

**PALISADES WILDLIFE MITIGATION
SOUTH FORK SNAKE RIVER PROGRAMMATIC
MANAGEMENT PLAN
IMPLEMENTATION PHASE I**

FINAL REPORT

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INTRODUCTION

Background

The Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Public Law 96-501) directed that Bonneville Power Administration (BPA) implement measures to protect, mitigate, and enhance fish and wildlife to the extent affected by development and operation of hydropower projects on the Columbia River System. This act created the Northwest Power Planning Council (NPPC), which in turn developed the Columbia River Basin Fish and Wildlife Program (Program). This Program established a four-part process, including:

- 1) Wildlife Mitigation Status Reports--to identify past mitigation proposed, mitigation required, mitigation implemented, and current studies and planning;
- 2) Wildlife Impact Assessments--to quantify wildlife and habitat impacts;
- 3) Wildlife Protection, Mitigation, and Enhancement Plans--to develop potential projects to mitigate for wildlife and habitat losses; and
- 4) Implementation of protection and enhancement projects--to mitigate for past wildlife and habitat losses.

Palisades Reservoir is one of many federal hydroelectric projects in Idaho. The dam and reservoir, located on the South Fork Snake River in eastern Idaho, was constructed in the early 1950s.

Steps 1 through 3 of the program have previously been completed for Palisades Reservoir by interagency/tribal teams of biologists (Chaney and Sather-Blair 1985, Sather-Blair and Preston 1985, and Martin and Hansen 1986). The interagency/tribal teams, involved through either direct participation or consultation and coordination, included the Idaho Department of Fish and Game (IDFG), Wyoming Game and Fish Department, Shoshone-Bannock Tribes, U.S. Fish and Wildlife Service (USFWS), U.S. Bureau of Reclamation (USBR), Northwest Power Planning Council (NPPC), Bonneville Power Administration (BPA), and Pacific Northwest Utilities Conference Committee. All work has been funded by BPA.

The wildlife impact assessment (Sather-Blair and Preston 1985) addressed inundation impacts on wildlife in the reservoir area and operational impacts on nesting Canada geese downstream from the dam. The impact assessment did not address operational impacts on other wildlife species downstream of Palisades Dam. The reservoir flooded nearly 16,000 acres of wildlife habitat, including nearly 1,700 acres of forested (cottonwood) wetlands, more than 800 acres of scrub-shrub (willow) wetlands, and 38 miles of free-flowing river. The interagency

team selected eight target species to assess impacts on wildlife. Target species were selected for a variety of reasons, including (1) as a representative of a guild of species with similar habitat needs, (2) as an indicator species for a particular habitat type, or (3) for their individual importance locally, regionally, or nationally. The bald eagle was chosen in the impact assessment because of its status as an endangered species.

The Habitat Evaluation Procedure (HEP) (USFWS 1980) was used to quantify losses to wildlife in terms of habitat units (HUs). One HU is equivalent to one acre of prime habitat for an individual target species. Losses included 5,941 breeding bald eagle HUs, 18,565 wintering bald eagle HUs, 1,358 black-capped chickadee (forested wetland) HUs, 716 yellow warbler (scrub-shrub wetland) HUs, 2,454 mule deer HUs, 2,276 mink HUs, 2,622 mallard HUs, 805 Canada goose HUs, and 2,331 ruffed grouse HUs.

The interagency work group then developed the Palisades Wildlife Mitigation Plan (Martin and Hansen 1986), proposing protection and enhancement projects to mitigate the identified losses. The mitigation plan identified 18 potential projects in Idaho and Wyoming to mitigate losses for all target species. The South Fork Snake River proposal, which included the protection and enhancement of 3,200 acres of bald eagle and other wildlife habitat below Palisades Reservoir, was ranked highest of the proposals in Idaho, by the interagency team of biologists.

In early 1990, the NPPC and IDFG developed a public review document which included a summary of Palisades wildlife losses and mitigation goals and objectives. It was distributed statewide and announced in local newspapers, local government publications, and the NPPC monthly newspaper. During the Columbia Basin Fish and Wildlife Authority and BPA Implementation Planning Process (IPP), the South Fork Snake River area was ranked as the top priority mitigation project in Idaho. In late 1990, the NPPC and BPA approved funding of the project to protect and improve bald eagle and other wildlife habitat in the riparian corridor along the South Fork Snake River.

Project Purpose and Scope

The purpose of this project is to develop a programmatic management plan for wildlife mitigation along 65 miles of the South Fork Snake River riparian corridor, from Palisades Dam to the confluence with the Henrys Fork. The goal of the plan is to protect and enhance riparian habitat along the South Fork. The focus is on actions which will benefit breeding or wintering bald eagles and other target wildlife species. The programmatic management plan includes operation, maintenance, and monitoring needs.

Total acreage of wildlife habitat to be protected and/or enhanced along the South Fork will depend on progress toward achievement of habitat protection/mitigation goals, the availability of willing sellers, availability of BPA funding, resolution of the rate payer responsibility question at Palisades Reservoir (discussed in detail in Martin and Hansen 1986), and other factors.

Riparian areas are utilized by wildlife more than any other type of habitat (Thomas et al. 1979). Riparian vegetation covers less than one percent of the landscape in the western United States, yet more species of breeding birds are found in it than much more extensive uplands (Knopf et al. 1988).

Western riparian areas are subjected to disturbances and fragmentation associated with livestock grazing, agriculture, water management, recreation, residential development, and other land-use activities (Anderson 1985). Approximately 90-95 percent of the cottonwood-willow riparian ecosystems in the Rocky Mountains/Great Plains region have been lost to various land uses (Johnson and Carothers 1981).

The 65-mile stretch of the South Fork Snake River from Palisades Dam to the Henrys Fork confluence supports the most extensive cottonwood riparian forest remaining in Idaho and one of the largest such ecosystems in the western United States. In 1980, it was identified as the most important fish and wildlife habitat site in Idaho (USFWS 1986). In 1980, the National Rivers Inventory List identified the South Fork Snake as a candidate river eligible for study under the Wild and Scenic Rivers Act.

South Fork Snake River cottonwood forests, associated riparian areas, important bald eagle populations, and a variety of other wildlife species which utilize riparian areas are threatened by residential and recreational development, logging, and grazing. The BLM and USFS (1991 b) estimate that about 30 percent (6,000 acres) of the private land in the 119-mile stretch of river covered under the Snake River Activity/Operations Plan will be developed or impacted in the next 15 years. Bald eagles use primarily cottonwoods along the South Fork riparian corridor for nesting during the breeding season and for perching and roosting throughout the year. In 1992, the South Fork supported 11 nesting pairs of bald eagles and over 60 wintering birds. Ten of the nests were located in cottonwoods. Two of the eleven existing bald eagle nests are located on private land.

The primary objectives of the Pacific Bald Eagle Recovery Plan (USFWS 1986a) are to (1) provide secure habitat for bald eagles, and (2) increase population levels in the 7-state Pacific Recovery Area so it is possible to delist the species.

Forty-seven management zones have been established in the 7-state Pacific Recovery Area (Figure 1). Thirty-seven of the zones are believed to have nesting potential (USFWS 1986a).

Several criteria exist for delisting, including the establishment of at least 800 breeding pairs of bald eagles and the requirement that population recovery goals must be met in at least 80 percent of the management zones with nesting potential (USFWS) 1986a). Although the 7-state Pacific Recovery Area now supports 932 breeding pairs of bald eagles, only 35 percent of the management zones with nesting potential have met or exceeded recovery goals (K. Steenhof pers. comm.).

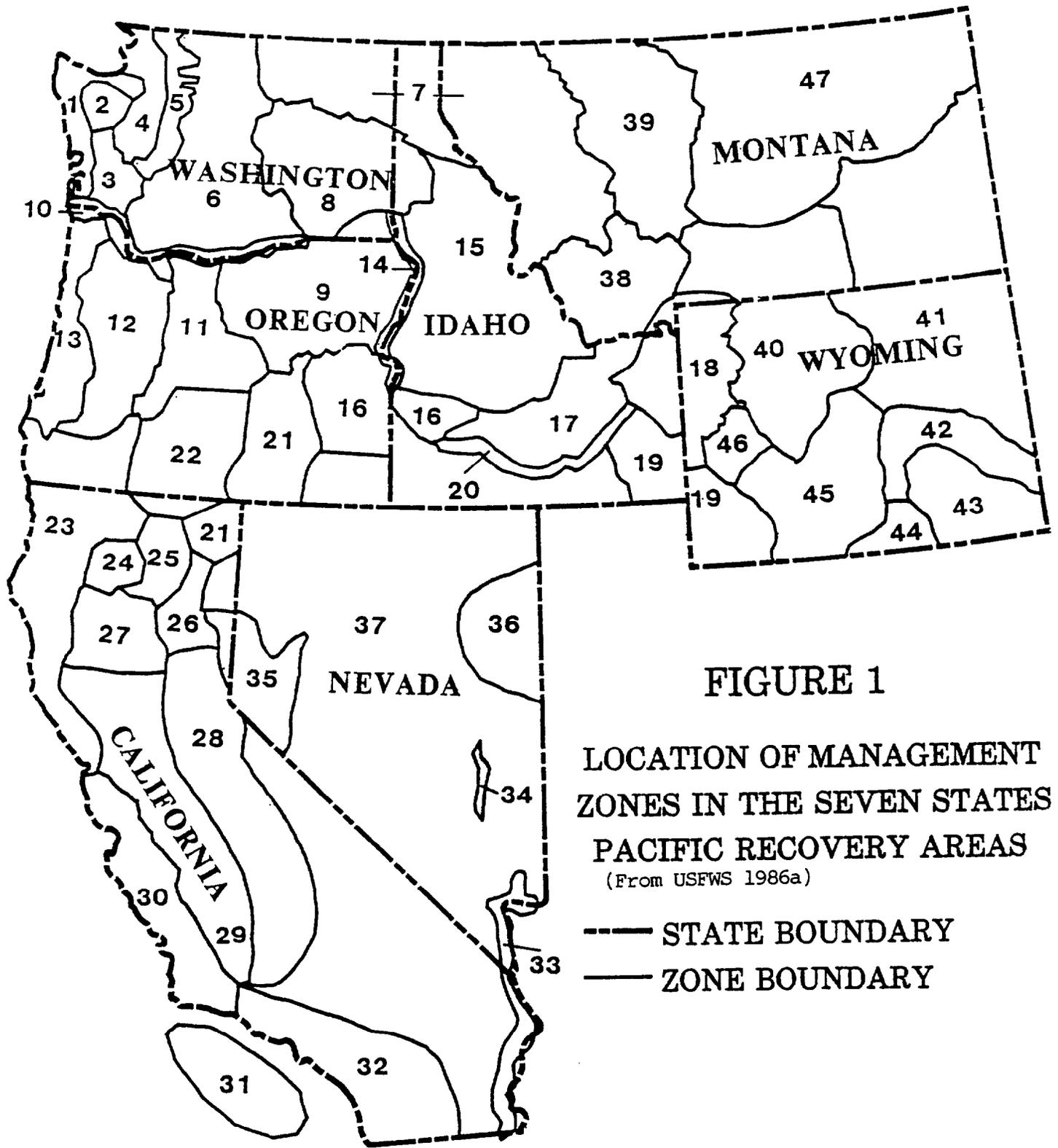


FIGURE 1
 LOCATION OF MANAGEMENT ZONES IN THE SEVEN STATES PACIFIC RECOVERY AREAS
 (From USFWS 1986a)

Management Zone 18 contains the Greater Yellowstone Ecosystem (GYE) (Figure 1). The South Fork Snake River is a part of the Idaho portion of the Snake Unit (Figure 2). The Zone 18 recovery goal is the establishment of 65 nesting territories and 50 breeding pairs of bald eagles (USFWS 1986a).

