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BOWEN CANYON BALD EAGLE SANCTUARY:

AN OVERVIEW

by

CHRIS KETCHUM

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BUREAU OF LAND MANAGEMENT
IDAHO STATE OFFICE
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Bowen Canyon Bald Eagle Sanctuary:
An Overview

by

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The northern bald eagle (Haliaeetus leucocephalus) is both a Federally- and State-listed endangered species in Idaho. Initial protection and monitoring of bald eagle roosting in the Bowen Canyon began in 1977 under the direction of District Wildlife Biologist Kurt Kotter. Mr. Kotter transferred from the District in late 1979 and was replaced in early 1980 by Willis Bird. Mr. Bird developed the Bowen Canyon Bald Eagle Sanctuary Area of Critical Environmental Concern (ACEC) and the Bowen Canyon Habitat Management Plan (HMP) in 1981 and assisted with the eagle project until he transferred from the District in early 1984.

Chris Ketchum is the Wildlife Biologist for the Deep Creek Resource Area of the Burley District. Since early 1980, he has had the responsibility for on-the-ground management activities and monitoring efforts in Bowen Canyon. Further plans for the area include more intensive studies on bald eagle distribution within the roost area, food habitats of the eagles, and physical condition of the roost trees.

Bowen Canyon Bald Eagle Sanctuary ACEC

An Overview

Bowen Canyon ACEC is located 10 miles south of American Falls, Idaho on the northern end of the Deep Creek Mountains. Its purpose is to protect the winter roost site of a significant portion of Idaho's wintering bald eagles. The ACEC sits at an elevation of about 6,000 feet above sea level. The major vegetation types in the area consist of mountain brush and stands of Douglas fir. The stands of Douglas fir are typically found on the north and east facing slopes, while the mountain brush community is usually found on the south and west exposures. Stands of aspen are also interspersed throughout the area.

The ACEC designation applies to the public land at and around the roost site (see map). However, there is also private land inter-mingled with the public land. Originally, it was thought that it would be best to acquire the adjacent private land in order to help ensure protection of the roost site. However, to date there has been no available funding for purchase of the land, nor has a suitable exchange of land been negotiated. Therefore, a cooperative agreement is to be developed with the landowner to ensure protection of lands within the ACEC area. The land owner has a personal interest in the protection of the roost site and has been very cooperative in assisting BLM with management of the area.

It was through this land owner that BLM first became aware of the roost site in 1977. As soon as BLM personnel were aware of the site, actions were begun to provide for its protection. The area was designated as an Area of Critical Environmental Concern on February 19, 1981. This was the first ACEC in the

state of Idaho. By July 19, 1981 the Bowen Canyon Habitat Management Plan was signed. It provided guidelines for proper management and protection of the area surrounding the roost site.

Management objectives developed through the ACEC and HMP processes are aimed at securing the protection of the Bowen Canyon roost site. Upon development of these plans the following objectives were generated:

1. Maintain minimum human disturbances of the Bowen Canyon Eagle Roost Area for the period of November 15 to April 15 each winter.
2. Maintain preferred roosting trees at the Bowen Canyon Roost Site.
3. Continue to cooperate with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service for the protection and law enforcement at Bowen Canyon.
4. Maintain Bowen Canyon in a manner conducive to the continued existence of wintering bald eagles.

Also developed through the ACEC were special management requirements that will help protect the integrity of the eagle habitat. The following is a list of those requirements.

1. Allow no post, pole, firewood or commercial timber sales within the ACEC area.

2. Place stipulations on oil and gas leases, phosphate and geothermal exploration and mining that would ensure the protection of eagle habitat.
3. Control commercial road operations from November 15 to April 15.
4. Close Bowen Canyon to snowmobile use from November 15 to March 15 except for research and administration.
5. Classify the ACEC area as high risk value for fire protection.
6. Acquire private lands in Bowen Canyon or develop a formal cooperative agreement with the private land owner.

If these objectives are met and management requirements adhered to, eagle habitat in Bowen Canyon should be secure.

Since BLM became aware of the roost site, periodic monitoring trips into the site have been taken throughout the winter on an annual basis. After the winter of 1978-1979 it was decided that at least three trips should be made into the roost site each winter. This would give a more accurate count on the number of eagles using the roost site. However, due to poor weather conditions and lack of funding for snowmobile rental less than three trips were made in some years. The following table summarizes the results of the monitoring efforts.

