Status Review of Wildlife Mitigation at 14 of 27 Major Hydroelectric Projects in Idaho

Prepared by:

R. C. Martin
L. A. Mehrhoff

Idaho Department of Fish and Game

and

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U. S. Fish and Wildlife Service

under agreement numbers 83-478 (IDFG)
and DE-AI79-84BP12149 (USFWS)
for
Bonneville Power Administration
Division of Fish and Wildlife
in compliance with
Northwest Power Planning Council's
Columbia River Basin Fish and Wildlife Program

Final Report
January 1985

Bureau of Wildlife
Idaho Department of Fish and Game

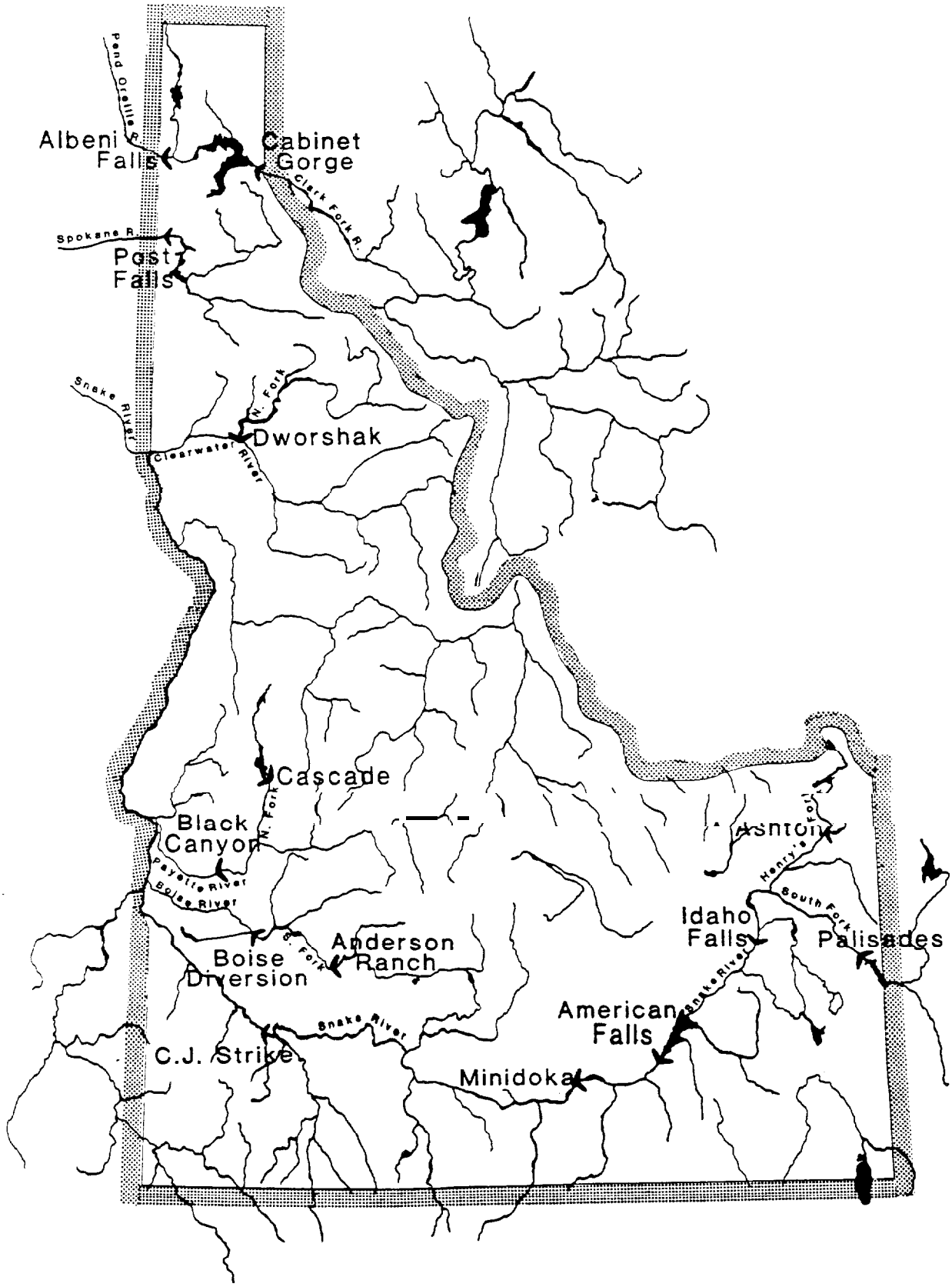
Office of Ecological Service8
U. S. Fish and Wildlife Service

Boise, Idaho

TABLE OF CONTENTS

PREFACE

The Pacific Northwest Electric Power Planning and Conservation Act (Public Law 96-501) directed the Northwest Power Planning Council (Council) to develop and adopt a program to protect and enhance fish and wildlife and their habitats in the Columbia River Basin and to mitigate for the losses to those resource8 resulting from the development, operation, and maintenance of hydroelectric projects on the river and its tributaries. To accomplish this goal, the Council developed the Columbia River Basin Fish and Wildlife Program (Program). The reports contained within this volume were written to meet the requirements of Measure 1004(b)(l) of the Program. The purpose of these wildlife mitigation status report8 is to provide a factual review and documentation of existing information on wildlife resources at some of the Columbia River Basin hydroelectric projects within Idaho. Effects of hydroelectric development and operation; existing agreements; and past, current, and proposed wildlife mitigation, enhancement, and protection activities were considered. In compliance with the Program, the wildlife mitigation status reports were written with the cooperation of project operators, and in coordination with resource agencies and Indian Tribes.



14 of 27 Major Hydroelectric Projects in Idaho

Wildlife Mitigation
Status Report

ALBENI FALLS HYDROELECTRIC PROJECT

Final Report

Prepared by:

E. Chaney
XVther-Blair

U.S. Fish and Wildlife Service
Ecological Services Office
John P. Wolflin, Field Supervisor

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number DE-AI79-84BP12149
Northwest Power Planning Council
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
January 1985

TABLE OF CONTENTS

I. PROJECT NAME

Albeni Falls Hydroelectric Project

II. PROJECT OPERATOR

Army Corps of Engineers

III. PROJECT DESCRIPTION

a. Location and Size

Albeni Falls Dam is located at mile 90 on the Pend Oreille River in Bonner County, Idaho, west of Lake Pend Oreille. Priest River, Idaho lies four miles to the east and Newport, Washington lies two and one-half miles to the west of the dam. All of Lake Pend Oreille, including the natural lake, is considered the dam's reservoir. Lake Pend Oreille covers 136 square miles (USACE 1981).

The dam is a concrete gravity gate-controlled structure 90 feet high and 755 feet long. The 472-foot spillway contains ten vertical lift roller-train type gates. The power plant's three generators have a capacity of 42,600 kilowatts at 0.9 power factor. The reservoir can store 1,155,OOO usable acre feet (USACE 1981).

b. Authorized Purposes

Authorized purposes of the dam include flood control, power generation, navigation, recreation and fish and wildlife conservation (USACE 1981).

c. Brief History

Albeni Falls Dam was authorized by the Flood Control Act of 1950. Construction began in January 1951. Regulation of the lake began in June 1951. Construction was completed in 1955 and power generation began at that time (USACE 1981).

d. Other Pertinent Data

(1) Water Level Fluctuation and Timing

Lake level is regulated between a minimum elevation of 2,049.7 feet and a maximum of 2,062.5 feet. The maximum is usually reached in the month of June and maintained until Labor Day. Lowest levels are reached in the winter.

(2) Land Ownership

The 94,600-acre reservoir has a shoreline of 226 miles. Of that, 58.8% is privately owned, 15.5% is occupied by railroad and highway embankments, 12.8% is owned by the U.S. Forest Service (USFS), 11.2%

is owned by the Army Corps of Engineers (Corps), 1.5% is owned by the State of Idaho and 0.2% is owned by the City of Sandpoint. Approximately 3,780 acres of project land are licensed to the Idaho Department of Fish and Game (IDFG) for wildlife management (USACE 1981).

(3) Indian Rights

In preparing this report, no documentation was found that would indicate any consideration of Indian rights or any tribal involvement in pre- or post-construction wildlife impact assessment and planning.

According to spokesmen from the Kootenai Tribe of Idaho and Kalispel Indian Community, it is doubtful there was tribal involvement in planning and construction of the Aibeni Falls project. However, both tribes are interested in project impacts on wildlife and are members of the Upper Columbia United Tribes, an inter-tribal organization recently formed to facilitate tribal involvement in the Columbia River Basin Fish and Wildlife Program adopted by The Northwest Power Planning Council. Members are the Coeur d'Alene Tribe, Kalispel Indian Community, Kootenai Tribe of Idaho and Spokane Tribe of Indians (pers. comm. Kootenai Tribe of Idaho and Kalispel Indian Community).

IV. WILDLIFE SPECIES AND HABITAT ASSESSMENT

Wildlife impact assessments conducted during project planning and construction were tied to general wildlife conservation provisions of the Rivers and Harbors Act requiring ".. .due regard for wildlife conservation...," the Flood Control Act and Fish and Wildlife Coordination Act (USFWS 1951). The resulting U.S. Fish and Wildlife Service (USFWS) assessment was published in 1953 (USFWS 1953).

a. Pre-construction

The proposed reservoir at normal pool was projected to impact 5,300 acres of land and 88,300 surface acres of water above the dam (USFWS 1953). Tne land area was subject to spring and early summer flooding. Though the USFWS (1953) did not quantify extent of vegetation communities to be inundated by the reservoir, they did describe the more common communities: "The principal cover types on the lands to be flooded are broadleaf trees, coniferous trees, brush, meadows, grasslands, marsh, and agricultural crops. The dominant plant species of the lakeshore and river deltas are black cottonwoods, alder, Douglas fir, western red cedar, lodgepole pine, willow, hawthorn, snowberry, spirea, cinquefoil, sneezeweed, sedges, redtop, and bluejoint. The most abundant aquatic plants in Pend Oreille Lake are waterweeds, pondweeds, spike rushes, arrowgrasses, horsetails, and water smartweeds."

Lake Pend Oreille has historically been an important waterfowl migration and wintering area. Twenty-three species of waterfowl have been recorded for the area (USACE 1981), most notable among these are the large concentrations of redheads and canvasbacks. Unfortunately, no quantitative data were found to give any indication of waterfowl numbers before the project.

Lowlands along the north shore of Lake Pend Oreille including the deltas of the Clark Fork and Pack Rivers were utilized by large concentrations of migratory waterfowl. These shallow water areas were known to be very productive of waterfowl food plants, both emergent and submerged (USFWS 1960).

Mallards, goldeneyes and wood ducks were the principal nesting species identified by the USFWS (1953) but other species such as the Canada goose, greenwing, blue-wing and cinnamon teal, and American wigeon probably also nested (USACE 1981). Nesting success was limited due to chronic flooding of nesting habitats during early June.

Furbearing animals were abundant in the project area (USFWS 1953). Principal species were muskrat, beaver, skunk, weasel, mink and otter.

Moose, elk, mule deer, white-tailed deer and black bears are all native to the region. White-tailed deer were common in the project area, particularly in the Clark Fork and Pack River delta areas (USFWS 1953). Ruffed and blue grouse were the principal upland game birds present. Pheasant habitat was limited and the small number of wild birds were annually supplemented by stocking. The pre-construction presence of additional species can be inferred from recent reports on contemporary wildlife populations in the project area (USACE 1981).

b. Post-construction

Reservoir operations were expected to substantially alter vegetation on the 6,300 acres lying between the pre-construction meander line and post-construction normal pool elevations (USFWS 1953). Maintaining reservoir water levels during the summer was expected to improve waterfowl nesting over pre-project conditions. Fall drawdown of the reservoir was expected to drain most areas providing food for waterfowl with a corresponding reduction in waterfowl use of the area in late fall and winter. This negative impact was estimated to far exceed the positive impact of improved nesting habitat (USFWS 1953).