The goal of the GYE Bald Eagle Management Plan is the establishment and maintenance of 62 breeding pairs of bald eagles fledgling a 5-year average of 53 young per year (GYE Bald Eagle Working Team 1983). The goal for the Snake Unit is 32 breeding pairs, fledgling a 5-year average of 31 young per year. These goals are currently being met and exceeded in both the Snake Unit and in the GYE (Table 1).

Table 1. 1992 bald eagle breeding success in the Greater Yellowstone Ecosystem (Zone 18).

Area	Nesting Territory	Occupied	Successful	Young Fledged
Greater Yellowstone Ecosystem (Zone 18)	94	86	61	103
Snake Unit				
Snake Idaho	20	20	14	25
Snake Wyoming	14	13	10	15
Snake Teton	9	8	5	10
Snake Yellowstone	1	1	0	0
Total Snake Unit	44	42	29	50

Habitat management goals (number of nesting territories) and population goals (number of breeding pairs) are considered to be far less than the existing habitat or biological potential of the areas (USFWS 1986a). Throughout the Pacific Recovery Area, recovery goals are believed to be only a fraction of historical population levels (USFWS 1986a).

Although population goals are currently being met in Zone 18, habitat security objectives are not. Existing habitat continues to be threatened by future development and disturbance. Eagle habitat protection and management must be a primary consideration in habitats that currently support breeding or wintering populations of eagles both until and after the zone's recovery goal has been attained (USFWS 1986a).

Protection and enhancement of riparian habitat will help maintain existing bald eagle production and help ensure that management goals continue to be met long-term. Protection and enhancement of riparian habitat will also benefit wintering bald eagles and a variety of other target species, including Canada geese, mink, mallards, ruffed grouse, mule deer, black-capped chickadees, and yellow warblers. The South

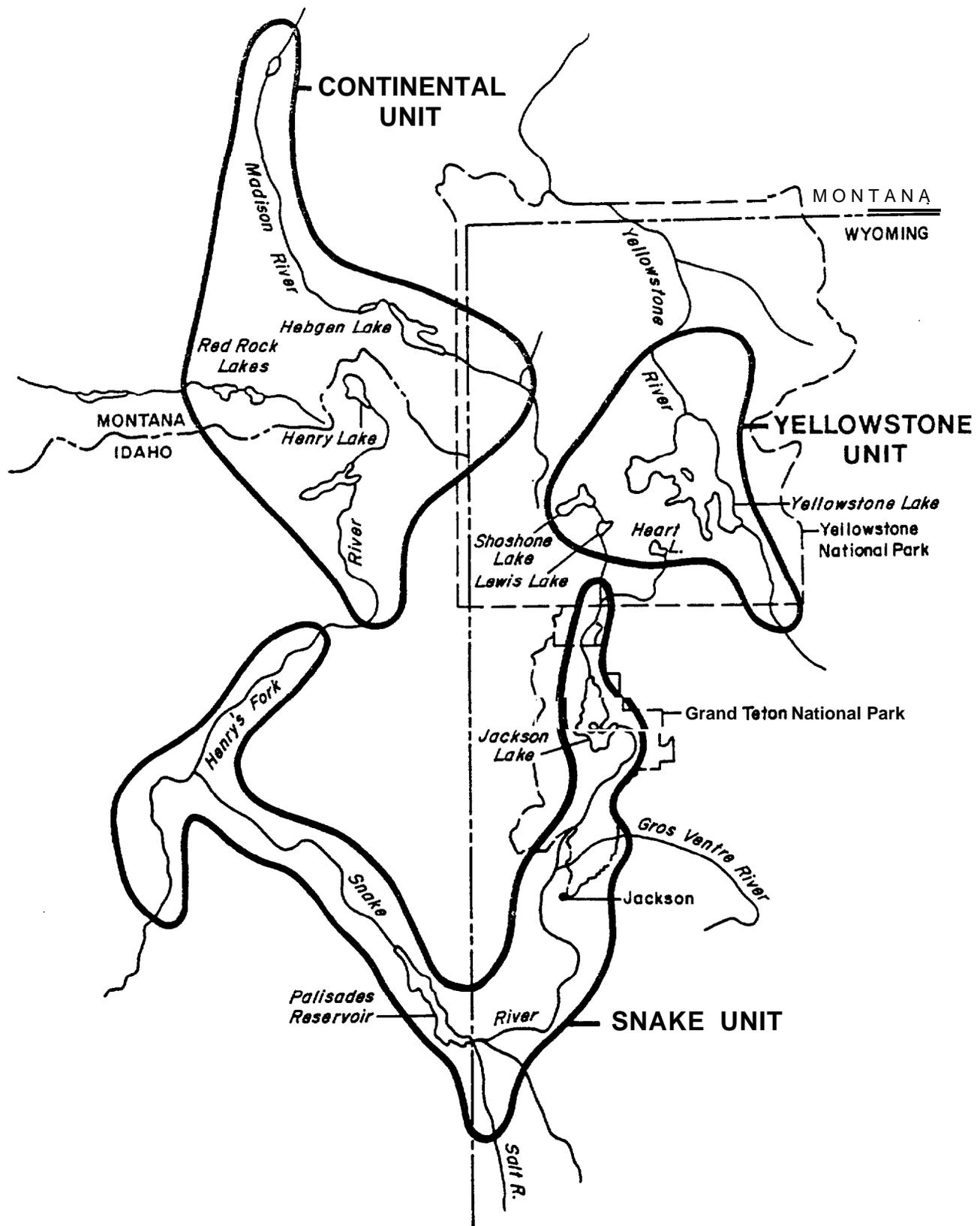


Fig. 2 Map of the Greater Yellowstone Ecosystem showing the three bald eagle population units
 (From GYE Bald Eagle Working Team 1983)

Fork supports a rich diversity of over 260 species of wildlife, many of which will also be benefited by protection and enhancement of riparian habitat.

Pursuant to the National Environmental Policy Act of 1969, BPA will prepare an environmental review of its proposal to fund wildlife mitigation activities on the South Fork. The review will assess whether or not the mitigation plan's proposed actions would significantly affect the environment. Upon conclusion of its environmental review, BPA will decide whether or not to fund the mitigation activities.

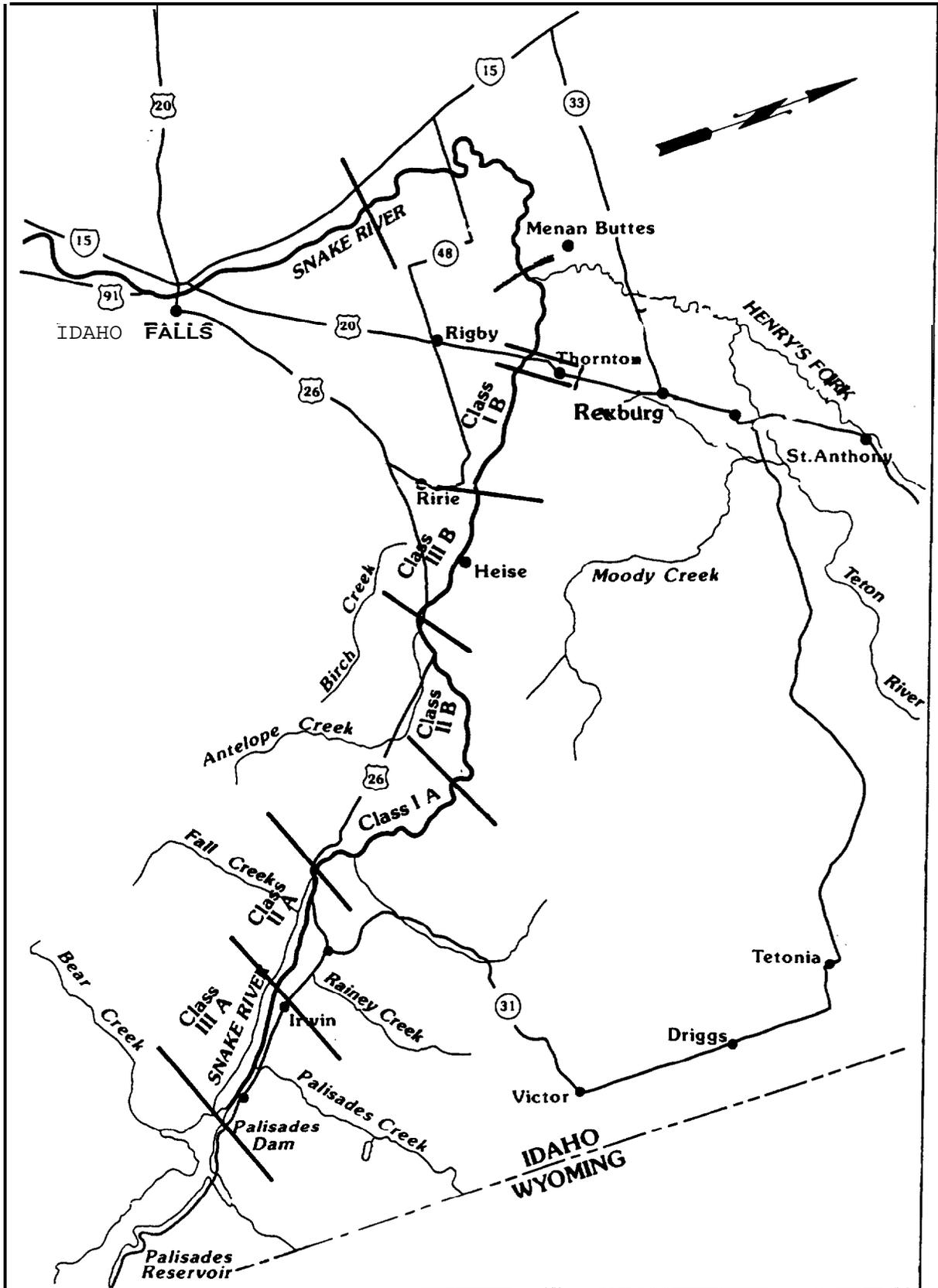
Study Area

The South Fork Snake River corridor contains a mix of public (85 percent) and private (15 percent) lands. The BLM manages about two-thirds of the public land, and the USFS manages about one-quarter. The remaining public land is managed by either the Corps of Engineers, the USBR, or the state of Idaho. There are about 20,500 acres of private land along the 119-mile river corridor covered under the Snake River Activity/Operations Plan (BLM and USFS 1991a). In the 65-mile stretch of river covered in this mitigation management plan, over 63 miles of river shoreline is under private ownership.