Monitoring Summary

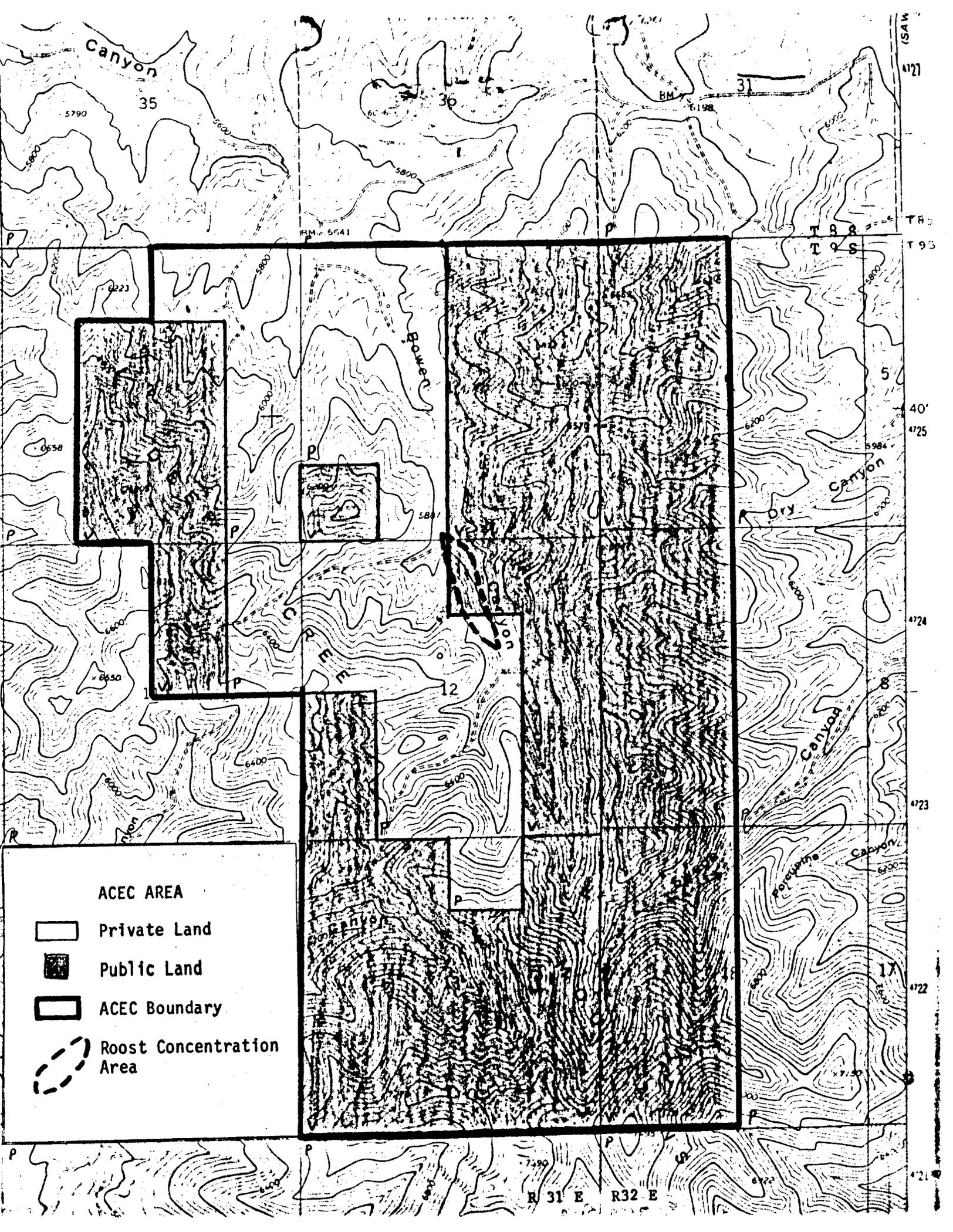
<u>Year</u>	<u>Average No. of Eagles Observed</u>	<u>Percent Immature</u>	<u>Unclassified</u>
1977-78	40	*	40
1978-79	20	*	20
1979-80	*	*	
1980-81	11	40%	6
1981-82	5	20%	
1982-83	5	40%	
1983-84	22	50%	1
1984-85	24	17%	

*No data collected or data lost

These monitoring trips have yielded more than just information on numbers of eagles. A better knowledge of the behavior of the eagles in relation to weather, alternate food sources and disturbance by snowmobiles has been gained.

At this time most objectives identified in the Bowen Canyon ACEC and HMP have been met. However, before proper management for the wintering eagles can be realized, more information needs to be gathered. Although it is assumed the eagles feed on waterfowl and fish along the Snake River and American Falls Reservoir, it is not known what the main prey base actually is. Also, it is not known how far up and down the Snake River these eagles typically hunt. In light of the recent increase in proposed hydroelectric projects in the area, this type of information is needed to assess the impacts these and other projects would have on the eagles.

In addition to the above, a more thorough search needs to be made around the ACEC for any other sites that may be used as a roost by the eagles. The area is steep and quite difficult to travel in during the winter. Therefore, it is possible that alternate roost sites are present but have gone undetected. If the preceding information could be obtained, winter habitat for the bald eagle in this area could be more effectively managed.



Canyon

35

36

31

(SAW

17)

HM 5641

T 9 S
T 9 S

T 9 S

T 9 S

5

40'