Later the USFWS (1960) reported post-construction wildlife losses larger than the 1953 pre-construction estimates. The affected 6,300 acres of land, once agricultural lands, meadow, brush and deciduous tree habitats, were now largely mudflats December-April. The USFWS (1960) also noted that "...the drawdown and shallow water areas have become less productive of waterfowl food plants. Native grasses and sedges have been eliminated. Submerged aquatic plants, which flourished under natural conditions in the permanently flooded shallow areas, have become less abundant, particularly during the fall migration period for waterfowl." However, the USFWS noted that duck use of the lake appeared to remain largely stable during spring and fall migration. Current waterfowl censuses conducted by the IDFG from 1970 to 1982 estimate from 47,500 to 142,600 ducks, from 493 to 14,459 geese, and 225 whistling swans winter on the lake annually. The wintering population of redheads is 98% of Idaho's total and 20% of the Pacific flyway population (USACE 1981).

The anticipated new growth of vegetation along the lake shoreline was not established by 1960 and as a result waterfowl production in the area was reduced from pre-project levels. Brood counts in 1958, 1959 and 1960 indicated a 50 percent drop in duck production (USFWS 1960).

Moose , elk, mule deer, white-tail deer and black bears are still present in the region (USACE 1981, USACE 1983). The reservoir inundated approximately 4,000 acres of white-tailed deer range and 1,000 acres of black bear habitat. All big game habitats below 2,062.5 feet in elevation were eliminated. However, some white-tailed deer *were* found to return to the Clark Fork delta area during the winter low-water period (USFWS 1960).

Post-construction stabilization of Pend Orelle Lake and River from June to October and a 10-13 foot winter drawdown were estimated to result in rapid elimination of muskrat and beaver within the impoundment. Otter, mink and weasel habitats were expected to be eliminated within the reservoir area, but these animals were expected to re-establish themselves along the post-construction shoreline. These animals are currently found in the area, though they are not abundant (USACE 1981, 1983). Pheasant, ruffed and blue grouse habitats were eliminated within the 6,300 acre area affected by the water level fluctuations. A wide variety of nongame species also were displaced and/or lost because of habitat elimination within the impounded area.

Raptors that nest in the area include bald eagles, ospreys, marsh hawks and owls. The bald eagle is listed as an endangered species in Idaho and one active nest has been located on Lake Pend Oreille (pers. comm. USFWS). The number of wintering bald eagles averaged 54 birds from 1971 - 1979 with the largest number observed in 1976 at 86 birds (USACE 1981). Lake Pend Oreille also supports one of the largest nesting concentrations of ospreys in the western United States (pers. comm. USFWS).

V. WILDLIFE MITIGATION HISTORY

Planning and construction of the Albeni Falls project occurred prior to the time formal impact assessments and mitigation were required by law. The 1934 Fish and Wildlife Coordination Act, for example, largely mandated a " . . .spirit of cooperation..." among project developers and wildlife interests (House of Representatives Report No. 850, 1934). Strengthening amendments in 1946 fell short of requiring comprehensive impact assessments and mitigation (Senate No. 1981, 1958).

a. Mitigation Requested or Proposed

In 1953 the USFWS after consultation with IDFG recommended the following measures to mitigate the loss of 6,300 acres of wildlife habitat resulting from construction and operation of the Albeni Falls project (USFWS 1953):

" 1. The areas encompassing Clark Fork Delta-Denton Slough, Pack River Delta, Oden Bay, Muskrat Lake area, Morton Slough, and other downstream areas . ..be acquired and transferred to the State of Idaho for wildlife management.

2. A sub-impoundment be constructed by the Corps of Engineers on Morton Slough.

3. All federally owned land in the project area be open to free use by the public except for such portions as may be reserved by the sponsoring agency for purposes of safety, efficient operation, or protection of public property.

4. Leases of Federal land in the project area stipulate the right of public access for the purpose of hunting, fishing, and other uncommercialized recreational purposes."

The USFWS requested that a total of 8,140 acres of land and shallow water areas be acquired and transferred to IDFG for administration and management.

b. Mitigation Agreements or Requirements

On August 2, 1957 the Department of the Army executed a license granting the IDFG the right to develop and manage for wildlife approximately 3,780 acres of federally-owned project land (USFWS 1960). These lands consisted of 926 acres of upland and 2,854 acres of wetlands. Term of the license was for 50 years, beginning September 1, 1956 and ending August 31, 2006. The license has since been renegotiated and was signed by IDFG on March 13, 1984. The term of the new license is for 25 years.

C. Mitigation Implemented

Approximately 6,300 acres of land were impacted by the project. The USFWS recommended a total of 8,140 acres of land and shallow water areas be purchased for wildlife but only mitigation 3,780 acres were subsequently obtained. The recommended sub-impoundment on Morton Slough was not constructed.

The licensed lands are divided into ten management units ranging from one acre to 567 acres along the Pend Oreille River and north end of Pend Oreille Lake. The bulk of the acreage is under custodial management for wildlife habitat by IDFG (pers. comm. IDFG). However, several of the areas have recreational facilities existing or planned (USACE 1981). Approximately 64 acres of the wildlife management areas are or will be directly reduced in value to wildlife as a result of recreation developments. Additional lands surrounding these areas will probably also be reduced in value as wildlife habitat as a result of greater human disturbances.

VI, CURRENT STUDIES AND PLANNING

No studies related to the Albeni Falls Project are underway or planned by the Corps or IDFG (pers. comm. USACE and IDFG). In 1974 IDFG purchased 119 acres in the Pack River delta area and 419.25 acres in Clark Fork delta area. Both sites are upstream of and adjacent to Corps' lands and are managed for wildlife. The IDFG developments to enhance wildlife habitat and public utilization of wildlife resources on licensed and adjacent lands include:

1. A 15 acre alfalfa/clover field is being managed as goose pasture under a share-crop arrangement.

2. Goose nesting platforms have been constructed at Clark Fork and Pack River deltas, Morton Slough, Hoodoo Creek and Priest River.

3. Wood duck nesting boxes have been installed at Clark Fork and Pack River deltas,

4. Fencing to control livestock and enhance wildlife habitat has been constructed at Roodoo Creek, Morton Slough, Denton Slough and Johnson Creek.

VII. REFERENCES CITED

Environmental Law Institute. 1977. The evolution of National Wildlife Law.

House of Representatives Report No. 850. 1934. 73rd Congress, 2nd Session.

Senate Report No. 1981. 1958. 85th Congress, 2nd Session.

U.S. Army Corps of Engineers. 1957. License for fish and wildlife management purposes, Albeni Falls Reservoir Area. Seattle District, Seattle, Washington.

_____. 1981. Albeni Falls Project master plan. Seattle District, Seattle, Washington.

_____. 1983. Final environmental impact statement - operation of Albeni Falls Dam, Idaho. Seattle District, Seattle, Washington.

U.S. Fish and Wildlife Service. 1951. Letter to Seattle District Engineer to propose field investigations to revise 1946 preliminary fish and wildlife assessment. January 26, 1951.

_____. 1953. An interim report on fish and wildlife resources affected by Albeni Falls Project, Pend Oreille River, Idaho.

_____. 1960. Supplementary follow-up report, Albeni Falls Project, Idaho.

APPENDIX A

Study Team

Ed Chaney
Signe Sather-Blair

APPENDIX B

Consultation/Coordination

A. Project Contacts

1. Idaho Department of Fish and Game
   Paul Hanna
   Jerry Neufeld

2. Kalispel Indian Community
   Lawrence Goodrow

3. Kootenai Tribe of Idaho
   Wayne Nishek

4. U.S. Army Corps of Engineers
   Ken Brunner

5. U.S. Fish and Wildlife Service
   Rich Howard
   John Wolflin

B. Summary

Dates	Agency	Summary
October 1 - November 15, 1983	Idaho Department of Fish and Game - Region 1	Discussed current wildlife populations and management of leased lands
	Kalispel Indian Community	Discussed Indian involvement in planning
" "	Kootenai Tribe of Idaho	Discussed Indian involvement in planning
" "	U.S. Army Corps of Engineers - Seattle District	Discussed current project operations and mitigation status
" "	U.S. Fish and Wildlife Service	Discussed project and important fish and wildlife resources in the general vicinity
March 22, 1984	U.S. Fish and Wildlife Service	Discussed bald eagle and osprey population status in Lake Pend Oreille area

APPENDIX C

Comments

(1) State Agency (IDFG)

(2) Federal Agency (USFWS)

(3) Indian Tribes (Kalispel Tribe)

(4) Facility Operator (USACE)

No formal comments were received.

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

August 31, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P.O. Box 3621
Portland, OR 97208

ATTENTION: JAMES MEYER

Dear John:

Thank you for the opportunity to review the "Wildlife Mitigation Status Review" for Albeni Falls Dam. The report appears to be an accurate description of the wildlife mitigation at the project.

On page 5, part B, Mitigation Agreements, a new license between the Corps of Engineers and the Department was executed that covers a 25 year period beginning October 1, 1983 and ending September 30, 2000. Reference to this new license and its provisions should be part of the Status Report.

The current mitigation for the impacts on wildlife from Albeni Falls Dam is not adequate. The mitigation proposed by the U.S. Fish and Wildlife Service in 1953 should be completed. These recommendations are listed on pages four and five of the report. Approximately 4,360 acres of land, in addition to land already acquired, need to be acquired to replace the habitat inundated and a subimpoundment on Morton Slough needs to be completed.

Sincerely,

Jerry M. Conley
Director

.JMC:LN:cjj

United States
Department of the Interior
'Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

AUG 0 8 1984

In Reply Refer To: Your Reference:

August 3, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter of July 20, 1984, we have reviewed the Wildlife Mitigation Status Report for the Albeni Falls Project in northern Idaho. The following comments are being provided for inclusion in the final report.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. Based on the report's content, it is evident that the construction and operation of the project has resulted in adverse impacts to wildlife resources which have been neither adequately identified nor mitigated. Therefore, the Service recommends that the Bonneville Power Administration provide funds to: 1) conduct an evaluation of the impacts of the project on wildlife resources; and 2) based on the findings of that evaluation, develop a mitigation and enhancement plan which would fully compensate the adverse wildlife impact attributable to the project.

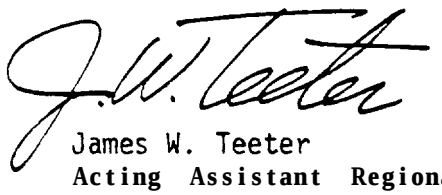
An evaluation of the project's impact on wildlife resources should be conducted by a lead resource agency which would then be responsible for coordinating the study with other appropriate agencies. Agencies that should be involved in such an evaluation include the Idaho Department of Fish and Game, Army Corps of Engineers, Forest Service, and the Fish and Wildlife Service. The evaluation should include an analysis of 1) immediate post-construction losses, 2) mitigation actions which have been implemented, and 3) current project area conditions. We recommend that the evaluation be habitat-based and supported by existing wildlife population data when available. We suggest that collection of new population data be limited and applied only to species of special interest, i.e. bald eagle.

We believe that a habitat-based evaluation could be accomplished in a timely manner using a tool such as the Habitat Evaluation Procedures (HEP) developed by the Fish and Wildlife Service. It provides a mechanism to assess project impacts and evaluate potential mitigation actions, and can thus streamline our efforts to evaluate losses and develop a mitigation plan for this project. Conduct of the proposed Palisades study should provide a basis for determining the evaluation method.

We foresee that an evaluation of losses for this project would include 1) an analysis of existing data such as pre- and post-construction photography and 2) brief field evaluation of current habitat conditions in the project area and sites considered representative of habitat inundated by the project. These field inspections would be conducted by a team of wildlife biologists familiar with the area's wildlife resources. The results of the evaluation would be presented in a loss statement report.

In conclusion, we believe that the analysis of losses and mitigation needs should be done as quickly as possible. However, we also recognize that the mitigation recommendations should be based on a technical assessment of losses.