For planning purposes, the BLM and USFS (1991a) have broken the South Fork Snake into Site Specific Management (SSM) class definitions. Under the SSM class definitions, the most natural, undeveloped, primitive, and inaccessible stretches of the South Fork are defined as Class I. Class II stretches are defined as intermediate in development, while Class III stretches are the most developed. Separate stretches of the river under the same class designation were identified by subclass letters A, B, C, or D.

The uppermost section of the South Fork Snake River (Palisades Dam to Irwin powerline) (Class III A, Figure 3), is in a mountain valley with farmland near the riverbank and a narrow strip of cottonwoods along the river. The river channel is primarily straight, without any islands. This 9-mile stretch of river contains about 8.6 miles of shoreline under private ownership. This Class III A stretch is under the greatest threat of future development in the South Fork corridor.

Figure 3. South Fork Snake River stream segments (BLM and USFS 1991a).



Scale 1:500,000
1 inch equals approximately 8 miles

The lower mountain valley section, Irwin powerline to Conant Boat Ramp (Class II A, Figure 3), is a braided river channel with many islands and a more extensive cottonwood forest. This 8-mile section of river contains about 6.7 miles of shoreline under private ownership.

The upper canyon section, Conant Boat Ramp through Lufkin Bottom (Class I A, Figure 3), is rugged and roadless. The 11-mile stretch of river in the canyon section is braided, with many cottonwood groves in a relatively unmodified environment. About 11.8 miles of shoreline are under private ownership.

The lower canyon section, Lufkin Bottom to Riley Diversion (Class II B, Figure 3), is similar to the upper canyon, except it is accessible by roads. The lower canyon section is 12 miles long, with 11.4 miles of privately-owned shoreline.

Continuing downstream, the rest of the South Fork is in a broad, open flood plain supporting a wide zone of cottonwoods. The 11-mile upper flood plain section, Riley Diversion to Twin Bridges (Class III B, Figure 3), has roads, diversions, and developments along the shore. About 8.9 miles of shoreline are privately owned.

The 14-mile lower flood plain section, Twin Bridges to confluence with Henrys Fork (Class I B, Figure 3), is relatively undeveloped. A total of 15.9 miles of the shoreline is privately owned.

Public Involvement

Public announcements of the mitigation planning process were made in BPA and NPPC newsletters and in local newspapers. Letters were mailed to appropriate elected officials, government agencies, Shoshone-Bannock Tribes, local and regional utilities, conservation and sportsmen groups, identified landowners on the South Fork, and identified members of the public who had previously expressed interest in government planning for the South Fork. The announcements and letters: 1) stated the intent of mitigation planning, 2) solicited comments on issues and alternatives to consider during planning, and 3) provided information on a scheduled public meeting.

A public meeting on wildlife mitigation planning on the South Fork Snake River was held in Idaho Falls on July 2, 1991. Approximately 20 people attended the meeting, which was designed to provide information on the mitigation planning process and to collect additional comments on issues and mitigation alternatives. During the issues and alternative scoping period, comments were received from eight individuals or organizations (Appendix A).

Planning Process

After a three-year planning process, the BLM and USFS recently finalized a Snake River Activity/Operations Plan and Environmental Assessment (BLM and USFS 1991a, 1991b). This planning was conducted with assistance from other agencies and extensive public involvement.

The BLM/USFS Snake River Plan is for management of existing public lands along the river. The mitigation management plan being prepared for BPA is for protection of bald eagle habitat on the South Fork to partially achieve NPPC wildlife mitigation goals for Palisades Dam.

The BLM/USFS planning effort contributed information to the current mitigation planning effort. We began with knowledge of many public issues and concerns in the river corridor (Table 2). Wintering and nesting bald eagles had been previously studied. Habitat conditions and cover type acreages were already documented. All of the existing information and additional public input received during the planning process was used to develop a mitigation management plan for bald eagle habitat protection.

For the mitigation management plan, the work group divided the South Fork into five stream segments, using boundaries of the BLM/USFS site-specific management (SSM) classes (Figure 3). Beginning at Palisades Dam, the five segments were 3A (Palisades Dam to Irwin powerline), 2A (Irwin powerline to Conant Boat Ramp), 1A (Conant Boat Ramp through Lufkin Bottom), 2B/3B (Lufkin Bottom to Twin Bridges), and 1B (Twin Bridges to confluence with Henrys Fork).

The work group then developed a list of potential mitigation alternatives identified through the planning and public involvement process. Development of the proposed mitigation management plan was based on: 1) agency/tribal and public input, 2) compliance with the Northwest Power Act and Columbia Basin Fish and Wildlife Program, and (3) NPPC and BPA mitigation goals.

Table 2. Eleven key issues and areas of concern identified by the public during the scoping process for the Snake River Activity/Operations Plan (BLM and USFS 1991a).

1. River users need to be educated about their impacts on riparian areas, hazards associated with irrigation diversions, and river management policies and goals.
 2. Riparian habitat needs to be enhanced through proper management of grazing, off-highway activities, developments, and firewood cutting.
 3. Watershed needs protection from erosion. Damaged areas need rehabilitation.
 4. Boundaries between federal and private land need to be delineated and posted where necessary.
 5. Wildlife habitat needs protection, including bald eagle perching and nesting habitat, high quality spawning areas, Canada goose nesting areas, and bald eagle and big game winter habitat.
 6. Off-Highway Vehicles (OHVs) and Off-Road Vehicles (ORVs) need managed by providing trails and regulations, closing trail between Blacks and Dry canyons, and limiting OHV use to existing roads/boat launch sites.
 7. Identify and maintain developed and dispersed campsites. Sanitary services and enough campsites for outfitters and the general public are needed along the river.
 8. River corridor users need to be controlled through the identification of the number of float trips taken down the river, improved enforcement of existing laws and regulations, and trash pick-up.
 9. Noxious weeds need to be controlled in the river corridor.
 10. Access areas to the river may need to be increased or improved to handle increased demand.
 11. Livestock grazing should be restricted in riparian habitat and should be allowed to continue on federal lands.
-

POTENTIAL MITIGATION MANAGEMENT ACTIONS

In order to mitigate or replace wildlife habitat lost from the construction of Palisades Dam and Reservoir, other habitat must either be protected from future degradation and/or enhanced above existing habitat values with various management activities. The following mitigation alternatives have been identified during the issue and alternative scoping period.

Potential Habitat Protection Actions

- 1) Acquire fee-titles on private lands along the South Fork Snake corridor. Requires willing sellers.
- 2) Obtain conservation easements on private lands along the South Fork Snake corridor. Requires willing landowners.
- 3) Develop cooperative landowner agreements to protect private lands along the South Fork Snake corridor. Requires willing landowners.

Potential Enhancement Actions

- 1) Fence areas along the South Fork Snake to protect riparian vegetation from livestock grazing. Areas to be fenced could be (1) private lands protected for mitigation or (2) existing public lands.
- 2) Plant riparian vegetation (cottonwoods et al.) in suitable areas along the South Fork Snake corridor. Existing cottonwood stands have been impacted by both the operation of Palisades Dam and livestock grazing.
- 3) Improve existing bald eagle nest sites along the South Fork corridor. Techniques may include tree topping, pruning, thinning, planting, and nest structure improvements. Specific tree and crown characteristics are important in nest tree selection.
- 4) Revegetate agricultural lands along the South Fork corridor. Although existing agricultural lands would not be the highest priority areas to protect, some acreage may be included in any acquisition project. Revegetation of such areas with either upland or riparian vegetation would benefit bald eagles through either perch establishments or terrestrial prey base enhancement. Revegetating agricultural lands would also benefit other target wildlife species.
- 5) Alter summer flows in the Snake River by purchase and release of water from Palisades Reservoir or Jackson Lake. The purpose of this alternative would be to acquire upstream water rights and release the water in a manner that encourages cottonwood seedling establishment over large areas. Scouring and sediment deposition

to prepare seedbeds would help alleviate the cottonwood seedling recruitment problems discussed above. Quantity of summer flows needed and timing of releases would need to be determined.

- 6) Alter winter flows in the Snake River. This alternative would be to acquire upstream water rights and increase winter flows in the South Fork. There would be many benefits of higher winter flows, including increased fish populations and greater amounts of open (unfrozen) water, both of which are important to wintering bald eagles.
- 7) Construction of artificial nest poles for bald eagles. Under this alternative, artificial nest poles would be placed far enough from the river to avoid human disturbance.
- 8) Create side channels for bald eagle foraging. This alternative would create side channels off the main river. These side channels would allow bald eagles to forage free from the human disturbance associated with the main river channel.
- 9) Develop land use restrictions on public land along the South Fork corridor to reduce human disturbance to bald eagles and other wildlife during critical times. This action would include increased law enforcement to enforce any restrictions on land use activities.

PROPOSED MITIGATION MANAGEMENT PLAN

The proposed mitigation management plan combines several habitat protection and enhancement alternatives. The goal of the proposed plan is to permanently protect wildlife habitat along the South Fork Snake River. Where appropriate, habitat values of protected parcels will be enhanced with selected management activities.

Protection Actions

Protection of wildlife habitat will be achieved through either fee-title or conservation easement acquisition from willing sellers.

Fee-title acquisition provides permanent protection of wildlife habitat and maximum management flexibility. Because the IDFG has statutory ability to pay in-lieu-of property taxes, long-term funding for annual in-lieu-of payments will be cooperatively worked out with BPA and the affected county. A long-term trust fund is one potential source of in-lieu-of payments. BPA also has the authority to pay property taxes in some situations.

Conservation easements will be permanently tied to the title of the property. Terms and conditions of the easement will be written to include any necessary habitat enhancement and maintenance on the property. Under the terms of the easement, property taxes would still be the responsibility of the landowner. Easements can be written to include a comprehensive list of rights acquired by the Grantee or a comprehensive list of rights retained by the Grantor. In the latter case, rights not specifically reserved by the Grantor are assumed to be acquired by the Grantee. An example of possible programmatic easement terms and conditions under the former case and an example of a Forest Service easement under the latter case are included in Appendix B.

Compared to fee-title acquisition the standard conservation easement is expected to:

- 1) cost more to negotiate (Diehl and Barrett 1988),
- 2) cost less to acquire (Land Trust Alliance and National Trust for Historic Preservation 1990),
- 3) cost more to monitor (Diehl and Barrett 1988), and
- 4) provide similar wildlife benefits if the easement allows for habitat enhancement and maintenance, landowners comply with easement terms and conditions, and excess human disturbance of bald eagles does not occur (Land Trust Alliance and National Trust for Historic Preservation 1990).

The goal on mitigation lands is to provide maximum wildlife benefits in the most cost-effective manner. Although conservation easements can provide many benefits, they can also lead to more difficult situations in which to manage wildlife and habitat.