475

Dry Canyon

474

473

Roubidoux Canyon

472

471

ACEC AREA



Private Land



Public Land



ACEC Boundary

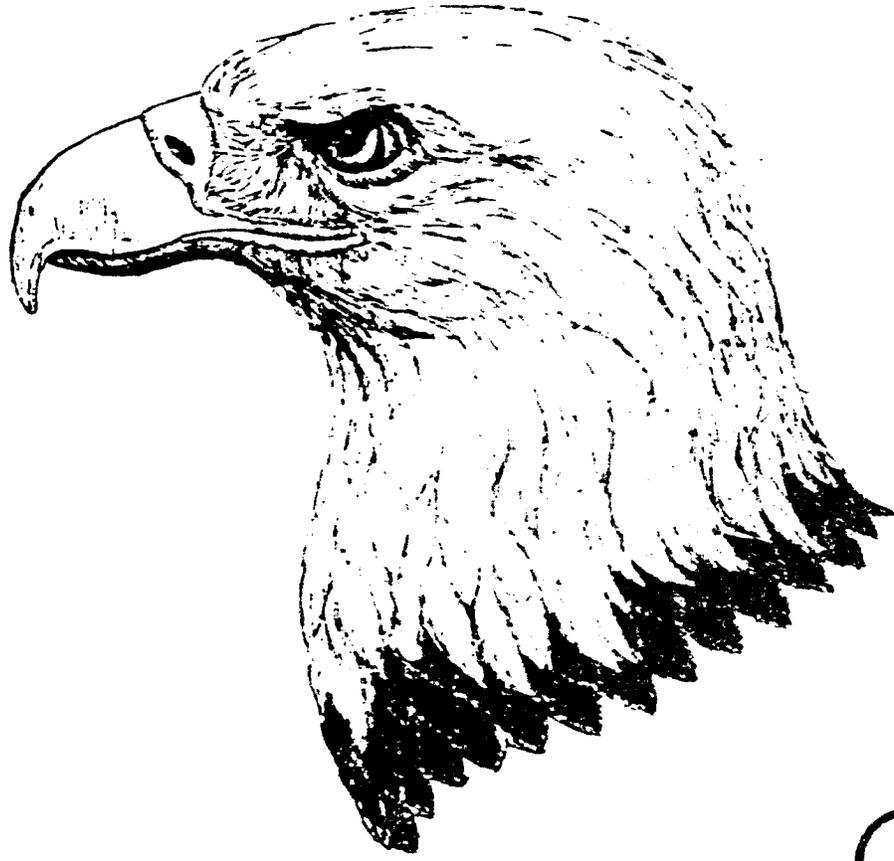


Roost Concentration Area

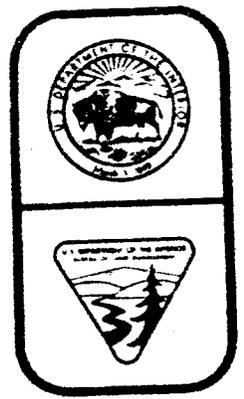
R 31 E

R 32 E

BOWEN CANYON BALD EAGLE SANCTUARY



AN
AREA OF CRITICAL
ENVIRONMENTAL CONCERN



BURLEY DISTRICT
BUREAU OF LAND MANAGEMENT

**BOWEN CANYON BALD EAGLE SANCTUARY an
AREA OF CRITICAL ENVIRONMENTAL CONCERN**

I. NAME

Bowen Canyon provides crucial wintering habitat for a significant number of Idaho's transient bald eagles. It is proposed that their winter habitat be designated as an Area of Critical Environmental Concern (ACEC) under the name Bowen Canyon Bald Eagle Sanctuary.

II. MANAGEMENT OBJECTIVES

The objective of the ACEC process is to identify, designate and manage areas within the public lands where special management is required to perpetuate unique resources or protect the public from natural hazards. Guidelines for the development of ACEC's were published by BLM in June 1980.

The management objectives for Bowen Canyon are within a framework aimed at solidifying the continued protection of habitat historically utilized by a large number of Idaho's wintering bald eagles. More specific objectives of the Plan Element are:

1. Continue to cooperate with the Idaho Department of Fish and Game, and the U. S. Fish and Wildlife Service for the protection and law enforcement of Bowen Canyon.
2. Continue to work cooperatively with the private land owner in Bowen Canyon to protect eagle habitat.
3. Manage Bowen Canyon in a manner conducive to the continued existence of wintering bald eagles.

III. DESCRIPTION

Bowen Canyon lies approximately 10 miles south of American Falls (see appendix A for a map and legal description of the area). American Falls Reservoir and the Snake River provide fish and waterfowl, the primary food base for eagles wintering in Bowen Canyon. Bowen Canyon provides roosting habitat for this population of eagles. Pockets of Douglas fir snags are used as roost trees upon which the eagles have a clear line of sight to American Falls Reservoir.

Accounts of local people indicate that bald eagles have historically used Bowen Canyon and no alternate roost sites have been recorded. Thus, Bowen Canyon is identified as crucial habitat to the survival of this population of eagles.

A. Relevance

Bowen Canyon requires the special management elements of an ACEC because the area:

1. Provides crucial habitat suited for bald eagle roosting;
2. Is conducive to the continued existence of a federally endangered species.

The Douglas fir snags in Bowen Canyon are particularly favored by wintering bald eagles. They roost at night in the canyon and feed during the day along the Snake River and American Falls Reservoir. The Bowen Canyon eagle population ranges from 40 to 60 birds, usually accounting for about 10 percent of Idaho's winter count.

B. Importance

Symbol of freedom in the United States, the bald eagle is the key species in the Bowen Canyon ACEC designation. The bald eagle first received federal protection under the Bald Eagle Protection Act of 1940. In 1973 the bald eagle was listed as an endangered species in Idaho, thus giving it further protection under the Endangered Species Act.

Idahoans are proud that their state hosts such a notable species and in such abundance compared to other states. Locally, the Bowen Canyon ACEC proposal drew no adverse comment during the land use planning process.

The Malad Management Framework Plan (MFP) recommendations which include the ACEC recommendation for Bowen Canyon received public review during 1978-80. The public was informed of the ACEC proposal and of the special management needed to protect the area. No contrary comments were received addressing the ACEC. Interdisciplinary development and review directed the evolution of the ACEC recommendation. In 1979, the U. S. Fish and Wildlife Service was formally consulted with regard to proposed BLM management of Bowen Canyon and subsequent impacts on the bald eagle. The USFWS approved the MFP recommendations for Bowen Canyon and assessed them to be of positive benefit to the bald eagles using the area.

C. Special Management Requirements

Because Bowen Canyon is crucial to a large number of Idaho's wintering eagles, special management is needed for the area to ensure the continuance of suitable habitat for present and future eagle populations. Several factors are key to protecting the area for eagle roosting. Human activity in the canyon increases each year as snowmobiling becomes increasingly popular. Indiscriminate timber harvest, mining or energy development could be disastrous to the roost site by direct habitat alteration.

The ACEC designation for Bowen Canyon calls for 2,308.08 acres; large enough to provide a buffer around the roosting sites. Many

of the roost trees are on private land. The private land owner recognizes the importance of the canyon to eagles and has, to date, cooperated fully with BLM in managing the area. The owner has expressed no willingness to sell private land holdings in Bowen Canyon but wishes to continue cooperating with BLM.

The following list describes the special management requirements that will be adopted for Bowen Canyon to protect the integrity of the eagle habitat. These requirements coincide with Management Framework Plan (MFP) recommendations for Bowen Canyon.

1. Allow no post, pole, firewood or commercial timber sales within the ACEC area.
2. Place stipulations on oil and gas leases, phosphate and geothermal exploration and mining that would ensure the protection of eagle habitat.
3. Control commercial road operations from November 15 to April 15.
4. Close Bowen Canyon to snowmobile use from November 15 to March 15 except for research and administration.
5. Classify the ACEC area as high risk value for fire protection.
6. Acquire private lands in Bowen Canyon or develop a formal cooperative agreement with the private land owner.