Sincerly,



James W. Teeter
Acting Assistant Regional Director
Habitat Resources

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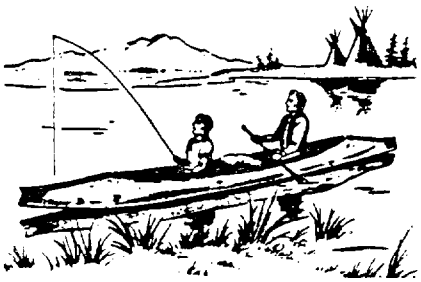

KALISPEL TRIBE OF INDIANS

July 25, 1984

Mr. John Polensky, Director
Division of Fish & Wildlife
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

RE: Comments -Project Report on the "Wildlife Mitigation Status Review" for Albeni Falls Dam prepared by the U.S. Fish and Wildlife Service

Dear Mr. Polensky:

Given the wildlife losses due to the construction and operation of the Albeni Falls Dam, it is imperative that those agencies involved be cognizant of post construction impacts and establish a time frame for planned mitigation.

Currently mitigation is piecemeal and without established goals. Sensitive habitat areas should be identified for the purposes of a long term coordinated mitigation effort. Multiple use areas, protected areas and specific use areas should be identified. An attempt must be made in the plan to educate and inform the public concerning mitigation efforts. If one of the intended authroized purposes of the Albeni Dam project is fish and wildlife conservation, then a concerted move toward mitigation is necessary to insure no further degradation of wildlife habitat.

Respectfully,

Glen Nenema

Glen Nenema
Chairman, Kalispel Indian Tribe
Chairman, Upper Columbia
United Tribes (UCUT)

GN/km

Box 38 ▯ USK, WASHINGTON 99180 • PHONE (509) 445-I 147

APPENDIX D

Mitigation Instruments

(1) Corps of Engineers license allowing the IDFG to manage 3,780 acres of land under the jurisdiction of the Corps. Signed March 13, 1984.

Signe

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT. CORPS OF ENGINEERS
P.O BOX C-3755
SEATTLE. WASHINGTON 98124

MAR 2 6 1984

REPLY TO ATTENTION OF

MAR 2 2 1984

Management and Disposal Branch

Idaho Department of Fish and Game
Attention: Stephen M. Barton, Chief
Bureau of Administration
600 South Walnut
Box 25
Boise, Idaho 83707

Dear Mr. Barton:

Enclosed for your records is a fully executed copy of Department of the Army License No. DACW67-3-84-4 for use and occupancy of approximately 3,780 acres of land and water areas, Albeni Falls Dam, Idaho.

Sincerely,

Patricia M. Dice
Acting Chief, Real Estate Division

Enclosure

DEPARTMENT OF THE ARMY LICENSE

FOR FISH AND WILDLIFE MANAGEMENT PURPOSES

NO. DACW67-3-84-4

FOR FISH AND WILDLIFE MANAGEMENT AND PUBLIC PURPOSES IN THE ALBENI FALLS RESERVOIR PROJECT, THE SECRETARY OF THE ARMY, under authority of Section 4 of the Act of Congress approved 22 December 1944, as amended, (16 U.S.C. 460d.) and Section 3 of the Fish and Wildlife Coordination Act of 1934, as amended, (16 U.S.C. 663) and in order to update and supersede License Control No. 103-6, dated 2 August 1957, hereby grants to the STATE OF IDAHO, Department of Fish and Game, hereinafter referred to as the licensee , a license for a period of twenty-five (25) years commencing on 1 October 1983 and ending on 30 September 2008, to use and occupy approximately 3,780 acres of land and water areas under the primary jurisdiction of the Department of the Army in the Albeni Falls Reservoir Project, as shown on Exhibit "A, and described on Exhibit "B, " attached hereto and made a part hereof, for fish *and* wildlife management and public purposes.

THIS LICENSE is granted subject to the following conditions:

1. That the licensee, in the exercise of the privileges hereby granted, shall conform to such rules and regulations as may be prescribed by the Secretary of the Army and the Chief of Engineers to govern the public use of the said project area.

2. That the licensee may construct upon said land such buildings, improvements, facilities, accommodations, fences, signs and other structures as may be necessary for the purposes of this license, and may plant seeds, shrubs and trees, provided that all such structures shall be constructed and the landscaping accomplished in accordance with plans approved by the District Engineer, U.S. Army Corps of Engineers, in charge of the administration of the property.

3. That the licensee shall administer and maintain the said property, for the purposes of this license, in accordance with the master plan for the said project area and with an annual management program to be mutually agreed upon between the licensee and the said District Engineer, which may be amended from time to time as may be necessary. Such annual management program shall include, but is not limited to, the following:

a. Plans for management and development activities to be undertaken by the licensee or jointly by the Corps of Engineers and the licensee. This should include specific information about: (1) the activities to be performed and where; (2) the areas designated for various species of fish and wildlife propagation; (3) the areas to be outgranted by agricultural agreement or sharecropped; (4) variety and scope of crops to be planted, as well as any rotations; (5) the areas proposed for wildlife cover and the type of cover to be cultivated, if any;and (6) all structures and improvements proposed.

b. Budget of the licensee for carrying out the management and development activities. This should include estimates of revenues to be generated annually and where these funds will be expended.

c. Personnel to be used in the management of the area.

d. Plans for supervising, patrolling and policing the licensed areas, Including the water areas.

e. That for the purpose of wildlife habitat management, licensee may enter into cattle grazing agreements for a period up to flve (5) years, subject to prior approval by the District Engineer of annual land use regulations submitted by the licensee.

4. That the licensee shall protect the property from fire, vandalism and soil erosion, and may make and enforce such rules and regulations as are necessary, and within its legal authority, in exercising the privileges granted in this license, provided that such rules and regulations are not inconsistent with those prescribed by the Secretary of the Army to govern the public use of the area.

5. a. That the licensee, in exercising its governmental or proprietary functions, may plant and harvest crops, either directly, by service contract, by sharecrop agreements with local farmers, or by agricultural agreements to provide food and/or habitat for wildlife and for the development and conservation of land, fish and wildlife, forests, and other natural resources. Where f easlble, contracts and agreements with third parties shall be by competitive bid procedures.

b. The proceeds derived from the sale of crops, and timber required to be cleared, may be used in furtherance of the above uses at this project in accordance with the approved management plan. The balance of the proceeds not so used shall be paid to the United States of America at the expiration of each five-year period. The first five-year period is to begin on the date of the execution of this license by the Government. Payment of direct expenses are authorized for planning and development of optimum wildlife habitat inclding planning of wildlife food plots, necessary timber clearing, erosion control or habitat improvements such as shelter, restocking of fish and wildlife, and protection of endangered species. Payment of licensee's employees who are directly engaged in such activities at the project is also authorized. However, proceeds will not be used for the payment of general administrative expenses. Payment of expenses, salaries and wages must be approved .

c. Proceeds derived from the sale of fishing and hunting licenses are not subject to this condition.

d. Any lands not being managed by the licensee for wildlife habitat will be made available for lease by the District Engineer for agricultural or grazing purposes under conditions which would not be incompatible with the licensee's use of the licensed property.

e. The licensee will establish and maintain adequate records and accounts and render annual statements of receipts and expenditures in furtherance of its management program, and as otherwise may be reasonably required by the said District Engineer. The District Engineer shall have the right to perform audits of the licensee's records and accounts.

6. That the licensee may take, trap, remove, stock or otherwise control all forms of fish and wildlife within the said area, and may place therein such additional forms of fish and wildlife as it may desire from time to time, and shall have the right to close the area, or any parts thereof from time to time, to fishing, hunting or trapping, provided that the closing of any area to such use for fishing, hunting or trapping shall be consistent with the state laws for the protection of fish and wildlife; also, the licensee shall enforce the fish and game laws and such orders and regulations as may be issued by the Division of Game and Fish, and/or its Director, which *laws,* orders and regulations are consistent with its state-wide program.

7. That the water areas of the project shall be open to public use generally, without charge, for boating, swimming, bathing, fishing and other recreational purposes, and that ready access to and exit from such water areas along the shores of the project shall be maintained for general public use, when such use is determined by the Secretary of the Army not to be contrary to the public interest. However, no use of any area shall be permitted which is inconsistent with the state laws for the protection of fish and game.

8. That this license is subject to all existing and future easements, leases, licenses and permits heretofore granted, or to be hereafter granted, by the United States concerning said lands; provided, however, that upon appropriate notification by the licensee to said District Engineer, the United States, insofar as may be consistent with other uses and purposes of the project, will not enter into any new easements, leases, licenses or permits, or renewals thereof, which will, in the opinion of the District Engineer, adversely affect the current operations of the licensee under the provisions of the license, or which will conflict with the definitely scheduled program of the licensee for the expansion of its activities under the provisions of this license.

9. That the licensee shall not discriminate against any person or persons because of race, color, age, sex, handicap, or national origin in the conduct of operations on the leased premises.

10. That no cuts or fills along the shoreline shall be made by the licensee without the prior approval of the said District Engineer.

11. That, within the limits of their respective legal powers, the parties to the license shall protect the project against pollution of its water. The licensee shall comply promptly with any regulations, conditions or instructions affecting the activity hereby authorized if and when issued by the Environmental Protection Agency and/or a state water pollution control agency having jurisdiction to abate or prevent water pollution. Such regulations, conditions,or instructions in effect or prescribed by the Environmental Protection Agency or state agency are hereby made a condition of this license.

12. That ingress to and egress from the project area shall be afforded the licensee over existing access roads, such interior roads as may be constructed, and at such additional places over Government-owned land as may be approved by said District Engineer. The licensee shall provide appropriate markings at its own expense.

13. That the right is hereby expressly reserved to the United States, its officers, agents and employees, to enter upon the said land and water areas, at any time and for any purpose necessary or convenient in connection with river and harbor and flood control work, and to remove therefrom timber, or other material, required or necessary for such work; to flood said premises -when necessary, and/or to make any other use of said land as may be necessary in connection with public navigation and flood control, and the licensee shall have no claim for damages of any character on account thereof against the United States or any agent, officer or employee thereof.

14. That any property of the United States damaged or destroyed by the licensee incident to the exercise of the privileges herein granted shall be promtly repaired or replaced by the licensee to the satisfaction of the said District Engineer.

15. That the United States shall not be responsible for damages to property or injuries to persons which may arise from, or be incident to, the exercise of the privileges herein granted, or for damages to the property of the licensee, or for damages to the property or injuries to the person of the licensee's officers, agents, servants or employees, or others who may be on said premises at their invitation or the invitation of any one of them, arising from or incident to the flooding of said premises by the Government or flooding from any other cause, or arising from or incident to any other governmental activities or operations on said project area, and no claim or right to compensation shall accrue from such damages or injuries, and the licensee shall hold the United States harmless from *any* and all such claims.

16, That this license may be relinquished by the licensee at any time by giving to the Secretary of the Army, through the said District Engineer, at least thirty (30) days' notice in writing.

17. That this license may be revoked by the Secretary of the Army in the event the licensee violates any of the terms and conditions of this license and continues and persists therein for a period of thirty (30) days after notice thereof, in writing, by the said District Engineer.

18. That on or before the date of expiration of this license or its relinquishment by the licensee, the licensee shall vacate the said Government premises, remove all property of the licensee therefrom, and restore the premises to a condition satisfactory to the said District Engineer. If, however, this license is revoked, the licensee shall vacate the premises, remove said property therefrom, and restore the premises as aforesaid within such time as the Secretary of the Army may designate. In either event, if the licensee shall fail or neglect to remove said property and so restore the premises, then said property shall become the property of the United States, without compensation therefor, and no claim for damages against the United States, or its officers or agents, shall be created by or made on account thereof.

19. That the licensee shall not remove or disturb, or cause or permit to be removed or disturbed, and historical, archeological, architectural or other cultural artifacts, relics, vestiges or remains. In the event such items are discovered on the premises, the grantee shall immediately notify the District Engineer, Seattle District, and the site and the material shall be protected by the licensee from further distrubance until a professional examination of them can be made or until clearance to proceed is authorized by the District Engineer.

20. That the licensee shall comply with all applicable Federal laws and regulations and with all applicable laws, ordinances and regulations of the state, county, and municipality wherein the premises are located.