Conservation easements create extreme difficulties for access and use by Shoshone-Bannock Tribal members for effectuation of treaty rights (S. Robertson, Pers. Comm.). In a case study, the USFWS concluded that easements were more expensive than fee-titles, mainly due to management problems caused by not having clear title to mitigation lands (Prose et al. 1986).

The decision to acquire fee-title or easement will be determined on a parcel-by-parcel basis. Easements will be the preferred means of protection where they can provide permanent protection, meet the biological goals for the area, allow necessary management flexibility, are cost-effective, and where they are preferred by the landowner. Fee-titles will be obtained from willing sellers when the above criteria cannot be met with easements.

It is assumed the BPA will initially acquire easements or fee-titles and then deed the acquisition to the IDFG or other appropriate land management agency. BPA will be responsible for funding Grantee enhancements and operation and maintenance responsibilities included under easement terms and conditions (Appendix B).

Prioritization of Parcels for Protection

Average cover type acreages and target species habitat values were estimated in each of five river segments (SSM classes 3A, 2A, 1A, 2B/3B, and 1B) along the South Fork (Tables 2 and 3). Segments 1B and 2B/3B provided the most overall total target species habitat units per 100 average acres (Table 3). These segments support the most extensive stands of cottonwood forests and scrub-shrub wetlands (Table 2).

All river segments provided 74 breeding bald eagle HUs for each average 100 acres of habitat in the class. Stream segments 3A and 2A, located directly below Palisades Dam, were estimated to provide the highest bald eagle winter habitat value (100 HUs/100 acres of habitat). These two segments contain more open water, due to Palisades Reservoir releases, and are estimated to support a higher prey base for bald eagles than segments further downstream, which were all estimated to provide 93 HUs/100 acres of habitat). Segments 3A and 2A are also under the highest threat of development in the South Fork corridor.

Because of the importance of the stream segments directly below Palisades Dam for bald eagles, the initial order of priority for protection of wildlife habitat will be segment 3A, followed by 2A, 1A, 2B/3B, and 1B.

These stream segment protection priorities are not hard constraints. If a parcel which provides high quality wildlife habitat becomes available in a lower priority river segment, it may be considered for protection.

Table 3. Acres of cover types per average 100 riparian acres in South Fork Snake River stream segments.

Stream Segment	Deciduous Forested Wetland Acres	Percent Overmature Cottonwood	Deciduous Scrub-shrub Wetland Acres	Emergent Wetland Acres	Sagebrush grassland Acres	Deciduous Forest Acres	Evergreen Forest Acres
3A	28.4	51.9	3.2	0.6	0	0	4.1
2A	52.7	1.0	0.6	2.9	19.1	0	11.9
1A	20.2	8.0	4.2	9.4	35.7	7.4	22.8
2B/3B	65.2	10.0	6.2	2.3	19.4	0.3	4.9
IB	89.0	1.9	1.1	3.7	0.4	0	0

Table 4. Predicting mitigation credit per average 100 acres of wildlife habitat that is protected, enhanced, operated and maintained on South Fork Snake River stream segments.

Stream Segment	Canada Goose			Mink			Mallard			Ruffed Grouse			Mule Deer			Sub-Total HUs
	Ac	HSI	HU	Ac	HSI	HU	Ac	HSI	HU	Ac	HSI	HU	Ac	HSI	HU	
3A	10.9	0.25	2.7	10.9	0.70	7.6	10.9	0.40	4.4	28.4	0.30	8.5	2.0	0.58	1.2	24
2A	10.9	0.53	5.8	10.9	0.87	9.5	10.9	0.66	7.2	52.7	0.92	48.5	15.0	0.58	8.7	80
1A	10.9	0.53	5.8	10.9	0.87	9.5	10.9	0.66	7.2	27.6	0.92	25.4	30.6	0.58	17.7	66
2B/3B	10.9	0.53	5.8	10.9	0.87	9.5	10.9	0.66	7.2	65.5	0.92	60.3	30.6	0.58	17.7	101
1B	10.9	0.53	5.8	10.9	0.87	9.5	10.9	0.66	7.2	89.0	0.92	81.9	20.0	0.58	11.6	116

Stream Segment	Breeding Bald Eagle			Wintering Bald Eagle			Black-capped Chickadee			Yellow Warbler			Sub-Total HUs	Grand Total HUs
	Ac	HSI	HU	Ac	HSI	HU	Ac	HSI	HU	Ac	HSI	HU		
3A	100.0	0.74	74.0	100.0	1.00	100.0	28.4	0.81	23.0	3.2	0.86	2.8	200	224
2A	100.0	0.74	74.0	100.0	0.93	100.0	52.7	0.81	42.7	0.6	0.86	0.5	217	297
1A	100.0	0.74	74.0	100.0	0.93	93.0	20.2	0.81	16.4	4.2	0.86	3.6	187	253
2B/3B	100.0	0.74	74.0	100.0	0.93	93.0	65.2	0.81	52.8	6.2	0.86	5.3	225	326
1B	100.0	0.74	74.0	100.0	0.93	93.0	89.0	0.81	72.1	1.1	0.86	0.9	240	356

A variety of opportunities exist to protect riparian habitat for bald eagles and other wildlife in the South Fork corridor. The following criteria will be applied to parcels that become available. The criteria prioritize each parcel in terms of benefits to bald eagles first and then benefits to other wildlife species. Parcels do not have to meet all criteria in order to be considered for protection. The primary purpose of the criteria is to help prioritize parcels when more than one are available. Parcels that provide benefits to both bald eagles and a variety of other wildlife will be ranked the highest.

Criteria for protection include:

- 1) presence of a bald eagle nest:
- 2) proximity to existing bald eagle nest sites (location inside of bald eagle Principle Management Parcels);
- 3) location inside of a bald eagle nesting territory:
- 4) degree of threat of development and/or future diminishment of habitat values on the parcel:
- 5) overall bald eagle breeding and wintering habitat value;
- 6) importance as a perching or roosting site for bald eagles;
- 7) benefits to other wildlife species. In research conducted along the South Fork Snake River: Saab (1992) detected 54 species of birds in large cottonwood stands (>7 to 200 ha.), 48 species in medium-sized stands (>3 to 7 ha.), and 41 species in small stands (<1 to 3 ha.).
- 8) cost effectiveness;
- 9) compatibility with other on-going management programs along the South Fork. The BLM and The Nature Conservancy have cooperatively purchased easements or fee-titles on 1,400 acres of land along the corridor in the past. Funding for this program has been from the Land and Water Conservation Fund Act. The general objectives of the Snake River Activity/Operation Plan (BLM and USFS 1991a) are:
(1) maintenance, restoration and improvement of riparian areas, and
(2) maintenance or enhancement of critical nesting, foraging, and wintering areas for bald eagles. More specific standards for bald eagle management include (1) maintain 11 active bald eagle nesting territories with 85 percent occupancy and production of 1.48 young per occupied territory on a 5-year running average, (2) maintain potential habitat for 4 new nesting territories, and (3) maintain suitable winter habitat for 100 to 120 bald eagles along the river corridor (BLM and USFS 1991);

10) maintenance of the undeveloped portions of the South Fork Snake riparian corridor.

Enhancement Actions

"Enhancement" means improving wildlife habitat on mitigation lands. Once a fee-title or easement has been acquired, enhancement **may** be necessary to get maximum wildlife benefits from a parcel. In some situations, enhancement is critical to protecting habitat values and mitigation credit.

Enhancement actions needed on a mitigation parcel will be determined on a case-by-case basis. Issues and concerns identified in Table 2 will be evaluated in relationship to any proposed enhancement activities. Enhancements expected in the South Fork area include: 1) fencing to control livestock access, 2) improving bald eagle nests and the trees supporting and surrounding the nest, 3) planting cottonwoods, and 4) revegetating agricultural lands. Enhancement actions will be conducted by IDFG or other appropriate land management agency with funding provided by BPA.

It has recently become apparent that there is an imperative need to recruit young cottonwoods to the riparian forest. Riparian research on inundated rivers indicates a potential for a gradual loss of cottonwood stands up to 25 miles below a dam. On the South Fork, stream segments likely affected the most would be 3A, 2A and 1A (BLM and USFS 1991a).

Existing data for the South Fork suggest that there is an insufficient amount of young cottonwoods (14 percent) to replace the existing mature cottonwood type (84 percent) (BLM and USFS 1991a). Recruitment of cottonwoods on gravel bars is the primary recruitment strategy for the species. Since 0-1 age cottonwoods make up only 0.35 percent of the total cottonwood acreage annually, recruitment is insufficient to sustain the existing cottonwood complex. This factor is believed mostly a result of Palisades Dam, although livestock grazing, agricultural conversion, and subdivision development, have all contributed to reduced recruitment.

Reservoir impoundments affect rivers in two ways: 1) they act as a settling basin for streambed sediments, and 2) they eliminate major stream channel shifting and deposition from high flows. Both of these factors are needed to form new cottonwood recruitment habitat (i.e. new gravel bars, new deposition around existing bars and islands) (BLM and USFS 1991a). Data demonstrating these downstream impacts on the cottonwood community were not available in the mid-1980s and, therefore, were not addressed or quantified in the Palisades wildlife impact assessment (Sather-Blair and Preston 1985).

The BLM and USFS concluded that recruitment needs to equal 0.66 to 1.0 percent of the total acreage to ensure long-term survival of the cottonwood community. This is based on the existing cottonwood **age** structure, acreage, and expected life of a cottonwood tree (100 to 150 years). When gravel bar recruitment of cottonwoods is combined with cottonwood sucker/saplings in mature stands, total percent of recruitment may be sufficient enough to sustain the existing

community. Habitat mapping indicates that there is insufficient recruitment of young cottonwoods in stream segments 3A and 2A. Seedling recolonization areas have not been mapped in stream segments 1B and 3B. Although it appears that current recolonization (almost exclusively sucker/saplings) is meeting recruitment standards for

stream segments 1A and 2B, it is unknown if this understory sapling recolonization will survive to replace older age classes (BLM and USFS 1991a).

Operation and Maintenance Needs

Operation and maintenance of mitigation land and habitat enhancements is critical to sustain wildlife benefits and protect rate payer investments in mitigation. The Northwest Power Planning Council's 1990 wildlife rule requires that mitigation be permanent and that BPA fund operation and maintenance of mitigation actions. Operation and maintenance needs for mitigation lands on the South Fork will depend on the site and the enhancement actions that will require operation and maintenance. Operation and maintenance of enhancements on conservation easement lands is expected to be the same as on fee-title lands, with the following exception: easements will require inspection and enforcement of terms and conditions of the easement. Operation and maintenance will include any activities necessary to restrict human use on mitigation lands. Operation and maintenance will be conducted by the IDFG or other appropriate land management agency, with funding provided by BPA.

Monitoring

Monitoring habitat conditions on mitigation lands ensures that wildlife and habitat goals are being met and that rate payer investment in mitigation actions is protected. Detailed monitoring and mitigation crediting plans will be developed in the future.