The special management requirements for Bowen Canyon are to go into effect upon publication of an ACEC designation notice in the Federal Register.

D. Compatible Uses

The Bowen Canyon ACEC designation is rather unique in that the key element of the designation, the bald eagle, only inhabits the area about five months each year (November 15 to March 15). During the times the eagles are not in the area most multiple use activities are compatible. The exceptions are severe habitat altering activities. Compatible activities at the times when eagles are not in the canyon include hunting, hiking, grazing, ORV recreation, and road maintenance.

Compatible activities at times when eagles are in the canyon include non-motorized recreation, limited research, and wildlife studies.

E. Incompatible Uses

As mentioned above, many activities are incompatible with the ACEC area only during the time when the eagles are present. Motorized ORV recreation would be incompatible November 15 to March 15. Activities such as logging and mining which alter habitat would be incompatible during any time of the year. BLM's Surface Protection regulations governing the Mining Laws of 1872 provide for the protection of threatened and endangered species and their habitat (43 CFR Part 3809.2-2).

F. Future Uses and Plans

The future use of Bowen Canyon is expected to continue as in the past since multiple use activities will be allowed within the framework of eagle habitat protection. Some restrictions, however, will be placed upon winter-time activities that would significantly alter eagle habitat.

For many years, BLM has recognized the importance of Bowen Canyon to wintering eagles and has managed the land for their protection. Activities affecting the area in the future include the development of cooperative agreements with the Idaho Department of Fish and Game and the private land owner in the canyon.

Upon official approval of an ACEC denoting "Bowen Canyon Bald Eagle Sanctuary" a large interpretive sign will be erected at the north entrance to the canyon. This sign will identify the area as an ACEC and explain the crucial nature of the area to wintering bald eagles. A barrier and explanatory sign displaying ORV restrictions will also be placed at access points into the ACEC area.

IV. SUMMARY

The Federal Land Policy and Management Act of 1976 cited provisions for designation of ACECs as locations where special management attention is required. Guidelines for developing ACECs were developed in June 1980. It is proposed that Bowen Canyon be designated as an ACEC under the name Bowen Canyon Bald Eagle Sanctuary.

Bowen Canyon provides crucial habitat for a unique and sensitive bird species; in Idaho the bald eagle is listed as endangered and is protected under the Endangered Species Act of 1973. Bald eagles have historically used Bowen Canyon for winter roosting and no alternate roost sites have been recorded. The special management requirements of this ACEC Plan Element are needed in order to perpetuate and protect suitable wintering habitat for about 10 percent of Idaho's wintering bald eagles.

Some of the special management requirements for Bowen Canyon that will go into effect upon designation as an ACEC include cooperative agreements with adjacent land owners and Idaho Department of Fish and Game, seasonal ORV restrictions and prohibition of severe habitat altering activities. Livestock grazing would not be affected by the ACEC designation. Some of these management requirements are in effect, others will occur following official ACEC designation. Erecting the interpretive sign and posting ORV restrictions will occur in 1981.

Appendix B

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

AGENCY: BUREAU OF LAND MANAGEMENT,
BURLEY DISTRICT OFFICE, IDAHO

ACTION: DESIGNATION OF CERTAIN PUBLIC LANDS IN THE BANNOCK-ONEIDA
RESOURCE AREA AS AN AREA OF CRITICAL ENVIRONMENTAL CONCERN
(ACEC).

SUMMARY: PURSUANT to the Authorities in the Federal Land Policy and
Management Act (FLPMA) of 1976 (43 USC 1701 and 1712) and the
Authorization from the Director received January 1979, I hereby
designate the following described public lands as an ACEC under
the name Bowen Canyon Bald Eagle Sanctuary:

Boise Meridian

T.9 S., R.31 E.

Section 1: NE1/4, SW1/4SW1/4, SE1/4	361.03
Section 2: SW1/4NE1/4, SE1/4NW1/4, E1/2SW1/4, W1/2SE1/4	240.00
Section 11: W1/2NE1/4	80.00
Section 12: E1/2NE1/4, NW1/4NE1/4, W1/2SW1/4, E1/2SE1/4	280.00
Section 13: E1/2NE1/4, SW1/4NE1/4, NW1/4, SW1/4SE1/4	600.00

T.9 S., R.32 E.

Section 6: W1/2	242.17
Section 7: W1/2	250.72
Section 18: W1/2	254.16

Total: 2308.08 acres

A copy of the ACEC Plan Element is available at the Burley BLM District
Office, Route 3 Box 1, Burley, Idaho 83318

EFFECTIVE DATE: February 12, 1981

Nick James Cozacos
District Manager

BOWEN CANYON
HABITAT MANAGEMENT PLAN
ID-020-WHA-T5

Burley District Office
Bureau of Land Management
Burley, Idaho

PREPARED BY:
Willis M. Bird Jr.

Wildlife Biologist

.2 Development of Habitat Management Plan.

.21 Required Plan Components.

A. Introduction: This Habitat Management Plan is developed as a result of a management decision resulting from the Bannock-Oneida Management Framework Plan.

The Bowen Canyon Wildlife Habitat Area (WHA) is located in Power County of South Central Idaho, and is in the Roy Arbon Planning Unit of the Bannock-Oneida Resource Area.

The purpose of this plan is to develop a management program for protection and preservation of the Bowen Canyon Bald Eagle roost area located in T. 9 S., R. 31 E., Sec. 12.

Habitat management for mule deer and forest grouse is also incorporated in this effort.

The WHA is bordered on the east by the Fort Hall Indian Reservation and to the south by the Deep Creek Mountain Range.

The west is bordered by private land along the Rockland Highway, while the north is mostly private land with a scattering of State land to the Snake River and the American Falls Reservoir (see map iii).