IN WITNESS WHEREOF, I have hereunto set my hand this 21st day of March, 1984 by authority of the Secretary of the Army.

PATRICIA M. DICE
Acting Chief, Real Estate Division

The above instrument together with the provisions and conditions thereof, is hereby accepted this 23rd day of March, 1984

STATE OF IDAHO

BY James F. Keating

James F. Keating
(Print or type name)

Title: Chief, Field Operations

EXHIBIT "B"
GAME MANAGEMENT UNITS
IDAHO DEPARTMENT OF FISH AND GAME

1. RIVER ACCESS UNIT:

Those portions lying southerly of the Burlington Northern Railroad (formerly Great Northern) main line right-of-way and northerly of the Pend Oreille River in Sections 26, 27, 28, and 29, EXCEPT THEREFROM Tract 8 of Albeni Falls Orchard Tracts, and ALSO EXCEPT THEREFROM the easterly 250 feet of that portion of Government Lot 8 in said Section 28 lying westerly of the west line of Albeni Falls Orchard Tracts as extended southerly to the Pend Oreille River, all in Township 55 North, Range 5 West, Boise Meridian, Bonner County, Idaho.

2. PRIEST RIVER UNIT:

All of Government Lot 5, Section 30, and those portions of Government Lots 1, 2, and 3, of Section 29, Government Lots 5, 7, 8, 9, and the northeast quarter of the northwest quarter (NE1/4NW1/4) of Section 30, and the north half of Government Lot 8 of Section 32, lying southerly and westerly of the right-of-way of the Burlington Northern Railroad (formerly Great Northern), in Township 56 North, Range 4 West of the Boise Meridian, Bonner County, Idaho,

3. CAREY CREEK UNIT:

All of Government Lot 1, Section 4, and those portions of Government Lots 1 and 4, and the southwest quarter of the northeast quarter (SW¼NE¼), Section 5, lying easterly of the County Road, all in Township 55 North, Range 4 West, Boise Meridian. Bonner County, Idaho.

4. RILEY CREEK UNIT:

Those portions of Government Lots 2 an? 5, Section 75, the southeast quarter of the southeast quarter (SE¼SE¼), Section 25, Government Lots 5, and 7 the northwest quarter of the northeast quarter (NW¼NE¼), the northeast quarter of the northwest quarter (NE¼NW¼) and the south half of the northwest quarter (S½NW¼) and all of Government Lot 8, Section 36, lying southerly of the Burlington Northern Rail road right-of-way (formerly Great Northern), and northerly and westerly of a line BEGINNING at the northeast corner of said Section 36;

Thence north 89°48' west, 55.81 feet)

Thence south 7°55' west, 261 .00 feet;

Thence south 36°04' west, 551 .00 feet;

Thence south 56°34' west, 270.00 feet;

Thence south 75°44' west, 190.00 feet;

Thence south 55°34' west, l70.00 feet;

Thence south 28°24' west, 210.00 feet;

Thence north 72°06' west, 380.00 feet;

Thence south 76°14' west , 960.00 feet;

Thence north 78°26' east , 128.00 feet;

Thence south 49°44' west, 445.00 feet;

Thence south 27°54' west, 433.00 feet;

Thence south 16°46' east, 653.00 feet;

Thence south 40°00' east , 320.00 feet, more or less, to the east line of said Lot 7; EXCEPT THEREFROM a tract in the southeast quarter of the southeast quarter (SE¼SE¼) of said Section 25, described as BEGINNING at the Intersection of the south line of said B.N. RR right-of-way and the east line of

said Section 25;

Thence south 0°15'east, 56.00 feet;

Thence south 64°37' west, 201.90 feet;

Thence north 25°23' west, 50.00 feet to said Burlington Northern Railroad right-of-way; thence north 64°37' east, 225.00 feet alone said right-of-way to the BEGINNING, al1 in Township 56 North, Range 4 West:, Boise Meridian, Bonner County, Idaho.

5. HOOD00 CREEK UNIT:

Those portions of Government Lots 4, 5, and 6, and the southeast quarter of the southwest quarter (SE¼SW¼) of Section 31, Township 56 North, Range 3 West, Boise Meridian, Bonner County, Idaho, lying between the Pend Oreille River and the following described line: BEGINNING in the west line of said Section 31 at the line of ordinary high water of said River; thence southerly along said Section line to a point 734.3 feet northerly of the southwest corner of said Section 31 ;

Thence north 67°35' east, 282 feet;

Thence north 32°55' east, 380 feet;

Thence north 60°45' east, 648 feet;

Thence north 68°05' east, 268 feet;

Thence north 81°15' east, 187 feet;

Thence south 89°35' east, 208 feet;

Thence south 24°05' east, 298 feet;

Thence south 61°45' west, 122 feet:

Thence south 13°15' east, 107 feet;

Thence south 27°30' east, 445 feet;

Thence north 40°20' east, 710 feet;

Thence north 50°00' east, to the westerly line of the Laclede Ferry Approach Road; thence northerly along said westerly line to the line of ordinary high water of the Pend Oreille River.

6. MORTON SLOUGH UNIT:

All of Government Lots 3 and 4, the northwest quarter of the southeast quarter (NW¼SE¼), the north half of the northeast quarter of the southeast quarter (N½NE¼SE¼) and the west half of the southwest quarter of the southeast quarter (W½SW¼SE¼), Section 16, that portion of the north half of the northwest quarter of the southwest quarter (N½NW¼SW¼) of Section 15 lying westerly of the Spokane International Railroad right-of-way, and a parcel lying in the northwest quarter, the west half of the northeast quarter (W½NE¼), and the northwest quarter of the southwest quarter (NW¼SW¼) of said Section 15, and in the southeast quarter of the southwest quarter (SE¼W¼) and the southwest quarter of the southeast quarter (SW¼SE¼), Section 10, described as BEGINNING in the north line of said northwest quarter of the southwest quarter (NW¼SW¼) of Section 15 at a point which bears south 25°05' east, 2,910.1 feet from the northwest corner of said Section:

Thence north 76°28' east, 345 feet;

Thence north 69°38' east, 528 feet;

Thence north 42°33' east, 1,240 feet;

Thence north 17°33' east, 310 feet;

Thence north 17°03' east, 325 feet;

Thence north 1°37' west, 495 feet;

Thence north 45°57' west, 290 feet;

Thence north 1°29' west, 100 feet;

Thence north 68°03' east, 120 feet to the north line of said Section 15;

Thence north 68°03' east, 40 feet;

Thence north 43°18' east, 670 feet;

Thence north 24°28' east, 512 feet;

Thence north 10°42' west, 383 feet to the north line of said southwest quarter of the southeast quarter (SW¼SE¼) at a point which bears south 37°14' east, 1,597.2 feet from the center of said Section 10; thence westerly along said north line 1,165 feet:

Thence south 12°43' west, 45 feet;

Thence south 33°21' west, 544 feet;

Thence south 40°10' west, 1,066 feet to a point 1,485 feet east of the southwest corner of said Section 10;

Thence south 4°14' west, 944 feet;

Thence south 41°06' west, 528.9 feet;

Thence south 88°23' west, 98 feet, more or less, to the easterly right-of-way line of the Spokane International Rail road; thence southwesterly along said right-of-way to its junction with the county road in the said northwest quarter of the southwest quarter (NW¼SW¼) of Section 15; thence northerly along said west line of said county road to a point lying south 27°23' west approximatel y 440 feet from the beginning; thence north 27°23' east, 440 feet, more or less, to the BEGINNING.

EXCEPT THEREFROM the county road right-of-way.

ALSO including all of Government Lots 1, 2 and 3 those portions of Government Lot 4, and the northeast quarter of the northeast quarter (NE¼NE¼),

the west half of the northeast quarter (W½NE¼) and the northwest quarter of the southeast quarter (NW¼SE¼) lying westerly of the said Railroad right-of-way, Section 21, all in Township 56 North, Range 5 West, Boise Meridian, Bonner County, Idaho.

7. MALLARD BAY UNIT:

That portion of Government Lot 2, Section 10, lying northerly of the north line of the county road, and that portion of Government Lot 4 of Section 9 lying between the Pend Oreille River and a line described as BEGINNING in the east line of said Section 9 at the line of ordinary high water of said river; thence southerly along said east line to the northerly right-of-way line of the county road; thence west 948 feet; thence south 54° 32' west, 940 feet, more or less, to the south line of said Lot 4; thence westerly along said south line to the line of ordinary high water of the Pend Oreille River.

8. MUSKRAT LAKE UNIT:

That portion of Government Lot 2, Section 3, lying northwesterly of the Spokane International Railroad right-of-way, all in the Township 56 North, Range 3 West, Boise Meridian, Bonner County, Idaho.

9. CARR CREEK UNIT:

That portion of Government Lots 1 and 2 and the northwest quarter of the southeast quarter (NW¼SE¼) of Section 26, Township 57 North, Range 3 West, Boise Meridian, Bonner County, Idaho, lying between the southwesterly right-of-way line of the Burlington Northern Railroad (formerly Great Northern) and the northwesterly right-ofway line of the Spokane International Railway.

10. HORNBY CREEK UNIT :

A portion of Government Lot 4, Section 30 and Government Lot 4, Section 31, all in Township 57 North, Range 2 West, Boise Meridian, Bonner County, Idaho, described as BEGINNIING in the west line of said Section 31 at the Pend Oreille River; thence northerly along said west line of Sections 31 and 30 to the southerly right-of-way line of the Spokane International Railway: thence easterly along said right-of-way 409.8 feet; thence South to the Pend Oreille River; thence westerly along said River to the BEGINNING.

11. ODEN BAY UNIT:

That portion of the south half of the southwest quarter (S½SW¼) of Section 4 lying southeasterly of a line BEGINNING in the west line of said Section, at a point which bears north 80°00' west, 5,355.9 feet from the southeast corner thereof; thence north 20°56' east, 365 feet; thence north 42°11' east, 75 feet, more or less, to the TERMINUS on the north line of said south half of the southwest quarter (S½SW¼). ALSO includes all of Government Lots 2, 3,
and 4, and the southeast quarter of the southeast quarter (SE¼SE¼), and those portions of the southeast quarter of the northwest quarter (SE¼NW¼), the southwest quarter of the northeast quarter (SW¼NE¼) and the northwest quarter' of the southeast quarter (NW¼SE¼) lying southerly of the centerline of the abandoned Northern Pacific Railway right-of-way and *the* westerly and southerly of a line BEGINNING in said railway centerline at a point south 62°07' east, 2,982.5 feet from the northwest corner of Section 10;

Thence south 19°48' east, 45 feet;

Thence south 33°33' east, 200 feet to the south right-of-way line of said abandoned rail road;

Thence south 26°27' west 290 feet;

Thence south 13°57' west, 425 feet;

Thence south 66°27' west, 220 feet;

Thence south 47°27' west, 210 feet;

Thence south 15°33' east, 130 feet;

Thence south 31°08' east, to the east-west centerline of said Section 10; thence easterly along said centerline to the southwest corner of the southwest quarter of the northeast quarter (SW¼NE¼);

Thence north 51°02' east, 350 feet;

Thence south 43°28' east, 195 feet;

Thence south 1°48' east, 335 feet;

Thence south 41°43' east, 345 feet;

Thence south 42°03' east, 210 feet;

Thence east 548 feet, more or less, to the east line of the northwest quarter of the southeast quarter (NW¼SE¼), all in Section 10.

ALSO including that portion of the northwest quarter of the northwest quarter (NW¼NW¼) of Section 14 lying westerly of a line BEGINNING in the west line of said Section at a point 260 feet southerly of the northwest corner thereof;

Thence south 84°30' east, 32 feet;

Thence south 48°30' east, 180 feet;

Thence south 00°15' east, 265 feet;

Thence south 28°10' east, 740 feet, more or less, to the south line of said northwest quarter of the northwest quarter (NW¼NW¼).

ALSO all of Government Lots 1, 2, and 3, Section 15, all of the aforementioned Oden Bay Unit lying within Township 57 North, Range 1 West, Boise Meridian, Bonner County, Idaho.