The monitoring plan will include the establishment of permanent sampling points in acquired parcels to determine changes in habitat conditions through time. Important habitat variables for each bald eagle and other wildlife target species will be measured to assess benefits of mitigation measures.

Monitoring will be conducted by the IDFG or other appropriate land management agency with funding provided by BPA.

Estimated Costs

Implementation costs for an average acre of habitat along the South Fork have been estimated (Table 4) using Martin and Hansen (1986) and information from recent land acquisitions in the corridor.

Table 5. South Fork Snake River wildlife (bald eagle) mitigation cost estimates (per average acre). "Protection" is acquiring full management rights. "Enhancement" is initial development of acquired land. "Operation and maintenance" annual action needed to maintain wildlife mitigation benefits.

Mitigation Alternative	Protection	Enhancement			Operation & Maintenance
		3A	2A,1A	2B/3B,1B	
Fee-title	\$2,000-5,000	\$320	\$200	\$80	\$30
Conservation easement	<\$2,000-5,000	\$320	\$200	\$80	\$37

Relationship to Palisades Losses

Sather-Blair and Preston (1985) and the subsequent Wildlife Mitigation Rule (NWPPC 1991) identified eight target species which lost over 15,000 acres of low elevation habitat and a total of 37,068 HUs with the construction of Palisades Dam. Breeding bald eagle losses totaled 5,941 HUs while wintering bald eagle losses totaled 18,565 HUs.

Implementation of the South Fork Snake Project will achieve mitigation for a portion of those losses for all target species. For every 100 acres of wildlife habitat protected, it is estimated that 74 breeding bald eagle HUs and between 93 and 100 wintering bald eagles HUs will be provided. Between 224 and 356 HUs for all target wildlife species will be provided (Table 3). For every 1,000 acres of habitat protected in the South Fork corridor, it is estimated that about 7 percent of bald eagle mitigation and approximately 6 to 10 percent of all Palisades wildlife mitigation will be accomplished.

Table 6. South Fork Snake River wildlife (bald eagle) mitigation implementation schedule.

Year	Activity
December 1992	South Fork Snake River Programmatic Wildlife Mitigation Plan completed by IDFG.
June 1993	BPA completes environmental review of proposed action and finalizes Environmental Assessment (EA) or Categorical Exclusion (CE).
July 1993	IDFG and interagency team of biologists begin to identify willing sellers, prioritize available parcels, obtain appraisals where necessary, and purchase easements or fee-titles along the South Fork Snake River corridor, with funding from BPA. Total acreage to be protected and enhanced along the South Fork will depend upon progress toward achievement of habitat protection/mitigation goals, availability of BPA funding, availability of willing sellers, a resolution of hydropower share at Palisades, and other factors.

MITIGATION MANAGEMENT ACTIONS NOT RECOMMENDED

Public land enhancement. Both the BLM and USFS, under the Snake River Activity/Operations Plan, have the authority to pursue and obtain funding for enhancement of existing federal land along the South Fork. The interagency team will meet after review of this report to determine if potential BPA mitigation funding would be compatible with "in-lieu" portions of the 1980 Northwest Power Act.

Summer flows. It was felt that the implementation of this alternative would fall under another jurisdiction outside of this mitigation planning process. It is also questionable if permanent flows could be obtained for the future.

Winter flows. Implementation of this alternative would probably fall outside of this mitigation planning process and would not be a guaranteed, permanent enhancement.

Short-term management agreement with landowners. NPPC's 1990 wildlife rule requires that all mitigation actions be permanent: thus, it appears that non-permanent agreements would not comply with the Council's program for wildlife mitigation.

Artificial nest poles. It was the work group's opinion that this alternative would not be effective mitigation due to the bald eagle's reported preference for nest sites in natural over-mature trees, typically very close to water.

Side channel creation. This alternative would benefit bald eagles, but it appears cost-prohibitive and would require considerable engineering to withstand flood events.

LITERATURE CITED

- Anderson, M.W. 1985. Idaho's riparian lands: problems, concerns and hope. Pages 433-434 in Riparian ecosystems and their management: reconciling conflicting uses (R.R. Johnson, C.D. Ziedell, D.R. Patton, P.S. Ffolliott, and R.H. Hamre, tech coords). USDA For Serv. Gen Tech. Rep. RM-120. Fort Collins, Colorado.
- Chaney, E., and S. Sather-Blair. 1985. Wildlife Mitigation Status Report: Palisades Dam and Reservoir. Pages 11-117 in R.C. Martin, ed., 1985. Status Review of Wildlife Mitigation at 14 of 27 Major Hydroelectric Projects in Idaho. Bonneville Power Administration, Division of Fish and Wildlife, Portland, OR.
- Diehl, J., and T.S. Barrett. 1988. The Conservation Easement Handbook Trust for Public Lands. San Francisco, CA.
- Greater Yellowstone Ecosystem Bald Eagle Working Group. 1983. A bald eagle management plan for the Greater Yellowstone Ecosystem. Wyoming Game and Fish Dept., Cheyenne. **84pp.**
- Johnson, R.R., and S.W. Carothers. 1981. Southwestern riparian habitats and recreation: interrelationships and impacts in the Rocky Mountain region. Eisenhower Consortium Bulletin. USDA For. Serv. Rocky Mountain For. Range Exp. Sta., Fort Collins, Colorado.
- Knopf, F.L., R.R. Johnson, T. Rich, F.B. Samson, and R.C. Szaro. 1988. Conservation of riparian ecosystems in the United States. Wilson Bull. 100:272-284.
- Land Trust Alliance and National Trust for Historic Preservation. 1990. Appraising Easements--Guidelines for Valuation of Historic Preservation and Land Conservation Easements, second edition. The Land Trust Alliance, Alexandria, Virginia, and National Trust for Historic Preservation, Washington, D.C.
- Martin, R.C., and H.J. Hansen. 1986. Wildlife Protection, Mitigation, and Enhancement Plan: Palisades Project. Idaho Dept. Fish and Game. Bonneville Power Administration, Division of Fish and Wildlife, Portland, OR.
- Northwest Power Planning Council. 1991. Wildlife Mitigation rule and response to comments. Portland, OR 15pp.
- Sather-Blair, S., and S. Preston. 1985. Wildlife Impact Assessment: Palisades Project. U.S. Fish and Wildlife Service. Bonneville Power Administration, Division of Fish and Wildlife, Portland, OR.
- Thomas, J.W., C. Maser, and J.E. Rodick. 1979. Riparian zones. Pages 40-47 in Wildlife habitats in managed forests, the Blue Mountains of Oregon and Washington (J.W. Thomas ed.). USDA Handbook 553.
- U.S. Bureau of Land Management and U.S. Forest Service. 1991a. Snake River Activity/Operations Plan.

_____ 1991b. Snake River Activity/Operations Plan Environmental Assessment.

U.S. Fish and Wildlife Service. 1986. Proposal to Fish and Wildlife Foundation, South Fork of the Snake River, Idaho. Boise Field Office, USFWS. Boise, ID.

_____ 1986a. Pacific bald eagle recovery plan. USFWS. Portland, OR.

APPENDIX A

SOUTH FORK SNARE RIVER MITIGATION ALTERNATIVES, ISSUES AND CONCERNS
RECEIVED DURING PROJECT PLANNING AND PUBLIC COMMENT

Interagency Work Group:

Fee-title acquisition.
Conservation easements.
Planting cottonwoods.
Fencing.
Revegetating agricultural lands.
Flood flows for cottonwood seedlings.
Enhance bald eagle nest sites.
Management agreements with landowners.
Managing human disturbance on public lands.

Participant No. 1

- Purchase land/conservation easements.
- Consider bald eagle wintering habitat, foraging areas, and fishery requirements.
- Conant Valley should be a high priority area for acquisition of property or easements, if there are willing sellers.
- Consider conservation easements on lateral streams, which would improve fish spawning habitat, riparian conditions, and water quality.
- Identify important bald eagle winter roosting areas that are on the mainstem or lateral canyons, and consider these areas during selection of purchase/easement options.

Participant No. 2

Using flows to establish cottonwood seedlings as a mitigation measure may be a viable option, considering cottonwood ecology and other factors.

-- Large stock.

Participant No. 3

The mitigation action of buying or leasing land is good.
Development along the river corridor needs to be curtailed.
The state or federal government should pass legislation to provide for a green belt or corridor along all major rivers and streams.
The use of all motorized boats and all-terrain vehicles in the river corridor should be stopped, or at least control the type, size, and use. This would help minimize the human impact and noise pollution, and would be the single best thing that could happen to the river corridor for the wildlife habitat and all wildlife in general.

Participant No. 4

Mitigation measures should be permanent.

Purchases from willing sellers of private land with habitat similar to that which has been lost will give the greatest protection for our environmental resources.

Participant No. 5

The key to protecting bald eagles and other wildlife on the South Fork is habitat preservation and restoration.

Canyon should not be highest priority.

Primary focus for habitat preservation and restoration should be on the north bank from Palisades Dam to Conant Valley access site.

Tree planting and cattle exclusion on acquired lands would be very beneficial.

The second priority should be to expand the protection of the lower section (Heise Bridge to Henrys Fork confluence), again by land purchases to the greatest extent possible.

Encourage looking for ways to reverse degradation along some tributaries, especially Rainey Creek, to improve river water quality.

Participant No. 6

Support efforts to improve fish and wildlife habitat on the South Fork.

In addition to purchase of land and/or easements, propose that sufficient winter flows be ensured to enhance fish populations and maintain open fishing water for wintering bald eagles.

Participant No. 7

- Place artificial poles away from river and put platforms on them.
- Protect natural eagle habitat.
- Include landowners in public involvement; get permission to cross land.
- Planning group doesn't include property owners.
- Do not wish to sell property.
- Dikes along river lower water levels and kill cottonwoods.
- Will enough funding be going to South Fork project?
- Energy sales to California should fund wildlife projects. Get California to pay.
- Acquire land permanently.
- Require minimum stream flows from Bureau of Reclamation.
- Do water rights go with purchase of land?
- Will state law allow for water rights to be used for wildlife?
- Work with state to purchase water rights for wildlife.
- If Palisades Reservoir water is used to increase river flows, will the level of Palisades be increased to store the water irrigators need?
- Different groups benefit from reservoir, but only ratepayers pay.
- Palisades is primarily an irrigation dam.
- If landowners manage their land for wildlife, no need to purchase their land.