Elevation ranges from 7300 feet in the southern portion of the WHA to 5600 feet along the Cold Creek Canyon road to the north. Precipitation varies within the area, but the average is about 20 inches per year. There are no perennial streams within the WHA.

The WHA encompasses 13,830 acres. Land status acreage within the WHA are:

TABLE 1
Land Status by Acres

Land Status	Acres	Percent
Public Land	10,959	79%
State	1,906	14%
Private	965	7%
	13,830	100%

The vegetation types found within the WHA are: sagebrush, juniper, aspen and Douglas-fir. Plants commonly found in the vegetation types are listed in table 2.

TABLE 2
Major Vegetation Types

MAJOR VEGETATION TYPE	GRASSES	FORBS	SHRUBS & TREES
Sagebrush	Bluebunch wheatgrass Kentucky bluegrass Prairie junegrass Sandberg bluegrass Western wheatgrass Nevada bluegrass Basin wildrye Indian ricegrass Japanese bromegrass Mountain bromegrass Cheatgrass Sud dropseed	Mule's ear wyethia Balsamroot Fernleaf biscuitroot Louisiana sagewort Bosby birdbeak Spurge Longleaf arnica Yarrow Desert alyssum Yoadflax	Mountain big sagebrush Antelope bitterbrush Threetip sagebrush Black sagebrush Basin big sagebrush Common snowberry Prickly pear cactus Oregon grape Tall green rabbitbrush Broom snakeweed Greenswood Serviceberry Buckwheat
Juniper	Bluebunch wheatgrass Crested wheatgrass Cheatgrass Western wheatgrass Sandberg bluegrass Indian ricegrass Japanese bromegrass Noodgrass	Balsamroot Bosby birdbeak Low penstemon Phlox Goldenrod Larkspur	Black sagebrush Utah juniper Threetip sagebrush Antelope bitterbrush Curleaf mountain mahogany Broom snakeweed Basin big sagebrush Mountain big sagebrush Common snowberry Tall green rabbitbrush Rubber rabbitbrush
Aspen	Kentucky bluegrass Canada wildrye Pine reedgrass Basin wildrye Western wheatgrass Siender wheatgrass	Groundsel Dandelion Geranium Larkspur	Serviceberry Common snowberry Aspen Rocky Mountain maple Wood's rose Snowbrush ceanothus Syrble pachistima
Douglas fir	Pine reedgrass Carex Kentucky bluegrass Seedlegrass Basin wildrye	Jewettianice sweetroot Spreading sweetroot Rose pushtoes Bristled strawberry Yoadflax Mule's tongue Heartleaf arnica Ferdier meadowrus Marsh violet Smallflower asterwort Blue-eyed Mary Dandelion	Douglas fir Common chokecherry Rocky Mountain maple Common snowberry Oregon grape Syrble pachistima

On public land Sagebrush type consists of about 3,865 acres (35%), the Juniper type about 1,541 acres (14%) while the Aspen and Douglas-fir make up the remainder --- 5,553 acres (51%) (See appendix 1).

The WHA is located within the Indian Springs Grazing Allotment (6016) and the Walker Allotment (6006). The period of use for the Indian Springs Allotment is proposed for 6/16 - 9/30 with a total of 1983 AUM's. The permittee, Mr. Rudeen, has not used his total privileges for the past few years. The Walker Allotment season of use is 5/16 - 8/14 with a total of 150 AUM's. The Bannock-Oneida Livestock Grazing ES proposed a 55% reduction on the Walker Allotment and a 38% reduction in livestock use on the Indian Springs Allotment. The forage allocation for wildlife is 325 AUM's in the WHA.

This is a high use area for the Bald Eagle (Haliaeetus leucocephalus), a federally listed endangered species. This HMP will deal with the preservation of the bald eagle roost area located in Bowen Canyon. Prior to February 14, 1978 only the southern bald eagle, H.l. leucocephalus, was listed as an endangered species, on February 14, 1978, the U.S. Fish and Wildlife Service listed both subspecies, the northern bald eagle H.l. alascanus and the southern bald eagle as endangered. In the fall of 1980, the Idaho Department of Fish and Game also classified the bald eagle endangered.

Local residents can remember the eagles roosting in the area 15 years ago, but the birds seemed to inhabit areas further north near the Cold Creek Road. Human activity and land use changes probably forced the birds further south. Aerial photos taken in 1974 do not show the two stands of dead tree that are presently

being used. If protection measures are not taken, the birds could be forced to move to less desirable habitat, or abandon the area. A summary of eagle use in the Bowen Canyon area is given in appendix 2. The WHA is also an important area for mule deer (Odocoileus hemionus) and forest grouse (Blue grouse, Dendragapus obscurus and Ruffed grouse, Bonasa umbellus). Mule deer summer on most of the area above 5800 feet with gradual movement to the lower elevation in the winter. There are no major migration routes in the WHA. Mule deer inventories indicate that approximately 150 to 170 deer utilize the area between April and October. Use decreases to about 50 to 60 deer in the winter, November thru March.

The forest grouse utilize the higher elevation forested areas associated with meadow complexes, springs, and seeps. The forest grouse are year long residents of the WHA.

Management direction in the Malad Management Framework Plan, Step 2, influencing management of the wildlife habitat in the WHA include the following:

1. Acquire all private land in Bowen Canyon for bald eagle habitat management and protection (multiple use rec. W/L 11.1)
2. To the degree possible protect the bald eagle and roost site with stipulations on other land uses that may have an adverse effect to the population or habitat (multiple use rec. W/L 11.2).
3. Designate an Area of Critical Environmental Concern (ACEC) in Bowen Canyon within the boundaries shown with the following protective measures (multiple use rec. W/L 11.3 see appendix 3).
 - a) No post, pole, firewood or commercial timber sales.
 - b) Protective stipulations will be developed for oil and gas leases, geothermal or phosphate exploration and mining should they be necessary.