ALSO that portion of the southwest quarter of the northeast quarter (SW¼NE¼), Section 11, Township 57 North, Range 2 West, Boise Meridian, Bonner County, Idaho, lying southeasterly of the Burlington Northern Railroad (formerly Northern Pacific) right-of-way.

12. PACK RIVER UNIT:

A parcel of land lying in Sections 5, 6, 7, 8, 16, 17, and 18, Township 57 North, Range 1 East, and in the east half of Section 11, Township 57 North, Range 1 West, all in the Boise Meridian, Bonner County, Idaho.

BEGINNING at a point in the northwest quarter of the northeast quarter (NW¼NE¼) of said Section 18, which bears south 79°03' west, 2,571.5 feet from the northeast corner of said Section;

Thence north 35°28' west, 587 feet;

Thence north 47°43' west, 535 feet;

Thence north 20°48' west, 638 feet;

Thence south 76°02' west, 40 feet;

Thence north 4°59' west, 385 feet;

Thence north 33°21' west, 297.9 feet;

Thence north 33°12' west, 301 feet;

Thence north 51°39' west, 332 feet;

Thence south 75°04' west, 367.5 feet;

Thence north 18°18' west, 115 feet;

Thence north 67°33' west, 610 feet;

Thence south 73°38' west 1,160 feet to a point in the northwest quarter of the southeast quarter (NW¼SE¼) of said Section 11;

Thence north 12°03' east, 625 feet;

Thence north 35°22' east, 450 feet;

Thence north 32°07' east, 1,565 feet to a point in Government Lot 1, said Section 7;

Thence north 18°18' west, 265 feet;

Thence north 28°47' east, 200 feet to the Burlington Northern Railroad (formerly Northern Pacific) right-of-way; thence southeasterly along said right-of-way to the east line of said Government Lot l; thence crossing said right-of-way to a point in the northerly line thereof lying approximately 4,490 feet (as measured along said right-of-way) from the east line of said Section 7;

Thence north 66°07' east, 465 feet;

Thence north 45°02' east, 535 feet;

Thence south 80°38' east, 700 feet;

Thence north 26°02' east, 475 feet;

Thence north 15°42' east, 815 feet;

Thence north 2°02' east, 700 feet;

Thence north 13°28' west, 950 feet;

Thence north 20°48' west, 1,020 feet;

Thence north 30°28' west, 730 feet;

Thence north 39°48' west, 430 feet;

Thence north 4°43' west, 640 feet;

Thence north 14°53' west, 235 feet to a point in the southerly right-of-way line of U.S. Highway No. 10-A that bears south 55°14' east, 2,451.3 feet from the northwest corner of said Section 6; thence southeasterly along said right-of-way line 2,100 feet:

Thence south 53°03' east, 315 feet;

Thence south 50°13' east, 440 feet;

Thence south 29°38' east, 500 feet;

Thence south 4°38' east, 372 feet;

Thence south 15°08' east, 155 feet, more or less, to the north line of the southeast quarter of the southeast quarter of the northeast quarter (SE¼SE¼NE¼) of said Section 6; thence westerly 380 feet, more or less, along said north line to the northwest corner of safd subdivision; thence southerly 1,320 feet, more or less, to the southwest corner of the northeast quarter of the northeast quarter of the southeast quarter (NE¼NE¼SE¼), said Section 6; thence easterly along the south line of said subdivision to the east line of said Section 6; thence southerly along said east line, 660 feet, more or less to the north line of the southwest quarter of the southwest quarter (SW¼SW¼) of said Section 5; thence easterly along said north line, 620 feet; thence south 19°03' east, 80 feet; thence south 9°57' east, 1,240 feet to the north line of said Section 8 at a point lying 1,738.9 feet westerly of the north quarter corner thereof;

Thence south 8°57' east, 630 feet;

Thence south 7°12' east, 996 feet;

Thence south 20°27' east, 335 feet;

Thence south 21°32' east, 1,275 feet;

Thence south 26°07' east, 625 feet;

Thence south 32°07' east , 805 feet;

Thence south 23°32' east, to the north line of the Burlington Northern Railroad (formerly Northern Pacific) right-of-way thence crossing said right-of-way to the northwest corner of the northeast quarter of the northwest quarter (NE¼NW¼), of said Section 17; thence easterly along the section line

to the south line of said B.N. RR right-of-way thence southeasterly along said right-of-way to the south. line of the northwest quarter of the southwest quarter (NW¼SW¼) of said Section 16; thence westerly along said south line and the south line of Government Lot 1, said Section 17, to the line of ordinary high water of Lake Pend Oreille; thence westerly and southwesterly along said line of ordinary high water to the south line of said Section 18; thence westerly along said section line to the county road right-of-way; thence northwesterly along said road right-of-way to the BEGINNING.

EXCEPT THEREFROM the Burlington Northern Railroad (formerly Northern Pacific) right-of-way.

13. CLARK FORK UNIT:

All of Government Lots 5 and 7, the northeast quarter of the southeast quarter (NE¼SE¼), and those portions of the northeast quarter, Section 19, lying westerly of the Burlington Northern Railroad (formerly Northern Pacific) right-of-way and southerly of line BEGINNING in the north line of said Section 19, at a point lying 2,740 feet westerly of the northeast corner thereof;

Thence south 58°10' east, 605 feet;

Thence south 48°05' east, 675 feet;

Thence south 19°20' east) 940 feet;

Thence south 5°00' east, 900 feet;

Thence south 23°20' west, 120 feet;

Thence north 65°40' west , 140 feet;

Thence north 25°40' west, 560 feet;

Thence north 86°40' west, 210 feet;

Thence south 31°00' west , 540 feet;

Thence north 83°15' west to the west line of said northeast quarter, Section 19, and those portions of the south half of the southwest quarter of the northwest quarter (S½SW¼NW¼), the west half of the southwest quarter (W½SW¼), the southeast quarter of the southwest quarter (SE¼SW¼) and the southwest quarter of the southeast quarter (SW¼SE¼) lying westerly and southerly of the right-of-way of the Burlington Northern Railroad (formerly Northern Pacific) in Section 20. All of Government Lots 1 and 2, EXCEPT THEREFROM said Railroad right-of-way, and portions of the southwest quarter of the northwest quarter (SW¼NW¼) and the northeast quarter of the southwest quarter (NE¼SW¼) lying southwesterly of said Railroad right-of-way, Section 28; all of Government Lots 3 and 4, and that part of the southeast quarter of the northeast quarter (SE¼NE¼) lying southwesterly of said B.N. RR right-of-way, Section 29; the west 1,320 feet of Government Lot 1, all of Government Lots 2 and 3, the south half of the northwest quarter (S½NW¼), the southwest quarter of the northeast quarter (SW¼NE¼), the west half of the southeast quarter (W½SE¼), the north half of the southwest quarter (N½SW¼) and the southeast quarter of the southwest quarter (SE¼SW¼), Section 32; all of Government Lot 11 and those portions of Government Lots 5 and 6 lying southwesterly of said B.N. RR right-of-way, Section 33, all in Township 56 North, Range 2 East.

ALSO all of Government Lot 1, Section 4 and all of Government Lots 1, 2, 3, 7, 8, 9, 10, 12, 13 and the southeast quarter of the northeast quarter (SE¼NE¼), Section 5; and those portions lying northerly of the county road in Lot 2, less the easterly 12 feet thereof, and Lots 3, 4, 5, 6, 7, and 8, of Alpine Orchards, in Sections 3 and 10, according to plat recorded in Volume1 of Plats, Page 103, records of Bonner County, all in Township 55 North, Range 2 East, Boise Meridian, Bonner County, Idaho.

By: EHL 14 Nov 83
Chkd: SM 6 Jan 84
WANG: 1828P
Prfd: EHL 16 Jan 84

EXHIBIT "B"
Page 13
DACW67-3-84-4

Wildlife Mitigation Status Report

AMERICAN FALLS DAM AND RESERVOIR PROJECT

Final Report

Prepared by:

R. C. Martin
L. A. Mehrhoff

Idaho Department of Fish and Came
Jerry M. Conley, Director

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number 83-478D
in compliance with
Northwest Power Planning Council's
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
December 1984

TABLE OF CONTENTS

I. PROJECT NAME

American Falls Dam and Reservoir

II. PROJECT OPERATOR

U.S. Bureau of Reclamation (USBR)

III. PROJECT DESCRIPTION

A. Location and Size

The American Falls Dam is on the Snake River, adjacent to the city of American Falls, Idaho. It is 22 miles southwest of Pocatello, Idaho.

The dam is concrete gravity with embankment wings. It is 103.5 feet high, with a crest length of 5,277 feet (USBR 1981). The power plant has a total installed (nameplate) capacity of 92.4 megawatts (Federal Energy Regulatory Commission 1975b).

The spillway is a concrete overflow weir controlled by five 44-foot by 25-foot radial gates. At elevation 4,354.5 feet, the spillway capacity is 87,000 cubic feet per second (cfs). The outlet works have a capacity of 19,400 cfs and the power outlets have a capacity of 13,500 cfs. Therefore, the total capacity is 119,900 cfs (USBR 1981).

When filled to the normal maximum (elevation 4,354.5 feet), the reservoir is 22 miles long, up to 9 miles wide, and 58,076 acres in size (USBR 1981).

B. Authorized Purposes

The original purposes for constructing American Falls Dam were for irrigation and power production. The USBR (1927) stated that "the announced purpose of the United States in undertaking the work was the ultimate development of the proposed Minidoka North Side Pumping Unit. This unit contains about 115,000 acres. It will be irrigated by pumping. The American Falls reservoir will furnish the water for the land and, by the building of a power plant at American Falls, the necessary power for pumping." During the planning process for American Falls dam, the 520,000 acre-foot requirement of the proposed North Side Pumping Unit was used to justify the project (USBR 1920).

C. Brief History

The USBR (1981) considered the American Falls project to be authorized by the Minidoka Project authorization in 1904 (USBR 1957). However, Minidoka Dam was the only dam discussed in the 1904 authorization. We

found no authorizing documents for the original American Falls Dam, except the Reclamation Act of 1902 and congressional appropriations starting in 1921 (USBR 1960). The original dam was constructed from 1925 to 1927. A replacement dam was authorized by the congressional act of 28 December 1973. It was constructed from 1976 to 1978 (USBR 1981).

Prior to construction of the original dam, Idaho Power Company operated 3 power plants immediately downstream from the dam site (USBR 1961). The East Side power plant (original power plant) was constructed between 1913 and 1927 Its first power unit began operating in 1913; the fourth and fifth units were installed in 1927. The project works included a concrete gravity diversion dam that was located immediately below the American Falls Dam site, and created an effective head of 48 feet, The power plant had a capacity of 27.5 megawatts (Federal Energy Regulatory Commission 1975a). At the time the original American Falls Dam was constructed, the USBR acquired the West Side and Island power plants. Idaho Power Company retained the East Side power plant (USBR 1961), received a license for it in 1975, and operated it until it was replaced by their present power plant.

The construction of a 30 megawatt power plant was anticipated at the time the original dam was constructed; four 15-foot penstocks, temporarily capped, were imbedded in the right abutment of the dam. The United States also acquired certain power and water rights with the intention to construct the power plant. These transactions with Idaho Power Company were covered by a contract dated 15 June 1923. The 30 megawatt power plant was authorized by the congressional act of 30 September 1950 (USBR 1961), but was never built.

The present power plant was licensed in 1975. It was built in 1977 and was operating in 1978 (Idaho Power Company 1978). It has a total installed (nameplate) capacity of 92.4 megawatts and is operated by Idaho Power Company (Federal Energy Regulatory Commission 1975b).

D. Other Pertinent Data

1. Water Level Fluctuation and Timing

The reservoir has a storage capacity of 1,672,590 acre-feet; all is considered active storage. It provides full or supplemental irrigation service to about 900,000 acres (USBR 1972). Between April and October, the reservoir is drawn down an average of 27 feet (USBR, unpubl. data, Burley office).