Will it be a year before you hire researchers?
Do you basically have needed information without additional studies?
Studying this to death. You'll lose the remaining cottonwoods by the time you get to action.
Palisades is also used for flood control. Water control has damaged cottonwoods.
Some of us have been fighting cottonwoods our whole lives.
Someone has to protect public land from public over-use.
Fencing riparian areas causes bad feelings.
Okay to limit public access to protect land.
Forest Service wants to build a \$1,000,000 facility (ramp) on wetlands by the river. Have wetland issues been addressed to discourage Forest Service from building ramps?
How many eagles use the South Fork, and what is your goal for increasing the population?
How many more nests do you want?
There are as many eagles now as before Palisades was built.
What's currently being done to help eagles on the South Fork and elsewhere?
How can cottonwoods be regenerated without flooding?
Try to buy small strips of habitat on the river's edge, not whole farms.
Buying land is more effective than artificial measures.
How has variation in fish populations affected bald eagles?
Stabilize river winter flows to help eagles.
The river below Heise has more cottonwoods now than in the past.
Need to look carefully at human disturbance of habitat.
Are outfitters over-using the river?
Advertisement will increase **use**.
Is the river being over-fished?
Could side channels be created for eagles to fish undisturbed?
Will there be Palisades mitigation other than South Fork?
Mitigation needs to be one for species other than the eagle.
Will you do the Environmental Assessment in conjunction with Bureau of Land Management and Forest Service?
Make sure other actions (trapping for predators) do not adversely affect eagles.
Are you looking at other areas for mitigation? What happens if you can't reach 35 percent goal along South Fork?

APPENDIX B

Programmatic Conservation Easement Terms and Conditions
Palisades Wildlife Mitigation Plan
South Fork Snake River Project

Definitions

- a. "Easement" means the privilege granted by a landowner to another party for a specific purpose which remains in force and effect for as long as used for that specific purpose or for the specified term of the easement.
- b. "Grantor" means the party (usually the landowner) who grants the easement to another party.
- c. "Grantee" means the party (either Bonneville Power Administration (BPA)), the Idaho Department of Fish and Game (Department), or other appropriate land management agency) to whom the easement is granted.

Purpose of the Conservation Easement

To preserve and protect in perpetuity, and to enhance, restore, and improve the significant relatively natural habitat for bald eagles, other wildlife and plants, and the riparian and wetland ecosystems on the property.

Programmatic Terms and Conditions

- a. If necessary, the easement area may be subdivided into two separate zones to provide for specific conditions applicable to part, but not all of the easement area. The zones will be defined as either a "Natural Zone" or a "Residential/Agricultural Zone." Zones will be specified on a map.
- b. No dwellings, barns, outbuildings or other structures shall be built within the easement area.
- c. Cattle or other stock shall not be permitted in the easement area, unless deemed necessary by the grantee to help achieve habitat protection/mitigation goals and objectives on the parcel.
- d. The grantee shall bear the costs of building and maintaining fencing or other facilities reasonably necessary to preclude stock from entering the easement area.
- e. The grantor shall be responsible for compliance with all federal, state and local laws for the control of noxious or other undesirable plants on the easement area. The responsibilities for such plant control may be assumed in writing by and at the option of the grantee where the control or manipulation of such plants is

deemed by the grantee to affect easement habitat protection/mitigation goals. If the grantee carries out weed control, grantors shall reimburse grantee for expenses incurred.

- f. Hunting, fishing, hiking, and other recreational activities can take place in the easement area, provided such activities do not have an adverse impact on the property or the values sought to be preserved by this easement.
- g. The vegetation or hydrology of the described easement area will not be altered in any way, including (1) cutting or mowing, (2) burning, (3) grazing, (4) harvesting wood products, (5) burning, (6) placing of refuse, wasters, sewage, or other debris, and (7) draining, dredging, channeling, filling, discing, pumping, diking, impounding and related activities, unless such activity is deemed necessary to achieve habitat protection/mitigation goals in the easement area and is approved by grantee.
- h. Grantee shall have the right of ingress and egress to conduct habitat management, monitoring, and easement enforcement activities.
- i. Grantee shall have the right to install, operate, and maintain structures for the purpose of enhancing bald eagle nesting success and for the purpose of re-establishing, protecting, and enhancing wetland, riparian, and other habitats important for wildlife in the area.
- j. Grantee shall have the right to establish or re-establish vegetation through seedings, plantings, or natural succession.
- k. Grantee shall have the right to manipulate vegetation, topography and hydrology on the easement areas through diking, pumping, water management, excavating, island construction, burning, cutting, biocide application, fertilizing, and other appropriate practices within existing local, state, and federal laws which govern those activities.
- l. Grantee shall have the right to allow and manage public access on the "Natural Zone" portion of the easement and limit public access on the easement area if such access conflicts with habitat protection/mitigation goals.
- m. Grantor shall have the right to manage public access on the "Residential/Agricultural Zone" portion of the easement area and is not bound to allow any public entry on said zone.
- n. Grantee shall have the right to perform easement compliance inspections, research, surveys, take photographs, and prepare other documentation as may be necessary or desirable to administer the provisions of this easement or achieve the habitat protection/mitigation goals.

DEED OF CONSERVATION AND SCENIC EASEMENT

THIS DEED OF CONSERVATION AND SCENIC EASEMENT, hereinafter referred to as the 'Easement' dated this _____ day of _____, 19 __ ____, by and between _____ and _____ husband and wife, of the County of Garfield, State of Colorado, hereinafter jointly called the 'GRANTORS,' and the United States of America, acting by and through the Forest Service, Department of Agriculture, hereinafter called 'GRANTEE.'

WHEREAS, the Grantors are the owners in fee simple of certain real property located within the established boundaries of the Targhee National Forest, located in fremont County, State of Idaho, which property is more particularly described in Exhibit A attached hereto and incorporated herein, and referred to as the 'Property;' and

WHEREAS, the Property possesses natural, scenic, open space, historical, pastoral, fish and wildlife, and other similar values, including value as a habitat of the grizzly bear, hereinafter referred to as 'Conservation Values;' and

WHEREAS, Grantee, its successors and assigns, desire to provide for and protect these Conservation Values and to prevent any developments, uses, or activities that will tend to mar or detract from these Conservation Values, and to that end exercise such reasonable controls over the Property as may be necessary to accomplish such objectives; and

WHEREAS, Grantors intend, as owners of the Property, to convey to Grantee, its successors and assigns, the right to preserve and protect the Conservation Values of the Property in perpetuity; and

WHEREAS, Grantee agrees by accepting this Easement to honor the intentions of Grantors stated herein and to preserve and protect in perpetuity the Conservation Values of the Property for the benefit of this generation and the generations to come.

NOW THEREFORE, the Grantors, for and in consideration of the sum of Three Hundred Thirty Nine Thousand and-no/100 Dollars (\$339,000), and other valuable consideration including the covenants contained herein, under the authority of the Act of August 3.1956 (7 U.S.C. Sec. 428(a)), the Land and Water Conservation Fund Act of 1965 (78 Stat. 897), and the Department of the Interior and Related Agencies Appropriation Act, 1991, do hereby GRANT, BARGAIN, SELL, CONVEY, and CONFIRM unto the Grantee, its successors and assigns with a perpetual estate and easement comprising all rights and interests in the Property except those rights and interests specifically reserved to the Grantors in Part II.

The restrictions and covenants contained in this Easement shall constitute a perpetual servitude on and run with the Property. The Grantors covenant to the Grantee on behalf of themselves and their heirs, successors, and assigns, to restrict their use of the Property to only those uses and activities expressly reserved in this Easement, and to refrain from doing, severally and collectively, any other activity or use of the Property.

I. PURPOSE

It is the purpose of this Easement to assure that the Property will be retained forever in its natural, scenic, open space, historical, pastoral, fish and wildlife, and other similar values and to prevent any use of the Property that will significantly impair or interfere with the Conservation Values of the Property as they exist on the date of this Easement. The Grantors intend that this Easement will confine the use of the Property to such activities as are consistent with the purpose of this Easement.

II. RESERVED RIGHTS OF GRANTORS

All rights and interests in Property is vested in the Grantee except those rights that are specifically and expressly reserved unto the Grantors in this Part II. The rights reserved with associated terms and conditions are as follows:

- A. Record title to the Property and all rights accruing from ownership of the property.
- B. The right to retain the existing cabin (the 'Existing Cabin') in its present location as shown on the sketch of the Property which is attached hereto as Exhibit B and by this reference incorporated herein, and to construct an addition to the Existing Cabin provided such addition: (a) shall be no larger than 1,500 square feet: (b) shall be low profile with the highest part of the structure not exceeding 24 feet above natural ground level: and (c) shall be constructed of logs and be of a compatible architectural design with the Existing Cabin.
- C. The right to maintain or relocate the existing tepee.
- D. The right to build a combination tool shed and wood shelter near the cabin, not to exceed 240 square feet in size, and to be constructed of logs and be of compatible architectural design with existing cabin.
- E. The right to retain the existing barn (the 'Existing Barn') in its present location as shown on the sketch of the Property attached as Exhibit B, and to construct one (1) additional barn (the 'Additional Barn') within that area shown on Exhibit B as the 'Barn Site' in the immediate vicinity of the Existing Barn; provided such Additional Barn: (a) shall be no larger than 2,000 square feet: (b) shall be constructed of the same or similar materials as the Existing Barn: and (c) shall be low profile with the highest point of the structure not exceeding 24 feet above natural ground level.
- F. The exclusive right to use the Existing Cabin, the Existing Barn, and the Additional Barn for Grantor's personal use.
- G. The right to use the existing access roads and to build new access roads to the Additional Barn referred to in subparagraph 111.E above (together, the 'Access Roads'); provided such Access Roads shall be unpaved, vehicular access, not to exceed thirty (30) feet in width.
- H. The right to retain the existing fences, livestock corrals, and irrigation ditches on the Property provided they are on the Property and to replace the existing fences and corrals on the Property when deteriorated to a condition which renders them no longer usable so long as such replacements are in the same locations, size, materials, and design as the existing ones. The foregoing notwithstanding, Grantor shall have the right to replace the existing fence with a 'Jack Fence' along the Cave Falls Road shown on Exhibit B hereto providing such fence shall enhance the Conservation Values of this Easement and lies within the Property, even though said existing fence is in good condition, and to construct an inverted siphon irrigation system on the Property. Notwithstanding anything above-stated to the contrary, this Easement shall confer on Grantor no right to retain, repair or replace fences, livestock corrals and irrigation ditches that are located on National Forest System lands.
- I. The exclusive right to use the Property for hunting, fishing, educational and other recreational purposes consistent with the purposes of this Easement, provided such uses of the Property shall not be for profit.
- J. The right to graze cattle and horses including the right to use temporary fences and enclosures in the meadow area of the Property; provided such grazing shall not exceed 300 Animal Unit

Months (AUM) per year (one cow and one calf equates to one animal unit: one horse equates to 1.25 animal units). Production of hay is allowed in the existing meadow provided such production of hay shall be allowed in lieu of, not in addition to, the grazing activity permitted hereby.