- c) Deny logging access through ACEC from November 15 to April 15.
 - d) Close to snowmobile use from November 15 to April 15 except for research and administration purposes.
 - e) Classify as high risk value for fire protection.
4. Provide quality mule deer forage by reducing competition with livestock grazing. Develop a two pasture deferred rotation grazing system, stocking rate and season of use compatible with deer needs (multiple use rec. W/L 1.2 and RM-1.2).
 5. Allocate forage to mule deer during the following seasons of use within the Indian Springs Allotment and Walker Allotment (multiple use rec. W/L 1.8).

Table 3

Wildlife Season of Use by Allotment

	4/1 - 6/30		7/1 - 10/31		11/1 - 3/31	
	#	AUM	#	AUM	#	AUM
Allot. No.						
6016	198	149	198	198	66	83
6006	26	20	26	26	13	16

6. Provide deferment or rest to forest grouse areas where livestock graze. Specific fencing recommendation are not identified (multiple use rec. W/L 6.1).
7. Determine if the phosphate deposits identified are economically significant. Permits for phosphate prospecting will be regulated by applicable stipulations (multiple use rec. M-3).
8. Maintain a degree of management that minimizes changes in the visual dominance elements (multiple use rec. R-2).

B. Management Objectives

1. Maintain minimum human disturbances of the Bowen Canyon Eagle Roost Area for the period November 15 to April 15 each year.
2. Maintain preferred roosting trees at the Bowen Canyon Roost site.
3. Maintain the present vegetative composition in the Indian Springs and Walker Allotments at 23% grass, 14% forbs and 63% shrubs (see appendix 1).
4. Enhance and maintain ponds, springs and wet meadows to insure forest grouse habitat requirements for nesting and brood rearing (see overlay 3 for habitat areas).
5. Provide water for mule deer in locations where water is a limiting factor (see overlay 5 for locations).

C. Constraints

There are no constraints in the MFP for the Roy Arbon Planning Unit which will have an adverse effect on the development and implementation of the HMP. The major problem is the inability of BLM to control public access up Bowen Canyon from the intersection with Cold Creek Canyon road to the roost site. However, this has been discussed with the private land owner, Claire Rudeen, and he is willing to work with BLM on the management of the area. Mr. Rudeen has an equal desire to protect the roost site.

Another constraint is the lack of access to the eastern portion of the allotment. The Fort Hall Indian Reservation is the only access route available.

D. Planned Action

1. Habitat Development and Improvement

Three management concepts will be discussed as a means of enhancing wildlife and habitat within the WHA. The first deals with the protection of the bald eagle roost site. The second with habitat improvements for mule deer and the third concept will deal with habitat improvement for forest grouse.

a. Protection of the Bald Eagle Roost Site.

- 1) Cooperate with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service for protection and law enforcement of the Bowen Canyon eagle roost area and the bald eagles.
- 2) Acquire, if possible, through exchange or purchase, private land in Bowen Canyon. Acquire, priority "A" lands (280 acres) for the protection of the bald eagle roost area; and acquire priority "B" lands (680 acres) to insure access control from the Power County Cold Creek Road to the eagle roost area (see appendix 3).
- 3) Continue annual aerial and/or ground surveillance of the roost site at least once a month in December, January and February to determine the amount of use the area receives and provides for surveillance and protection of the roost site.
- 4) The District Wildlife Biologist will work with the District Forester to ensure that a biologically and silviculturally sound approach is used in maintaining an adequate number of roosting trees in the area of concern.

- 5) Forest inventories have been completed on the Indian Springs Allotment. To initiate a timber harvest program and still protect the roost site, logging activities will be allowed between April 15 and November 15. Harvesting of minor forest products (posts, firewood and poles) can take place in designated areas during the same periods. No wood cutting will be permitted in the ACEC (refer to overlay 4 for potential wood harvest areas).
- 6) Enter into a cooperative agreement with the private land owner whereby the Bowen Canyon access will be closed between November 15 to April 15 of each year except for state, federal and private management activities.
- 7) A portion of the WHA, the critical bald eagle roost site, has been designated as an ACEC area. This designation provides additional management authority for the bald eagle habitat.

b. Habitat Improvement for Mule Deer

Enhancement of habitat for mule deer in the WHA will consist of water developments and maintaining the existing forage.

- 1) Water developments will provide for better distribution of mule deer and better utilization of the existing forage. Inverted umbrella type water catchments and storage facilities will be installed in water deficient areas and springs will be developed to insure a more abundant supply of water.

2) The existing forage in the WMA is in good condition and should be maintained at that present percent composition of (23%) grasses, (14%) forbs and (63%) shrubs. An intensive livestock management system, deferred or rest-rotation system will help maintain needed forage.

c. Habitat Improvements for Forest Grouse.

Enhancement of habitat for forest grouse in the WMA will consist of providing necessary habitat needs for nesting, feeding and brood rearing. Ponds, springs and wet meadows will be protected from overuse by livestock. However, they will be periodically grazed to insure their availability to the grouse.

1. Protection of wet areas in the WMA is very important for grouse in the spring for brood rearing. Fencing of the wet areas will provide the needed protection.

E. Coordination with other Programs and Agencies

Region 5, Idaho Department of Fish and Game will assist in the implementation of the HMP law enforcement protection. The FTWS will be involved because of their responsibilities in the species program. Claire Rudeen, current livestock permittee will also be a cooperater in the development of the HMP.

The implementation of this activity plan will have an impact on several resource activities in addition to wildlife habitat.

1. Timber Management

The overall timber management goal, exclusive of the ACEC, is to implement intensive forest management practices subject to economic constraints. Emphasis will be placed on precluding

large timber losses resulting from insect or disease that might develop in or adjacent to the HMP area. Thinning will be implemented where practical to maintain a healthy and vigorous timber stand. Selective harvest will be accomplished using sound silviculture practices. Every effort will be made to minimize detrimental environmental impacts associated with logging activities.