2. Land Ownership

When full, the reservoir has about 100 miles of shoreline; all is in public ownership. The USBR administers the shoreline of the normal high pool, a 5-foot freeboard, some narrow strips of land above the top of the freeboard, and some isolated tracts.

The Shoshone-Bannock Tribes ovn about 30% of the lands adjacent to this administrative area. The remainder of adjacent ownership is private, except for Idaho Department of Fish and Game (IDFG) parcels in the Sterling Wildlife Management Area (WMA).

3. Indian Rights

In 1924, the 28,000 acres of Fort Hall Reservation lands within the area to be inundated plus the 5-foot freeboard vere purchased from the Shoshone-Bannock Tribes for $700,000.

Prior to that, the Fort Hall bottoms provided a permanent residence for 15 to 20 Indian families; during winters, the bottoms provided cattle grazing and subsistence hunting that supported 1,000 Indians (USBR 1922). Portions of the bottoms which were inundated were "sacred lands" of the Tribes (J. Ross, Sho-Ban Tribes, pers.commun.).

Because American Falls Dam and Reservoir are within the ancestral hunting area of the Shoshone-Bannock Tribes, it is assumed the Tribes' treaty rights are affected by any impact or management decision that affects wildlife that exist on, or cross, Reservation lands or open and unclaimed Federal lands within this area. To date, the Tribes have not communicated to us any specific rights they have pertinent to wildlife associated vith the American Falls Project.

IV. WILDLIFE SPECIES HABITAT ASSESSMENT

A. Pre-construction

The Fort Hall bottoms (purchased from the Shoshone-Bannock Tribes in 1924) comprised 28,000 of the 58,076 acres inundated plus the 5-foot freeboard. The USBR (1922) described the bottoms as "an extensive area of bottom lands which at times are subject to overflow, or at least are sub-irrigated to such an extent as to be practically valueless for general farming purposes, but do produce a large quantity of hay,"

The bottoms contained numerous perennial springs which arose in clumps of tules, were bordered with willows, wild roses, and other brush, and followed tortuous courses throughout the entire bottoms (USBR 1922). Between 1924 and 1927, Newell, a USBR hydrologist, calculated that

8,000 acres within the impoundment area were covered with standing water (L. Busch, USER, pers. commun.). Probably, a large proportion of this was comprised of springs, sloughs, and creeks within the bottoms.

Low gravel bars covered with cottonwood groves were along the shores of the Snake River. Next to them, there were high-water sloughs overgrown with dense thickets of willows and cottonwoods. Above the sloughs, there were areas with very dense growths of cottonwoods, willows, wild roses, wild apples, and other brush (USBR 1922).

On benches above the bottoms, vegetation was the shrub-steppe community characteristic of the Upper Snake River Plain: sagebrush dominating an understory of grasses and forbs. Reported species included sagebrush, greasewood, juniper, rabbitbrush, June grass, and wild rye (USBR 1922).

There were no pre-construction studies that quantified wildlife populations. The USBR (1922) reported abundant game birds in the Fort Hall Bottoms. D. Christopherson (Sho-Ban Tribes, pers. commun.) interviewed several older Tribal members who used to live in the Fort Hall bottoms area which was inundated by the reservoir. They stated both deer and elk vere hunted there and wintered there. They stated there were huge flocks of waterfowl, including swans. They said the swans were a lot bigger than the swans there now; therefore, they were probably trumpeter swans.

B. Post-construction

American Falls Dam inundated at least 58,076 acres of rivers, creeks, springs, sloughs, riparian vegetation, and upland vegetation. Along most of the reservoir shoreline, erosion has caused a cliff-like dirt bank that blocks passage between aquatic and terrestrial environments. Agriculture occurs nearly to the cliff edge over most of this area. Willow-dominated riparian vegetation is present primarily along shorelines of the Fort Hall bottoms and creek and river inlets.

Due to the shoreline barrier and lack of nesting habitat, waterfowl brood use of the reservoir is limited almost entirely to the upper end adjacent to the bottoms. Most broods that use the reservoir come from nests along the Snake River as far upstream as Blackfoot. From 1,500 to 2,000 Canada geese may be present on July 1 9W. Davidson, IDFG, pers. commun.). Approximately 20 to 25 pairs of Canada geese and 200 pairs of ducks nest in the Fort Hall bottoms (D. Christopherson, Sho-Ban Tribes, pers. commun.).

For waterfowl, the reservoir serves primarily as a resting area during migrations and winter. Peak IDFG counts during falls of the last 2 years were 44,500 Canada geese and 44,590 ducks (IDFG 1982, 1983). The

reservoir is a major wintering area for the Rocky Mountain Canada goose population. More than 20,000 geese winter there each year (Krohn and Bizeau 1980).

The 27-foot reservoir drawdown provides a benefit for geese. During late summer and early fall, geese utilize grass that sprouts on the exposed mud flat (W. Davidson, IDFG, pers. commun.). The reservoir drawdown also creates a botulism problem for ducks and other water birds on the exposed mud flats. The USFWS and USBR are currently studying this problem.

Bald eagles frequent the reservoir and the Snake River during winter and migrations. During January, 1984, 42 bald eagles were counted within 1 mile of the reservoir (C. Trost, Idaho State Univ., unpubl. data). Important roosts are near the upper end of the reservoir.

Osprey nesting in the area is limited to the rivers upstream from the reservoir. There are 3 active nests in the Fort Hall bottoms area. Two are on the Snake River by Ferry Butte, and the third is on Spring Creek by Cable Bridge (D. Christopherson, Sho-Ban Tribes, pers. commun.).

Many colonial water birds nest in the reservoir area. In 1984, the following water birds nested on Gull Island near the Aberdeen Sportsman's Park: 1,700 to 1,800 pairs of California gulls, 2,000 to 2,200 pairs of ring-billed gulls, and 2 to 3 pairs of Caspian terns. One or 2 pairs of common terns nested near Gull Island. The following nests were at the upper end of the reservoir: 400 to 420 double-crested cormorant nests, 200 to 250 white-faced ibis nests, 75 to 100 western grebe nests, 70 to 90 black-crowned night-heron nests, 30 to 50 great blue heron nests, 15 to 30 snowy egret nests, 5 to 10 black tern nests, 5 to 10 Forster's tern nests, 1 to 2 cattle egret nests, and an unknown number of eared grebe nests (C. Trost, Idaho State Univ., pers. commun.). On the Snake River 3 miles below the dam, 75 great blue heron nests were reported (IDFG 1977).

Nonnesting water birds include American white pelicans, which occur on the reservoir during spring and summer. An annual peak of 450 was observed in June, 1984. Migratory shorebirds feed on exposed mud flats during fall. When the reservoir is not lowered, as in 1984, no mud flats exist to attract shorebirds (C. Trost, Idaho State Univ., pers. commun.).

Rio Grande turkeys nest in the bottoms area. The present population in the area adjacent to the reservoir is about 150 birds (D. Christopherson, Sho-Ban Tribes, pers. commun.).

Mammals which occur in the bottoms area include mule and white-tailed deer, skunks, weasels, coyotes, bobcats, and an occasional cougar (D. Christopherson, Sho-Ban Tribes, pers. commun.).

Along the Snake River upstream from the reservoir, there is abundant iiparian vegetation. Cottonwoods and willows dominate a free-flowing river bottom that supports a diversity and abundance of wildlife (USBLM 1982).

Downstream from American Falls Dam, the Snake River is free-flowing for about 7 miles before reaching the backwater of Minidoka Dam. Lava rock is at or near the surface of the shoreline for most of this reach. Hence, the shoreline is predominantly sagebrush-grass, with scattered junipers and sparse riparian vegetation.

V. WILDLIFE MITIGATION HISTORY

Planning and construction of the original dam occurred prior to the time formal, comprehensive impact assessments and mitigation were required by law. The original dam, a diversion dam, and the first 3 power plants were constructed prior to the 1934 Fish and Wildlife Coordination Act.

A. Mitigation Requested or Proposed

In their comments on the licensing of Idaho Power Company's original power plant, the USFWS (1962) proposed that 2 articles be included in the license. The articles were subsequently included in the 1975 licenses for the original power plant and the present power plant; they are summarized in section B below.

In their Fish and Wildlife Coordination Act report on the dam replacement, the USFWS (1968) discussed the values of constructing dams across the entrances to 6 natural bays in the reservoir. At the time, they recommended West Bay as the most practical location for a subimpoundment. In the same report, they recommended that either 50 small islands or 100 platforms be built in the upper end of the reservoir for Canada goose nesting purposes.

During the replacement dam planning process, the IDFG proposed to enter into a cost-sharing agreement with the United States for the development of the nesting islands and acquisition of wetlands in the Sterling WMA. Their formal enhancement proposal (IDFG 1978) requested that $294,000 in federal monies be spent for acquisition and development of approximately 600 acres, and for developments on other IDFG lands in the Sterling WMA. Construction of islands was disregarded due to concern over vind and wave action (R. Pehrson, IDFG, pers. commun.).

B. Mitigation Agreements or Requirements

The license for the present power plant contains 2 articles directly pertinent to wildlife. Article 17 makes Idaho Pover Company responsible for constructing, maintaining, and operating reasonable facilities, and complying with modifications of project structures and operation, as may be ordered by the Federal Energy Regulatory Commission or recommended by fish and vildlife agencies, after notice and opportunity for hearing. Article 18 requires Idaho Power Company to allow the United States, if they desire, to construct wildlife facilities on project lands (Federal Energy Regulatory Commission 1975).

Congress authorized the replacement dam in 1973. Public Law 93-206 (Act of December 28, 1973, Section 7, 87 Stat. 904) appropriated $400,OOO for recreation, fish, and wildlife enhancement.

In their final environmental statement on the replacement dam and power plant, the USBR (1974) noted that enhancement possibilities included construction of 50 goose nesting islands and land acquisition within the Sterling WMA. On 4 October 1979, the DSBR and the IDFG signed an agreement (USBR 1979) that vithin the Sterling WMA, the USBR would lease 160 acres to the IDFG and spend up to $294,000 on land acquisition, and the IDFG would spend up to $98,000 on developments.

C. Mitigation Implemented

Within the Sterling WMA, the USBR leased 160 acres to the IDFG and spent $286,000 purchasing 605.92 acres, which were also leased to the IDFG (USBR 1982). This mitigation was for the replacement dam. No mitigation was implemented for the original dam and reservoir's impacts on wildlife.

VI. CURRENT STUDIES AND PLANNING

The IDFG has several ongoing projects in the area. They are continuing management of Sterling WMA, with waterfowl as the priority. Flights are conducted to survey waterfowl production and migratory and winter populations of waterfowl and bald eagles along the Snake River and the reservoir. Goose nesting platforms are being erected on the Snake River above the reservoir. Under contract with IDFG, C. Trost is inventorying the colonial nesting water birds of Idaho. In 1982, wild turkeys were introduced near Tilden Bridge and on the Fort Hall Indian Reservation. Further introductions are planned for the Snake River below Idaho Falls.

The USBLM is conducting wildlife inventories and enhancement under their Idaho Falls District omitted lands habitat management plan (1982). Flanned activities inciude constructing goose nesting platforms, controlling livestock grazing on islands, and improving wetlands on omitted lands between Idaho Falls and American Falls reservoir. Also, the USBEM is continuing their organization of mid-winter bald eagle counts which include surveys of the Snake River and the reservoir.

VII. LITERATURE CITED

Federal Energy Regulatory Commission. 1975a. Order issuing major license: Project no. 2258.

_____. 1975b. Order issuing major license: Project no. 2736.

Idaho Department of Fish and Game. 1977. Colonial water birds of Idaho, unpubl. report. Principal investigator: Liven Peterson.

_____. 1978. Enhancement proposal: American Falls Reservoir. Submitted to regional office, USBR, 17 April.

_____. 1982, 1983. Southeast Idaho waterfowl survey summaries, unpubl. data, Pocatello.

Idaho Power Company. 1974. Environmental statement: American Falls power plant. Project no. 2736.

_____. 1978. Amercian Palls dam fish passage study design. Boise Environmental Science and Technology, Inc., Boise.

U.S. Bureau of Land Management. 1982. Idaho Falls District omitted lands habitat management plan. Principal investigator: Robert McCarty.