- K. The right to harvest dead, diseased, or insect-infested trees for personal use such as firewood, to remove any hazardous trees on the Property, and to remove noxious or toxic weeds such as larkspur, leafy spurge, thistle, toad flax, and mules ear wyethia
- L. The right to construct a fish pond for Grantor's personal use in the location shown in Exhibit B attached hereto which fish pond shall not exceed an area of 2.5 acres: provided that the design and construction of the proposed pond shall be in accordance with required standard engineering practices and shall be subject to the prior approval of Grantee and any and all appropriate state and/or local governmental agencies with jurisdiction thereof. Fish type shall be governed by State law or regulation. Grantor shall be responsible for obtaining any and all necessary permits and approval with regard to the construction and use of the fish pond. Except for the construction of the fish pond as provided in this subparagraph, any and all construction activity within the riparian zone or stream channel will be strictly prohibited.
- M. The right to bring electrical services to the Property by way of underground line or conduit buried no further than three (3) feet from the roadway on the Property.

III. AFFIRMATIVE OBLIGATIONS OF GRANTORS

- A. The Grantors have an affirmative obligation to make reasonable repairs and reasonably maintain the Property, and to preserve its existing aesthetic characteristics. This obligation includes, but is not limited to, not placing any signs or billboards on the Property except for sale or rent, no trespassing, or for identifying the owners, and not allowing the accumulation of trash, debris, or other unsightly materials. Grounds will be reasonably maintained in an attractive appearance.

IV. GENERAL PROVISIONS

- A. The general purpose of this Easement is to preserve, maintain, and perpetuate the traditional and historic ranch uses of the Property as they existed at the time of this Easement. Exhibit B, attached hereto and incorporated herein, depicts the number and location of structures and facilities and land uses as of the date of this Easement. Also depicted are the proposed additional barn and the proposed addition to existing cabin and the general location of the proposed pond.
- B. For any activity by the Grantors which requires prior approval by the Grantee, such approval will be at the sole discretion of the Supervisor of the Targhee National Forest in St. Anthony, Idaho. In general, approval will be determined on the basis of whether the proposed activity or improvement is compatible with the protection, enhancement, and conservation of the Conservation Values. Any activity or use determined to be incompatible shall be construed as a right having been acquired by the Grantee pursuant to this Easement.
- C. Public use and entry is not permitted on the Property. Representatives and agents of the Grantee are empowered to gain reasonable entry upon the property for purposes related to administering this instrument. No authorization is granted to the Grantee for entry into structures or personal property without the permission of the Grantors, their successors or assigns, except under applicable law.
- D. Nothing in this Easement shall prevent the Grantors, their successors and assigns, from selling or mortgaging the Property, subject to the rights acquired herein by the Grantee.

- E. All rights and interest in the Property not expressly and specifically reserved by the Grantors shall be deemed to be acquired by the Grantee, and uses of the property not specifically reserved shall be deemed prohibited.
- F. The Grantors and the Grantee agree that any ambiguities regarding the terms and conditions of this Easement shall be resolved in favor of the aforementioned Purpose (Paragraph I, page 1) of this Easement.
- G. The Grantee shall have the right to make surveys, plats, take photographs, and prepare other documentation as may be necessary or desirable to administer the provisions of this Easement. Any maps, plats, or other suitable documents may be recorded at the discretion of the Grantee in the records of County wherein the Property is located.
- H. The provisions of this Easement are enforceable by law or equity by the Grantee, its successors or assigns. In the event the Grantors fail to abide by the affirmative obligations set forth in this Easement, the United States has the right, but not the obligation, to perform the work itself or through a third party contract, and to bill the Grantors for the costs of work plus costs of administering the contract or work.
- I. The term 'Grantors' shall apply to the present Grantors, their heirs, successors, or assigns.

TO HAVE AND TO HOLD, the herein described estate in land and rights unto the Grantee, its successors or assigns forever. The rights conveyed herein shall run with the land and constitute a perpetual servitude thereon. The Grantors covenant that they, their successors, and their assigns will WARRANT and FOREVER DEFEND unto the Grantee the quiet and peaceable use and enjoyment of this Easement against all claims and demands.

IN WITNESS WHEREOF, the Grantors have hereunto set their hands and seals on the day and year first above written.

APPENDIX C



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Boise Field Station
4696 Overland Road, Room 576
Boise, Idaho 83705

December 11, 1992

G. Allyn Meuleman
Wildlife Mitigation Supervisor
Idaho Department of Fish and Game
600 South Walnut
P. O. Box 25
Boise, Idaho 83707-0025

Subject: South Fork Snake River Mitigation Phase I (1916.0000)

Dear ~~Ms. Meuleman~~ ^{Ms. Meuleman}:

The Fish and Wildlife Service has completed our review of the draft South Fork Snake River Palisades Wildlife Mitigation Phase I (Report). We regret that we were not able to attend the work group meeting on December 3, 1992, however we submit the following written comments that should be considered when finalizing the document. The document framework is well presented and when fully implemented under the preferred alternative should provide mitigation/enhancement features for bald eagles and many other species associated with the South Fork of the Snake River below Palisades Dam.

First, we do recommend that a table be included as an appendix to the document. A funding and implementation schedule, similar to one found in the South Fork Snake River Management Plan, should be included in the Report so that participating agencies and the public have some expectation as to when the mitigation and enhancement features will be enacted.

Second, under the Endangered Species Act as amended in 1988, it is not necessary to formally consult under Section 7 on actions that enhance or contribute to recovery of a federally listed species. Since this mitigation/enhancement report considers only "willing sellers" and not land trades with federal or state agencies that may support other federally listed species which may be affected by these actions, it is not necessary to formally consult. Should the Report be amended to consider this alternative and at the time negotiations for land trades are being considered, then Section 7 consultation with our agency should be initiated.

Third, as a matter of interest to you, we intend to put this Report on our agenda for discussion during the annual meeting of the Snake River Planning Area interagency group. We intend to hold our next meeting sometime in March, 1993.

DEC 15 1992

We appreciate the opportunity to comment on this Report. Should you have any questions, please contact Rich Howard of my staff (208-334-1931).

Sincerely,

A handwritten signature in black ink, appearing to read "Charles H. Lobdell", with a stylized flourish at the end.

Charles H. Lobdell
Field Supervisor

PNUCC

PACIFIC NORTHWEST UTILITIES CONFERENCE COMMITTEE

December 3, 1992

Allyn Meuleman
Wildlife Mitigation Supervisor
Idaho Fish and Game
600 South Walnut
PO Box 25
Boise Idaho 83707-0025

Dear Allyn:

Thank you for sending us the draft Palisades Mitigation Plan. Although we were unable to attend the work group meeting on December 3, we would like to offer the following comments.

Idaho Fish and Game devoted considerable effort to the public review process, to defining the study area, and to developing alternatives. However the draft mitigation plan lacks some essential information and leaves many basic questions unanswered.

For example, what is the ratepayer's mitigation responsibility? The draft report says that nearly 16,000 acres were inundated but it does not say that the hydropower system is responsible for only 7.5 percent of those losses. In other words, BPA can **fund** mitigation for no more than 1,191 acres. The mitigation plan must be scaled to the ratepayer's mitigation responsibility.

It is difficult to determine the scope of the proposed action. The Palisades mitigation plan is based on the concept of "acres of covertype" and "habitat units" per "average 100 acres". What does that really mean? How many acres are you planning to protect? Enhance? Where are they? How many habitat units will be gained? How do the "habitat units per average 100 acres" compare to the acres and habitat units listed in the original loss assessment? How can you determine **the** cost of the mitigation project without knowing how many acres are involved? All of these questions must be answered before we can evaluate the adequacy of the mitigation plan. Further, it is inappropriate to use one method to determine the number of acres and habitat units lost and a different method for calculating acres and habitat units gained through mitigation.

PNUCC would like to see the following information in the final mitigation plan:

- A clear statement of the ratepayer's mitigation responsibility at Palisades Dam.
- A detailed description of what you plan to do based on the same cover types and habitat suitability models used in the loss assessments and in Table 5 of the Wildlife Rule.
- A clear statement of how many acres and habitat units will be credited to Table 5.
- A clear statement of how much the project will cost and how long it will take.

NOV 11 1992



Allyn Meuleman
December 3, 1992
Page 2

We appreciate the opportunity to comment and look forward seeing the final Mitigation Plan.

Sincerely,

A handwritten signature in black ink that reads "Tom Giese for". The signature is written in a cursive style.

Diana MacDonald
Wildlife Biologist

The SHOSHONE-BANNOCK TRIBES



FORT HALL INDIAN RESERVATION
PHONE (208) 238-3748
(208) 238-3900
(208) 238-3808

FISHERIES DEPARTMENT
P. O. BOX 306
FORT HALL, IDAHO 03203

December 29, 1992

H. Jerome Hansen, Wildlife Biologist
Idaho Dept. of Fish and Game
P.O. Box 25
Boise, ID 83707

VIA TELEFAX TRANSMISSION

RE: PROPOSED PALISADES MITIGATION PROJECT -- COMMENTS ON DRAFT REPORT

Dear Mr. Hansen:

Enclosed please find the Shoshone-Bannock Tribes comments on the draft report for the proposed Palisades mitigation plan. If there are any further questions, feel free to call me at (208) 238-3758.

Sincerely,


Shaun Robertson
Fish and Wildlife Biologist

enc (1)

cc: BPA -- B. Walker (via regular mail)
files

DEC 29 1992

Purpose of and need for proposed Project: The Idaho Department of Fish and Game (Department) has determined that the purpose of the South Fork Snake River Palisades Wildlife Mitigation Project (project) is to “develop a programmatic management plan for wildlife (bald eagle) mitigation along 65 miles of the South Fork Snake River riparian corridor, including habitat protection and enhancement options and operation and maintenance **needs**¹.” The Shoshone-Bannock Tribes (Tribes) assumed that bald eagles were **focused on** as an indicator or target specie representing a diversity of species with similar habitats. However, the previous statements, and additional analysis of potential protection actions and criteria, imply that the Project is strictly oriented towards bald eagle mitigation, with other species receiving “credits” for mitigation wherever possible. Further, we **could** find no description within the Wildlife Protection, Mitigation and **Enhancement Plan** for the Palisades **Project**² **which described the** reason bald eagles were chosen as a target **specie**³. We believe that the reasoning behind the decision to focus on bald eagles for purposes of the mitigation plan is a fundamental determination that was **necessary** to support the remainder of the analysis. This reasoning, therefore, requires discussion within the Report.

If the proposed Project is strictly oriented towards the bald eagle as a “high priority according to state or federal programs”, then we **question** the significant expenditure of mitigation funds for a specie which is currently exceeding recovery objectives for this region. However, **if the goal** of the Project is actually **wildlife** mitigation as stated in the title of the document **and bald eagles were chosen as an** “indicator species used to best describe habitat conditions for groups of species with similar **habitat needs**”, then we recommend inclusion of **language which more fully explains the process of** selecting the bald eagle as a focus specie and the use of **bald eagle** habitat as an indicator in protecting diverse habitats for many **species**.

In addition, if the Project is to accomplish mitigation of various species habitats using bald eagle habitat as an indicator, the criteria for **protection**⁴ should **not be limited solely to those**

¹South Fork Snake River Palisades Wildlife Mitigation - Phase 1 Draft Report (**Report**). Idaho **Fish and Game**. Oct. 1992. pg 4. see **similar descriptions on pg 3**.