Timber harvest will not be permitted in the ACEC. The Bowen Canyon road may be used to haul forest products from the surrounding lands for the period April 15 to November 15. In order to ensure ample raptor roosting trees (dead standing douglas-fir snags), it may be necessary to periodically girdle some live trees. Once the District wildlife biologist determines that a need exists to provide an additional number of suitable roosting snags, the District ^{Area} foresters will be consulted in their selection. Every attempt will be made to preserve the genetically superior growing stock.

2. Livestock Management

There are two allotments within the HMP area involving three livestock operations. Two livestock operator's utilize the Indian Springs allotment and the Walker allotment is an individual use allotment. A two-pasture deferred rotation system is being used on the Indian Springs allotment. The proposed season of use on the Indian Springs allotment is 6/16 - 9/30. At present there is no allotment management plan (AMP) written for this allotment. However, an AMP is scheduled to be written by June, 1982. No AMP is programmed for the Walker Allotment in the near future. The season of use is 5/16 - 8/24.

The proposals involved in this HMP will have very little effect on these livestock operations. Fencing of wet meadows, springs and seeps will exclude livestock from a minimal amount of forage. Any undeveloped springs in the HMP area will be developed primarily for wildlife, and secondarily for livestock. Newly developed springs will provide livestock with additional water not previously available.

3. Recreation Management

The Bowen Canyon HMP Area provides limited opportunities for participation in outdoor recreation activities. Compatible use is hunting (mule deer and upland game birds) and snowmobiling. Some motorcycling and four-wheel drive use occurs, as well. In addition, unauthorized firewood and Christmas tree cutting occurs infrequently in the area.

Legal public access across private lands to the WHA has never been acquired. Therefore, private landowners and the Shoshone-Bannock Tribal Council have a direct influence on the type and amount of recreation use which occurs in the Bowen Canyon area. This is particularly important in the Bowen Canyon roosting area. The private landowner limits access into the area during those months when the wintering bald eagle population is using the roost area. This has limited the amount of snowmobiling occurring in the area. Thus, the HMP will have little impact on snowmobile use in the area.

Motorcycle and four-wheel drive use is also restricted because of the lack of legal access across private and reservation lands. Most ORV use in the past and the foreseeable future will be associated with hunting. Because wildlife habitat development and ORV use are not always compatible, vehicle use will be confined to existing roads and trails. This will have little adverse impact as there is presently little crosscounty travel occurring in the area.

The increase in the quality of wildlife habitat resulting from implementation of the HMP will result in increased hunter opportunities. Though actual hunter visits in the area may not increase significantly because of the problems associated with access, improved game population numbers should result from better habitat management, thus increasing hunter success in the area.

Non-consumptive uses of wildlife (e.g., bird watching, photography) would not be significantly affected because little activity of this type occurs. Some enhanced opportunities will result outside the HMP area because of the preservation and protection of the bald eagle roosting area. The birds utilizing the roost can often be seen along the Snake River and American Falls Reservoir from Interstate 86 and other highways. No developed recreation facilities occur within the HMP area nor have any such facilities been proposed for the area. Visual quality is primarily Class B (moderate) with an area of Class A (high) identified in the southeastern portion of the area. Developments in the area presently consist primarily of range improvements (fences, water troughs and storage tanks, and spring developments in the HMP will need to have visual contrast rating completed in order to insure that they meet the requirements of the Visual Management Class for the area (Class II in the southeastern portion of the area, Class III in the remaining area). There has been no systematical cultural resource inventory completed within the HMP area. As a result, there are no cultural resource sites recorded within the HMP area. There are several sites recorded at springs on private land adjacent to the area, indicating the likelihood of sites being present in similar situations within the HMP area. Class III cultural resource inventories will be required

prior to any ground disturbing developments.

4. Watershed Management and Water Quality

No projects have been designed that would affect the watershed.

Watershed conditions should improve with implementation of the livestock grazing system and the proposed wildlife practices.

There are no live streams within the WHA. The only projects involving water will be the spring developments.

Springs will be developed in such a manner as to protect vegetation and water quality.

5. Wild Horse and Burro Management

No wild horses and/or burros are found in the Burley District.

6. Minerals Development

Most of the public land in the WHA is under oil and gas lease.

There is a known small deposit of phosphate in T. 9 S., R. 31 E.,

Section 23. This deposit does not appear to be economically significant. Locatable minerals have also been identified on the

north portion of the WHA. Generally the minerals in the WHA are classified subeconomic and/or an undiscovered resource. This means

some locations are known to contain mineral deposits, but they are economically unfeasible to develop.

Should any applications for prospecting or exploratory drilling for oil and gas be made within the WHA, stipulations can be placed on the permit to protect the affected resources.

7. Fire Management

Fire is not a normal occurrence within the WHA. The area is designated as a 'high' resistance to control. The fire

crew stationed in Pocatello, Idaho, or contractor, will have the responsibility for the initial attack should a fire occur in the WHA.

8. Support Activities

a. Engineering:

Engineering will assist in layout and design of many of the projects (see JDR's in appendix 7).

b. Road Programs

Road construction will be designed to support the timber harvest program.

c. Access Development and/or Improvement

Access to the WHA is provided by a county road along Cold Creek to the north of the area. Access into Bowen Canyon is by private dirt road with numerous unimproved dirt roads spreading out into the WHA. Some type of agreement will be made with the private landowner to restrict access from November 15 to April 15 each year.

d. Land Acquisition, Classification and Withdrawal

The acquisition of private land that is in Bowen Canyon has been discussed with Kent Rudeen. He indicated that he and his father, Claire Rudeen, are no longer interested at this time in the exchange that was discussed during the Bannock-Oneida Planning system. These lands are needed however, to provide management and protection of the roost area. Private land identified as priority "A" lands (280 Acres) should be negotiated first and Priority "B" lands (680 acres) should be negotiated second if and when the opportunity presents itself. In 1981, the Bowen Canyon roost area will be designated as an ACEC area in accordance to the Federal Land Policy and Management Act of 1976 (FLPMA) Sec. 202(c).