U.S. Bureau of Reclamation. 1920. Annual project history, Minidoka Project, Idaho. Compilation of information for use of Appropriation Committee, House of Representatives, 66th Congress.

_____. 1922. Appraisal: Fort Ball Indian Lands, Idaho.

_____. 1927. Annual project history, Minidoka Project, Idaho.

_____. 1957. Bureau of Reclamation project feasibilities and authorizations.

_____. 1960. Bureau of Reclamation appropriation acts and allotments.

_____. 1961. Upper Snake River Basin: plans, studies, and data. Vol. 4, part 1.

_____. 1972. American Falls dam replacement. Executive summary report.

_____. 1974. Environmental statement: American Falls dam replacement and power plant.

_____. 1979. Grant agreement between the United States and the State of Idaho. Contract no. 8-07-l0-LO116. USER regional office, Boise.

_____. 1981. Project data.

- - 1982. Letter and documents submitted to IDFG, 22 February.

U.S. Fish and Wildlife Service. 1962. Letter submitted to Office of Assistant Secretary of the Interior Holum, 13 February.

_____. 1968. Preliminary draft of proposed American Falls Dam replacement Fish and Wildlife Coordination Act report, unpubl. report. Submitted to regional director, USBR, 20 February.

_____. 1980. Rocky Mountain population of the western Canada goose: its distribution, habitats, and management. Special scientific report no. 229. Principal investigators: William Rrohn and Elwood Bizeau.

A P P E N D I C E S

APPENDIX A

STUDY TEAM

Idaho Department of Fish and Game

Bob Martin
Arch Mehrhoff

APPENDIX B

CONSULTATION/COORDINATION

1. Project Contacts

U.S. Bureau of Reclamation

Leo Busch
Bob Adair
Harold Short
Don Tracy
Terry Zontel
Rich Rigby
Jack Hansen

Idaho Department of Fish and Game

Ralph Pehrson
Bill Davidson
Dick Norell
Martel Morache
Gary Will
Lou Nelson

U.S. Fish and Wildlife Service

Signe Sather-Blair
Jim Nee
Rich Roward

U.S. Bureau of Land Management

Bob McCarty
Steve Elmore
Karen Steenhof

Shoshone-Bannock Tribes

Jack Ross
Dan Christopherson
Dave Lundgren

Idaho State University

Chuck Trost

2. Summary

Dates	Agency	Summary
6 June	All	Sent letter6 requesting sontast person(s) for status report.
9 July	USFWS	Obtained information from endangered species office.
9 July	USBR	Obtained information from central Snake projects office.
10 July	USBR	Obtained information from Burley office.
1		
18 July	Sho-Ban	Meeting at Fort Hall; requested Tribal cooperation. It was conditionally denied.
19-24 July	Sho-Ban	Numerous calls to Tribal lawyer.
23 July	USBR	Called Burley office.
24 July	USBLM	Called Burley office.
24, 25 July	USBR	Obtained information from regional office.
25 July	Sho-Ban	Sent letter again requesting Tribal cooperation and statement of rights and interests.
27 July	Sho-Ban	Called Tribal lawyer; call not returned.
6 August	Sho-Ban	Called Tribal biologist; he said Tribal cooperation still not assured.
8 August	USBR	Obtained information from Burley office.
9 August	ISU	Met with C. Trost.
23 August	USBR	Obtained information f *rom* regional office.

27 August	All	Submitted rough draft of status report for infoxmal review.
28, 30-31 August	Sho-Ban	Called Tribal lawyer.
5 September	USBLM	Called Burley office.
7 September	USFWS	Called ecological services office.
7 September	USBLM	Called Idaho Falls office.
13 September	USBR	Received comments regarding rough draft.
17 September	Sho-Ban	Called Tribal lawyer and biologist. Assured by lawyer that we would receive wildlife information and statement of Tribal right6 and concerns on 18 September. Lawyer originally agreed to get this information to us by 28 August. To date, statement of Tribal rights and concerns has not been received.
18 September	Sho-Ban	Received wildlife population information from biologist.

APPENDIX C

FORMAL COMMENTS ON SEPTEMBER 1984 DRAFT REPORT

State Agency:	IDFG
Federal Agencies:	USFWS USBLM (no formal comments received)
Tribes:	Shoshone-Bannock (no formal comments received)
Project Operator:	USBR
Hydroelectric Facility Operator:	Idaho Power Company

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho . 83707

December 4, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

Thank you for the opportunity to review the Wildlife Mitigation Status Report for the American Falls Project. The Idaho Department of Fish and Game looks forward to seeing fulfillment of the Northwest Power Act's and the Columbia River Basin Fish and Wildlife Program's goal "to protect, mitigate, and enhance . . . wildlife to the extent affected by the development and operation of any hydroelectric project of the Columbia River and its tributaries...."

This goal has not yet been achieved at the American Falls Project. The status report demonstrates that mitigation for wildlife habitat losses was insufficient. This is understandable, considering that legal mandates and concerns for wildlife resources have changed since the project was built.

Although net impacts have not been determined, it is obvious that substantial impacts to wildlife occurred as a result of the project inundating more than 58,000 acres of wildlife habitat (which included scrub/shrub and forested wetlands, meadows, sagebrush-grass rangelands, and extensive acreages of springs, creeks, sloughs, and marshlands).

In order to "protect, mitigate, and enhance" wildlife resources affected by the American Falls Project, it may be necessary to determine what impacts have occurred. Upon the approval of, and funding by, the Council and Bonneville Power Administration, Department is prepared to take the lead in conducting an assessment of impacts to wildlife resources resulting from this project and to prepare a net impacts statement. The Deparment is also ready to take the lead In developing mitigation plans.

Consultation and coordination with appropriate agencies and tribes regarding all aspects of the Fish and Wildlife Program is very important. The Idaho Department of Fish and Game supports the goals of the program and wants to see those goals fulfilled at this project.

Sincerely,

Jerry M. Conley
Director

JMC:BM:db

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

In Reply Refer To: Your Reference:

October 29, 1984

John Palensky, Director
Division of Fish & Wildlife
Bonneville Power Administration
Attention: James Meyer
P. 0. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter, we have reviewed the Wildlife mitigation Status Report for the American Falls Dam Project in eastern Idaho. The following comments are being provided for inclusion in the final report.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. Based on the report's content, it is evident that the construction and operation of the project has resulted in adverse impacts to wildlife resources which have been neither adequately identified nor mitigated. Therefore, the Service recommends that the Bonneville Power Administration provide funds to: (1) conduct an evaluation of the impacts of the project on wildlife resources: and (2) based on the findings of that evaluation, develop a mitigation and enhancement plan which would fully compensate the adverse wildlife impact attributable to the project.

An evaluation of the project's impact on wildlife resources should be conducted by a lead resource agency which would then be responsible for coordinating the study with other appropriate agencies. Agencies that should be involved in such an evaluation include the Idaho Department of Fish and Game, ~~Army Corps of Engineers~~, Forest Service, and the Fish and Wildliife Service as well as the Shoshone-Bannock Indian Tribe. The evaluation should include an analysis of (1) immediate post-construction losses, (2) mitigation actions which have been implemented, and (3) current project area conditions. We recommend that the evaluation be habitat-based and supported by existing wildlife population data when available. We suggest that collection of new population data be limited and applied only to species of special interest: i.e., bald eagle.

USBR

In conclusion, we believe that the analysis of losses and mitigation needs should be done as quickly as possible. However, we also recognize that the mitigation recommendations should be based on a technical assessment of losses.

Sincerely yours,

J.W. Teeter

James W. Teeter
Acting Assistant Regional Director
Habitat Resources

OCT 11 1984

United States Department of the Interior
BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U.S. COURTHOUSE
BOX 043-550 WEST FORT STREET
BOISE, IDAHO 83724

IN REPLY REFER TO PN 150
565.

OCT 09 1984

Director
Division of fish and Wildlife
Attention: James Meyer
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Gear Mr. Meyer:

We have noted that the one comment by our Minidoka Project staff concerning storage capacity has been incorporated in this draft of the American Falls Dam Mitigation Status Report,

We have no further comment on this report.

Sincerely yours,

John R. Woodworth

John R. Woodworth
Regional Environmental Officer

SNAKE RIVER
HYDRO POWER

IDAHO POWER COMPANY

BOX 70 ● BOISE, IDAHO 83707

October 23, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P 0 Box 3621
Portland, OR 97208

Re: PJS

Attn: Mr. James Meyer

Dear Mr. Meyer:

Herewith are the comments of Idaho Power Company regarding the Project Reports on the "Wildlife Mitigation Status Reviews' for American Falls Dam and C. J. Strike Dam.

Respectfully,

Larry R. Wimer
Fisheries Program
Coordinator

LRW:lf

American Falls

Section III. A. paragraph 2, last sentence;

The power plant has a total installed (nameplate) capacity of ~~106~~ 92.4 megawatts (Idaho Power Company License for FERC Project 2736).

Section III. C. paragraph 5, last sentence;

It has a ~~maximum~~ total installed (nameplate) capacity of ~~106~~ 92.4 megawatts...

Section III. D. 3. general comment;

The Order issuing the License for Project 2736, issued March 31, 1975, contained the following language regarding the concern of Indian Rights; "...the proposed hydroelectric project includes only clearly defined areas downstream of the Replacement Dam, and does not include the dam or the reservoir. (FERC) records further indicate that no tribal lands are included within the boundaries of the proposed hydroelectric project.

"Additionally,...the Applicant has no control over the water releases at the Replacement Dam, nor can it affect tribes' storage rights in the reservoir. In short, it is our (FERC) opinion that Project No. 2736 will not affect tribal lands by its operation under the terms of the License herein." (Idaho Power Company License for FERC Project 2736).

Section V. B. paragraph 1, second sentence;

Article 17 makes Idaho Power Company responsible for constructing, maintaining, and operating reasonable facilities,...

• • •

APPENDIX D

MITIGATION INSTRUMENTS

1, Portion of 1975 license

2, Congressional authorization for dam replacement

3. Grant agreement between United States and IDFG creating most of the Sterling WMA.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

APR 21 1975

Before Commissioners: John N. Nassikas. Chairman;
William L. Springer. and Don S. Smith

Idaho Power Company Project No.2736

ORDER ISSUING MAJOR LICENSE (UNCONSTRUCTED) AND
PERMITTING WITHDRAWAL OF INTERVENTION

(Issued March 31, 1975)

Article 17: The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance and operation of such reasonable facilities and comply with such reasonable modifications of the project structures and operation as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

Article 18. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Jcensee shall permit the United States or its designated agency tc use, free of cost, such of Licensee's lands and interest in lands, reservoirs, waterways and @project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

Public Law 93-206
93rd Congress, S. 1529
December 28, 1973

An Act

To authorize the Secretary of the Interior to enter into agreements with non-Federal agencies for the replacement of the existing American Falls Dam, Minidoka project, Idaho, and for other purposes.

American Falls Dam, Minidoka project, Idaho, Replacement.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior (hereinafter called the Secretary) is authorized to negotiate and enter into agreements with the American Falls Reservoir District or other appropriate agency representing the present spaceholders (hereinafter called the constructing agency), which agreements shall authorize the constructing agency to finance and provide for the construction of a dam and related facilities to replace the existing American Falls Dam of the Minidoka project, Idaho-Wyoming. The United States shall take title to the dam upon a determination by the Secretary that construction of the dam is substantially completed, and the dam shall be a feature of the Minidoka reclamation project and shall be considered to be a "Government dam" as defined by the Federal Power Act (Act of June 10, 1920, 41 Stat. 1063, as amended). The Secretary shall operate and maintain the replacement dam as a feature of the Minidoka project. The construction and operation of the replacement dam shall not result in an increase in the elevation of the reservoir water surface above that maintained for the original dam, and provision shall be made for the correction and prevention of erosion related to the reservoir or for the full and adequate compensation of adjacent landowners (including owners of land subject to a flowage easement for the reservoir) if such erosion cannot be corrected or prevented.