²**U.S.** Dept. of Energy - Bonneville **Power** Administration and Idaho Dept. of Fish and Game 1986. Final Report. **wildlife** protection, mitigation, and enhancement plan - Palisades project. **Pg. 9**.

³**The Final Report (IBID)** determined that species may be targeted "because they are of high priority according to state or federal programs, or because they are indicator species used to best describe habitat conditions for groups of species with similar habitat needs." (emphasis added)

⁴**Report**, page 21.

criteria necessary for bald eagle protection'. We believe that the criteria should place a higher priority on protection of bald eagle habitats that more fully represent a diversity of habitats necessary to satisfy the biological requirements of many species.

Goals and objectives. We agree that specific goals and objectives are necessary to support the evaluation of required Project activities and to **gauge the effectiveness** of expected Project attainments. However, broad based goal statements that apply to the entire Project, such as those described on page 16 of the Report, should be described at the beginning of the document.

Analysis of conflicts between Project implementation and Tribal Treaty Rights: The Tribes were assured that issues surrounding violation of Treaty rights would be resolved during the pre-design study of the South Fork mitigation **plan**⁶. However, the Report lacks a discussion of this issue or a **reference** to future analysis that will consider the effects of proposed **Project activities** on effectuation of Tribal Treaty rights. If the Report proposes that the Bonneville Power Administration (Bonneville) will **perform** this analysis within their review **under the National Environmental Policy Act**' (NEPA), then the Report should document that the analysis will occur in this manner.

Analysis to be included within the Bonneville prepared Environmental Assessment (EA): In **addition** to the EA 'examinations delineated within the **Report**⁸ the Tribes **request** that the EA also discuss the potential effects on Treaty rights from Project implementation. Tribal staff believes this request is supported within the Council on Environmental Quality regulations for implementing the NEPA and in recent decisions? Reference to this analysis should be included within this section of the Report.

Description of existing threats to habitat: The Report describes the upstream portion of the

¹For example the highest priority criteria for protection is "presence of a bald eagles nest" and lower priority criteria **are** "benefits to other wildlife **species**" and *maintenance of the undeveloped portions of the Snake River riparian corridor". (IBID)

⁶Correspondence from Cal Groen, Idaho Fish and Game to Marvin Osborne, Shoshone-Bannock Tribes, 1991.

⁸Pub. L. 91-420 USC 4321-4347 Jan. 1970 as amended by Pub. L. 94-52, July 3, 1975 and Pub. L. 94-83 Aug. 9, 1975.

⁹Page 5.

⁹see Northern Cheyenne Tribe v. Hodel, et al. (No. CV 82-116-BLG [D.Mont. May 28, 1985], 40 CFR 1506.2(d), and 40 CFR 1508.27(b)(10).

analysis area as “under the greatest threat of future development”¹⁰. This area was discussed by the interagency work group as a high priority for implementation of project activities”. It is possible to imply from the analysis that bald eagle mitigation **is proposed** since it is currently a state and federal high priority **species**¹². There are currently **strategies and protection measures emplaced that may ensure** protection of **these** high priority habitats (e.g. Endangered Species **Act** requirements). The Report should include a description of ongoing protection strategies and measures and their applicability to identified high priority areas.

Delineated issues and proposed issue statements: The Report delineates proposed issues to **be considered during the analysis**¹³. **The Tribes believe that** the Report should describe those issues determined through scoping for this Project, in addition to those issues described that were actually raised within other forum planning processes. Since issues surrounding **Tribal Treaty rights were** identified during the planning for this Project they should receive an appropriate level of discussion within this section.

Proposed protection actions: The Tribes recommend that fee-title acquisitions receive a higher priority than conservation easements. Conservation easements create extreme difficulties **for** access and use by Tribal members for effectuation of Treaty rights.

In addition, we believe that mitigation should not address operational impacts of the hydropower **system** since the loss assessments that provided a baseline for the mitigation plan were calculated for construction impacts only, To reiterate our previous discussion, the Project should not propose protection activities which are covered by existing protection measures or strategies.

¹⁰Page 6 .

¹¹Dec. 3,1992 meeting at Department's Idaho **Falls** office.

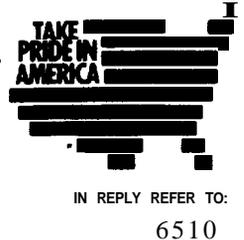
¹²~~see~~ previous **discussion** at Purposes ~~of~~ and need for proposed Project.

¹³Page 11. Table 1.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Idaho Falls District Office
940 Lincoln Road
Idaho Falls, Idaho 83401



January 13, 1993

Ms. Allyn Meuleman
Idaho Dept. of Fish & Game
600 South Walnut
P.O. Box 25
Boise, ID 83707-0025

Dear Ms. Meuleman:

The following comments represent our concerns over the Draft Palisades Mitigation Project.

We suggest a timetable be established for land and conservation easement acquisition. This should be coordinated with existing land management agencies and prioritized by the mitigation team.

Page 5-3. Bald eagles primarily use cottonwoods along the South Fork riparian corridor for nesting. The South Fork supports 11 nesting pairs of bald eagles.

Page 11 (Table 1). Regarding key issues and areas of concerns. are these identified as potential conflicts? If so what are the nature of the conflicts? How will these public identified issues and concerns be mitigated to the public's satisfaction?

Page 15 (9). We question the validity of even identifying the dismantling and removal of Palisades Dam as a "Habitat Enhancement Alternative".

Page 18-3. While we agree with the individual species HSI values established for the various river segments, our concerns remain with the overage/overmature cottonwood stands and the lack of regeneration within those stands (i.e., 3A-51.9%). We feel that these areas may have higher resource values and therefore may require a higher prioritization for protection. This is especially true within existing bald eagle nesting areas (i.e., Palisades Creek nest), the associated feeding and roosting areas and the present threat to these areas from human encroachment and development.

Page 21. We suggest that the "criteria for protection" use established Principle Management Parcel Rating guidelines found within the Snake River Activity/Operations Plan.

Page 24-1. No discussion was presented on agricultural, grazing or subdivision development impacts. Was this an oversight, or was it felt that not enough data presently exists to adequately address those impacts?

Page 25-2. Has it been identified who will complete the maintenance and monitoring of enhancements? Existing land management agencies? If so, where will the funding originate?

We appreciate the opportunity to provide comments for the South Fork Snake River Palisades Wildlife Mitigation Phase 1 Draft Report. Please feel free to contact our office should any further information be required.

Sincerely,

A handwritten signature in black ink, appearing to read "Donald L. Watson". The signature is written in a cursive style with a large initial "D".

Donald L. Watson
Area Manager
Medicine Lodge Resource Area



United States Department of the Interior

BUREAU OF RECLAMATION

Minidoka Project Office
1359 Hansen Avenue
Burley, Idaho 83318-1821



IN REPLY
REFER TO

422
ENV-7.00

JAN - 6 1993

Allyn Mueleman
Idaho Department of Fish and Game
600 South Walnut
P. O. Box 25
Boise ID 83707-0025

Subject: South Fork Snake River Palisades Mitigation Report
(Mitigation Fish and Wildlife)

Dear Allyn:

The Minidoka Project Office, Bureau of Reclamation would like to express our support for the concepts outlined in the draft South Fork Snake River Palisades Mitigation Phase 1 Report. It is our opinion that if implemented, the existence of significant wildlife habitat values, especially for bald eagles, can be guaranteed for the future.

The cottonwood habitat along the South Fork Snake River is one of the few remaining in Idaho. Besides the evident wildlife values, protection of this area will also result in economic and aesthetic benefits for the American public.

Sincerely,

John M. Dooley
Project Superintendent



United States
Department of
Agriculture

Forest
Service

Targhee
National
Forest

P.O. Box 208
St. Anthony, ID 83445

2620

February 10, 1993

Idaho Department of Fish and Game
600 South Walnut
Box 25
Boise, Idaho 83707
Attn: Allyn Meuleman, Mitigation Team Leader

Dear Allyn,

We have reviewed the South Fork of the Snake River, Palisades Wildlife Mitigation, Phase I Draft Report prepared by your staff. We also received and reviewed your January 12, 1993 letter and "easement conditions". We support the projects that have been developed. They appear to be consistent with the mitigation plan our interagency group developed in 1986.

There are two key comments we have related to the easement conditions and to the prioritization of parcels for protection. Please refer to attached sheets giving all of the comments from our review.

We appreciate the good work you have done in completing this document and thank you for keeping us informed as the project develops. Please feel free to contact us if there are questions.

Sincerely,

for Robert A. Quinn
JAMES L. CASWELL
Forest Supervisor



Caring for the Land and Serving People

Comments from our Staff for your consideration:

1. In relation to your January 12, 1993 letter and draft "programmatic conservation easement terms and conditions" which are to be included in the mitigation plan, our lands folks had these comments to offer.

Their concern was that these terms and conditions would result in disagreement and litigation in the future. In general, the easement should list what is retained by the grantor and clearly state that all rights not specifically reserved are assumed to be acquired by the grantee. It should also state that all ambiguities be resolved in favor of the grantee. A copy of an easement that ws recently purchased by the Forest Service is enclosed. We suggest any easements follow this format.

2. In the Phase I Draft Report under the section on "Prioritization of Parcels for Protection" (page 18) there was a concern that the priority should be based on review of individual bald eagle territories. It is important to identify the limiting factors affecting a given pair in regard to potential threats from activities on private land within or adjacent to the territory.

From this section it appears that the priority is based on geographical areas along the river from Palisades Dam to below Heise. This may be good related to cottonwood habitat availability. However, at the current time some of the greatest threats to active territories from human activities on adjacent private lands appears to be in segments 2A and 3A. These segments are shown as last priority on page 18. We recommend that this section be reviewed again to see if a better method can be developed.

3. One of the concerns of the Forest is maintaining consistency with the Targhee Forest Plan or any other management plans such as the Snake River Operations/ Activity Plan. At this point we don't see anything which would be in conflict with these plans. A specific concern is to maintain eligibility of certain river reaches for designation under the federal wild and scenic act as identified in our Forest Plan.

4. In the Phase I Draft Report under the section on "Habitat Enhancement Alternatives" (page 14) there were these comments:

Regarding 1) on fencing -- Intensive and expensive. Should be considered as a last measure.

Regarding 2) plantings -- It is difficult to succeed with cottonwood plantings, especially sprigs. Best to plant larger diameter material. General comments -- Is there a possibility to improve or enhance suckering of the narrowleaf cottonwood with a light to

growth as well. A high water table during growing season is also needed for success.

Regarding 5) summer flows -- Are we sure it's summer flows we need? Seems like storing flushing flows would be the important ones. Acquiring water rights could be a problem.

Regarding 8) side channels -- Would require a wetlands inventory and required permits. Needs to be properly located and reviewed to avoid negative downstream effects. Will produce at a minimum some adverse short term effects such as sedimentation.

5. There was concern that some discussion is needed to address the relationship between acquired parcels and the increasing recreation use along the South *Fork*. Also need for discussion on the cumulative effects management actions may have.