The ACEC area consists of 2,308 acres including the roost site and buffer zone. Refer to appendix 4 for legal description of ACEC area.

9. Environmental Analysis Record

See attached copy of EA appendix 5.

10. Implementation Schedule and Cost Estimate

Forms 1650-2, Program Package Cover Schedule, 1650-1, Programs Package Input Schedule, and 1650-3, Construction Project Analysis, show the cost estimates and manpower requirements for management methods, actions and evaluations. (See Appendix 8).

TABLE 5

Summary of Cost to Implement HMP*

<u>Type of Development</u>	<u>Units</u>	<u>Cost</u>
Spring Development	2 ea.	4,000
Inverted Umbrella Water Catchment	2 ea.	6,000
Protective Fencing	1 mile	5,000
Snow machine rent		3,000
Project maintenance		1,200
Signs		400
Permanent WM 11 WM X 2800/wm		30,300
Temporary WM 13 WM X 2800/wm		<u>35,400</u>
		86,300

*The costs are based on 1980 information and does not consider inflation cost.

The following is an explanation of the manpower requirements and cost estimates outlined on Form 1650-1 Program Package inputs Schedule.

1. Current Year FY81

- a) Complete the written portion of the Habitat Management Plan.
- b) Public Affairs Program.
- c) Designate 2,308 acres as a ACEC area.
- d) Monitor Roost area December, January, February.
- e) Identify projects for water developments in big game and upland game ranges.
- f) Cooperative agreement with private land owner.

2. Budget Year FY82
 - a) Monitor Roost area.
 - b) Survey and design on projects identified in HMP area.
 - c) Establish vegetation and pellet transects on selected areas.
 - d) Construct fence to restrict access to Bowen Canyon.
 - e) Sign habitat area.
3. Program Year FY83
 - a) Monitor roost area.
 - b) Construct two inverted umbrella type water catchments and fence to protect developments.
 - c) Continue habitat evaluation program.
4. Program Year + 1 FY84
 - a) Develop two springs to provide water in big game and upland game range and fence to protect development.
 - b) Monitor roost area.
 - c) Maintenance of existing projects.
 - d) Continue habitat evaluation program.
5. Program Year + 2 FY85
 - a) Monitor roost area.
 - b) Maintenance of existing projects.
 - c) Continue habitat evaluation program.
6. Program Year + 3 and + 4
 - a) Monitor roost area
 - b) Maintenance of existing projects.
 - c) Continue habitat evaluation program.
7. Subsequent Years
 - a) Continue to monitor and evaluate the effectiveness of the HMP.
 - b) Continue with the maintenance program.

8. Administration and Manpower needs

All of the work necessary for the full implementation of this HMP can be accomplished by existing district personnel. The only exception to this is the appraisal help that will be needed from the ISO if an exchange can be negotiated.

a) Permanent - 11 WM x 2800/WM = 30,800

b) Temporary - 13 WM x 2800/WM = 36,400

F. Management Evaluation and Revision

1. Habitat

Permanent photo points will be established. A general photo and a close up will be taken on an annual basis to monitor vegetative response to the improvement practices. A vegetation utilization transect and a pellet group transect will be run in accordance to the guidelines set forth in the "Big Game Range Investigations in Idaho" handbook. This will serve as baseline information to evaluate the responses to management in the WHA.

Visual inspection of the roost area by the district wildlife biologist will be the method used to evaluate the needs of the roost area to determine if new roost trees are needed. If it is determined that new roost trees are needed the district forester will be responsible for the selection of trees displaying phenotypically unsound characteristics to be used as replacement trees.

Habitat evaluation work will be conducted by BLM. Evaluation and studies on implemented actions will be reviewed annually to determine if objectives are being achieved and recommendations for revising or updating Habitat Inventories and Analysis, MFP and/or the HMP will be revised if necessary.

G. Public Affairs - Bowen Canyon Habitat Management Plan

Issue: Implementation of the Bowen Canyon Habitat Management Plan (HMP).

Background: The HMP was developed in response to a management decision made in the Bannock-Oneida Management Framework Plan. The purpose of the HMP is to develop a management program for protection and preservation of the Bowen Canyon Bald Eagle roost area which is a designated Area of Critical Environmental Concern, and to develop habitat management for mule deer and forest grouse. Emphasis is placed on minimizing human disturbance to the area and maintaining present habitat conditions. Access to the area is across private lands.

Objectives: The objectives of the public affairs program for this area is to inform the public about the need to protect and preserve the area. Because emphasis is placed on minimizing human disturbance and access, public information programs will be low key.

Course of Action: Any public information prepared for the area will be educational in nature. A Federal Register Notice for the Bowen Canyon Bald Eagle Sanctuary ACEC designation was published in February, 1981. Press releases will be prepared to inform the public about restrictions on wood cutting and access in the area as the need arises. Publicizing the area would cause management problems since all access to the area is across private land.

H. Concurrence and Approval

Burley District

Bowen Canyon Habitat Management Plan
Wildlife Habitat Area (I-020 WHA T 5)

Prepared by:

Willis M. Bird Jr., Wildlife Biologist
Burley District, Bureau of Land Management, 1981

With Assistance and in Cooperation with:

Region V Idaho Department of Fish and Game
Pocatello, Idaho

Claire & Kent Rudeen, Allotees
American Falls, Idaho
U.S Fish and Wildlife Service
Boise, Idaho

Concurrence with:

Greg L. Mallet
Region V Supervisor
Idaho Department of Fish & Game

Sept 2, 1981
Date

Kent Rudeen
Allotee

Oct. 29-81
Date

C. Jon Packham
U.S. Fish and Wildlife Service

August 13, 1981
Date

Approved: Bureau of Land Management

Nick James Czapka
District Manager Burley

July 1 - 1981
Date

David Wolf
Area Manager Bannock-Oneida

6/30/81
Date