elk on the area summer and winter.

There are an estimated 30 black bear and the population is increasing.

There are an estimated 30 coyote on the WMA.

Blue grouse populations are declining with less than 25 now believed to be on the WMA just before hunting season. Ruffed grouse are common to numerous with populations probably averaging around 1,500.

Beaver are present in the marshy portions of Smoke Chaser Creek. Population numbers are restricted by the lack of available food plants. Attempts at improving the food supply with willow plantings have, so far, been unsuccessful.

There are numerous nongame species on the area.

Use of the five clearcuts on which treatment has been completed has been so heavy by deer, elk and cows that many of the more desirable plants have not survived. The drought in the summer of 1977 brought a renewal of significant trespass by domestic livestock that concentrated on the clearcuts.

b. Fish

The St. Maries River flows along the south and west boundaries of the wildlife management area and supports limited populations of rainbow, brook (Salvelinus fontinalis) and cutthroat trout. Recently, German brown trout (Salmo trutta) and kokanee salmon (Oncorhynchus nerka) were introduced into the river several miles upstream but it is not known if they are established.

Fishing in the river is good in early summer and again in the fall when flows are sufficient to provide cooler water temperatures. Fishing is poor during the low warm flows of summer.

6. Rare and Endangered Species

There is no known population of rare, endangered or threatened animals in this area. One plant on the list of endangered-threatened plants has been found on U.S. land in Section 26, which is administered by the USFS (Map #3). This is Howell's gumweed (Grindelia howellii). The plant has not been found on Department land.

7. Human Use

There are an estimated 360 fisherman days of use each year on the St. Maries River adjacent to the wildlife management area. The highest density of human use is during the first two weeks of the big game season and immediately following a snow during the hunting season, which makes hunting much easier.

Big game hunting on the wildlife management area is primarily "road hunting" and success is generally poor. Hunters willing to park and walk a short distance from roads enjoy relatively good success. To encourage quality hunting, nine logging roads and "jeep trails" have been closed to all motorized traffic. These closed roads are being improved and marked for trails for hunters and others who enjoy walking through the area.

An estimated 150 hunters use the area annually and harvest 5 mule deer, 10 white-tailed deer, 6 elk, 80 forest grouse, 3 black bear, 20 coyotes and 3 bobcats. Most of these hunters are local people that make more than one trip to the WMA each year.

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Other major uses include sightseeing, snowmobiling, picnicking, camping, hiking, horseback riding and logging access to adjacent public and private lands. These other users greatly outnumber the hunters and fishermen. Total annual user days are estimated to be in excess of 3,000.

8. Economics and Sociology

Hunters and fishermen contribute substantially to north Idaho economy but perhaps less than Canyon Creek wildlife users.

A timber cruise, completed in October, 1980, estimated 60 million board feet of timber on the St. Maries WMA. Approximately 67 percent is marketable (40 MMBF). Extraction costs would be minimal.

The private company would probably log the area faster, with larger clearcuts, than the Department and there would be more immediate economic benefits to the St. Maries community. Logging by the Department would provide the same total community values but dollar infusion would be spread over several more years than from the private operation.

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Shoshone County would lose property tax and Benewah County would gain property tax revenue in the exchange. However, the distribution of Fish and Game fine money to the counties, which is based on acreage owned by the Department in a county, would more than compensate Shoshone County for their loss of taxes. Benewah County would gain some additional property tax revenue in the trade but would lose a lesser amount of Fish and Game fine money.

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C. Alternatives

1. Rejected Alternative:

The possibility of trading timber only for the Canyon Creek land was considered but trading St. Maries WMA timber was also considered in 1973 when Potlatch Corporation proposed an exchange. At that time, the Idaho Attorney General advised the Department it was inappropriate because it prevented others from bidding on the timber.

2. Only two alternatives are viable and these are:

- a. Department to trade St. Maries Wildlife Management Area land for BNI Canyon Creek land.
- b. No action.

3. Alternatives Discussed

- a. The first alternative discussed is that the Department would trade with BNI for their Canyon Creek lands and BNI would acquire Department land on the north side of Lindstrom Peak.

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The Department management objective for this St. Maries land is to harvest timber in small clearcuts or by selective logging to increase the forage-cover ratios to provide more food for deer and elk.

Should the land remain with the Department, the rate of timber harvest would probably be accelerated after this exchange proposal highlighted this harvest need and the high dollar value of the timber. If the land is traded, BNI could harvest the timber much faster than the Department is at the present time. They would also manage the area more intensively for timber than the Department would. The Department

would, of course, manage first for wildlife. BNI has agreed to consult the Department and use timber management practices that would benefit wildlife; but if they sold the land to another party there would be no such agreement.

Public access for hunting and wildlife values might be protected by covenant with BNI, except during active logging.

b. No Action

No action would mean the Department would not trade for the BNI Canyon Creek land.

The Department would continue to sell timber in small clearcuts and by selective logging at probably a faster rate than at present.

c. Comparative Analysis - St. Maries Wildlife Management Area - Portion to be exchange.

Considerations	Disposal Alternative Analysis	
	Trade w/BNI	No Action
Deer Populations	+	+
Other Wildlife	+	+
Hunting Opportunity	+	+
Hunting Quality	+	+
Watershed and Environment	+	+
Regional Acceptance	++	+
Community Acceptance	-	+
Timber Value to Community	++	++
Revenue to Department	--	++
Net	+6	+11

- ++ = Exceeds present values
- + = Meets present values
- = Below present values
- = Far below present values

D. Affected Environment

The act of exchange or the change of ownership will not by itself affect the environment. Activities that follow, such as road building and timber harvest in either ownership, will. Cut banks, fills and other soil disturbances of road building and the immediate reduction of vegetation during logging will increase the rate of water runoff and cause some siltation of the streams. However, most streams in the area proposed for trade are intermittent. The Department is probably more conscious of their environmental responsibilities than a profit-oriented private company and there would be less adverse impact on the environment with Department administration.

The vegetation will be altered and there will be noise and dust caused by the logging for several years. The described effects will occur with both alternatives but at different rates.

Historical or archeological sites that may occur along the St. Maries River would be retained in Department ownership and protected from alteration with both alternatives.

There is no significant wetland or flood plain land in the lands to be traded.