49 Stat. 863.
16 USC 791a.

Storage and contract rights, protection.

SEC. 2. (a) Replacement of the existing dam as authorized in section 1 hereof shall in no way alter or change the present proportionate storage rights of present spaceholders in the American Falls Reservoir and shall constitute a reaffirmation of existing contract rights between the Secretary and the spaceholders except as otherwise provided in this Act.

River crossing construction.

(b) The constructing agency shall: (i) include as a part of the project, a river crossing meeting the then current Department of Transportation standards for Federal-aid secondary highway two-lane traffic, which crossing shall be located on top of the replacement dam or immediately downstream from the dam, and which crossing shall be financed by State, Federal, and constructing agency funds, or any combination thereof as the parties deem appropriate; and (ii) design and construct an additional two lanes on top of the replacement dam, which additional two lanes may be funded with State, Federal, or constructing agency funds, or any combination thereof. For the purposes of subpart (ii) of this subsection, the constructing agency shall be considered an "agency" within the meaning of section 320(a) of title 23, United States Code.

72 Stat. 917.

(c) The plans and specifications for the construction of the dam shall require that an adequate two-lane, two-way crossing shall be maintained at or near the site of the dam during construction.

Repayment contracts with spaceholders.

SEC. 3. The constructing agency may enter into repayment contracts with the spaceholders in the existing American Falls Reservoir providing for the repayment by the spaceholders of proportionate shares of the total project costs incurred by the constructing agency for engineering, financing, designing, and constructing the replacement dam, and the Secretary shall be a party to said contracts and the delivery of water to the spaceholders shall be contingent upon the execution of such contracts and the fulfillment of the obligations thereunder: *Provided*, That said contracts shall be consistent with the terms of existing contracts between the Secretary and the spaceholders for repayment of the costs of the existing American Falls Dam.

Leasing contract for hydroelectric power production.

SEC. 4. The constructing agency may contract with an appropriate non-Federal entity for the use of the falling water leaving the dam for power generation, which contract shall provide for a monetary return to the constructing agency to defray the costs of construction of the replacement dam. The constructing agency may enter into agreements with an appropriate non-Federal entity to coordinate the construction of hydroelectric power facilities with the construction of the replacement dam. The contract and agreements for use of the falling water shall not be subject to the limitations of section 9(c) of the Reclamation Project Act of 1939 (53 Stat. 1194), or any similar limitations in any other applicable Acts of Congress: *Provided*, That said contract for falling water shall be approved by the Secretary and shall not impair the efficiency of the project to serve the other purposes of the Minidoka project.

43 USC 485h.

Designs and specifications, approval.

SEC. 5. Construction of the replacement dam shall not be initiated until the Secretary has approved the designs and specifications of the dam and the plan of construction of the dam and of the proposed operation of the dam and reservoir. Construction of each related facility shall not be initiated until the Secretary has approved the designs and specifications thereof. Costs incurred by the Secretary in reviewing such designs, specifications, plans, and construction shall be included as project costs allocated to beneficiaries of the replacement dam and shall be reimbursable to the Secretary.

Costs, reimbursement to Secretary of Interior.

Recreational, fish, and wildlife facilities.

SEC. 6. The Secretary is authorized to provide specific facilities for public recreation and fish and wildlife enhancement in connection with the replacement dam, and the costs of such facilities shall be repaid in accordance with the provisions of the Federal Water Project Recreation Act (79 Stat. 213). In addition, specific facilities for public recreation may also be provided in accordance with the Land and Water Conservation Fund Act of 1965 (78 Stat. 897), as amended (16 U.S.C. 460, et seq.).

16 USC 460l-12 note.

Appropriations.

SEC. 7. There is hereby authorized to be appropriated for construction of specific facilities for public recreation and fish and wildlife enhancement the sum of $100,000 (July 1972 prices) plus or minus such amounts, if any, as may be required by reason of the changes in the cost of construction work of the type involved therein as shown by engineering cost indices. There are also authorized to be appropriated such funds as may be necessary to meet the prorated construction cost apportionable to the irrigation storage rights of the Michaud Division of the Fort Hall Indian Reservation for space in the reservoir behind the American Falls Replacement Dam and such cost shall be subject to the Act of July 1, 1932 (47 Stat. 561; 25 U.S.C. 368a). There are also authorized to be appropriated such funds as are required for the operation and maintenance of the dam and related facilities.

Fort Hall Indian Reservation, irrigation storage rights costs.

25 U

Approved December 28, 1973.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 93-701 (Comm. on Interior and Insular Affairs).
SENATE REPORT No. 93-223 (Comm. on Interior and Insular Affairs).
CONGRESSIONAL RECORD, Vol. 119 (1973):
June 19, considered and passed Senate.
Dec. 17, considered and passed House, amended.
Dec. 18, Senate concurred in House amendments.

GPO 99-139

United States Department of the Interior

BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U.S. COURTHOUSE
BOX 034-550 WEST FORT STREET
BOISE IDAHO 83720

OCT 16 AM 8:20

IN REPLY
REFER TO: 410

Josepn Greenley, Director
Idaho Department of Fish and Game
P.O. Box 25
600 S. Walnut St.
Boise, ID 83707

Dear Mr. Greenley:

Returned herewith is one signed original agreement providing for development and administration of lands and facilities for wildlife enhancement adjacent to American Falls Reservoir, Minidoka Project, Idaho.

We will begin land acquisition from the willing sellers in the near future and keep you informed of the progress.

Sincerely yours,

H. R. Stivers

ACTING Regional Director

Enclosure

cc: U.S. Fish and Wildlife Service
4620 Overland Road
Boise, ID 83705
(w/copy of enclosure)

Contract No.
8-07-10-LO116

GRANT AGREEMENT
between
THE UNITED STATES OF AMERICA
and
THE STATE OF IDAHO

For development and administration of lands and facilities for wildlife enhancement in connection with the American Falls Replacement Dam, Minidoka Project, Idaho

THIS AGREEMENT, made this 4th day of October 1979, pursuant to the Act of June 17, 1902 (32 Stat. 388), and acts amendatory thereof or supplementary thereto, the Federal Grant and Cooperative Agreement Act of 1977 (Public Law 95-224) and the Federal Water Project Recreation Act of 1965 (Public Law 89-72, 79 Stat. 213), as amended, and in accordance with a General Plan, which plan is provided for in the Act of August 14, 1946 (60 Stat. 180), between THE UNITED STATES OF AMERICA, hereinafter referred to as the United States, acting through the Bureau of Reclamation, hereinafter referred to as the Bureau, and the STATE OF IDAHO, hereinafter referred to as the State, acting through the Department of Fish and Game,

WITNESSETH, THAT:

2. WHEREAS, the American Falls Dam Replacement Act (Public Law 93-206, 87 Stat. 904), Minidoka Project, Idaho, authorized the Secretary of the Interior to provide specific facilities for fish and wildlife enhancement; and

3. WHEREAS, the State has developed the principle components of the Plan to Enhance Wildlife adjacent to American Falls Reservoir; and

4. WHEREAS, the Bureau and the State desire to cost-share in the acquisition of lands and development of wildlife facilities required for enhancement, such costs being shared in accordance with the provisions of the Federal Water Project Recreation Act (79 Stat. 213), as amended; and

5. WHEREAS, the State desires to administer the lands involved for wildlife purposes and operate, maintain, and replace the wildlife enhancement facilities, pursuant to this agreement.

NOW, THEREFORE, in consideration of the mutual covenants and stipulations hereinafter stated, the parties do mutually agree as follows:

6. Lands

a. Lease - That portion of the following described lands located adjacent to American Falls Reservoir above water elevation 4354.5 feet and within the Bureau's acquisition line are hereby leased to the State at no cost for wildlife enhancement.

160 ac { E½SE¼, SW¼SE¼ Section 19, T. 5 S., R. 32 E., B.M.;
NE¼NW¼, approx. 4 ac. in the SE corner of the NW¼NW¼,
S½NW¼, W½SW¼ Section 20, T. 5 S., R. 32 E., B.M.;
E½NE¼ Section 30, T. 5 S., R. 32 E., B.M.

These lands are shown on the map marked Exhibit "A", attached hereto and by this reference made a part hereof. Lease of the above described lands is subject to the following exceptions and reservations:

(1) Any third party rights or interests in the lands, including but not limited to powerlines, telephone lines, pipelines, and roads which have attached prior to the date of this agreement,

(2) The right of officers, agents, and employees of the United States at all times and places freely to have ingress to, passage over, and egress from said lands for the purpose of exercising and protecting the rights reserved herein.

The Bureau will contact the State in advance of any inspections or examinations of the lands or facilities. Consideration shall be given to the primary management purposes of the area and the advice of the State relating to the timing of such inspections or examinations.

(3) The right to grant rights-of-way across the lands. The Bureau will consult with the State prior to issuing rights-of-way. Provided further that no rights-of-way will be granted that conflict in any way with the terms of this agreement or the goals and objectives of the management program for these lands or adjacent state lands.

b. Acquisition - The Bureau will follow its normal land acquisition procedures for acquiring real property. It is estimated that approximately 700 acres of land will be acquired. In addition, the Bureau will adhere to the following:

(1) Compliance with Public Law 91-646, as codified in 41-CFR-114 with regard to purchase of lands, relocation of occupants, and reimbursement of moving expenses.

(2) Appraisals will be prepared in accordance with standards contained in "Uniform Appraisal Standards for Federal Land

Acquisitions" published by the Interagency Land Acquisition Conference of 1973.

(3) Fee simple title will be obtained, free of all liens and encumbrances except for existing rights-of way of record or in use for roads, railroads, telegraph, telephone, and electrical transmission lines, canals, laterals, ditches, flumes, siphons, and pipelines and mineral rights outstanding in third parties which will not interfere with the intended use of the property.

(4) Lands for this project will be acquired from willing sellers rather than by condemnation.

Title to all lands acquired through this agreement shall be vested in the name of the United States; however, the State by terms of this agreement, shall have possesion of and shall be responsible for administration of said lands for wildlife purposes.

All lands acquired under terms and conditions of this agreement shall be located within the area designated as the "Sterling Wildlife Management Area" as shown on the attached Exhibit "A."

As lands are acquired under terms of this agreement, they shall become project leased lands and be administrated in accordance with the conditions outlined herein.

7. Development and Management Plan. Upon completion of the acquisition, or a significant portion thereof, the State, in consultation with the Bureau, will prepare a development and management plan to

be implemented on the project lands. Said plan will be the guide for wildlife development and include the following:

a. Management goals and objectives.

b. Wildlife improvements (facilities) to be completed such as waterfowl grazing pastures, nesting structures, fencing, ponding structure(s), and potholes.

c. General long-term management activities.

d. Vegetation manipulation - plants, other than native, proposed for establishment; fire as a management tool.

Upon mutual agreement, the Bureau and the State may revise or update the plan. During the development phase, the State will submit to the Bureau an annual work plan and the estimated expenditures for the upcoming State fiscal year by May 15. Progress reports will be submitted for the previous fiscal year by October 1.

8. Cost-Sharing

a. The Bureau will acquire the real property as outlined herein.

Allowable Bureau expenditures under this agreement will be:

(1) Cost of fee simple title to the real property;

(2) Actual contract expenditures required to obtain appraisals; and

(3) Administrative and overhead costs at 20 percent of the total expenditure.

Annually, the Bureau will inform the State of acquisition progress and amount of expenditures. This report will include direct

costs such as personnel, travel, equipment, supplies and items (1), (2), and (3) above.

Total expenditures by the Bureau under this agreement shall not exceed $294,000 (January 1977 prices) plus or minus such amounts, if any, as may be required by reasons of changes in the appropriate cost indexes.

b. The State will complete the development in accordance with the development and management plan outlined in Article 7. Labor, equipment, and materials used during completion of the development will be considered, at the actual book cost, as State expenditures under this agreement. Statements, listing costs incurred, will be submitted to the Bureau on forms as shown in Exhibit "B" or similar thereto, on a quarterly basis,

Administrative and overhead costs shall not exceed the latest annual indirect cost proposal as approved by the Interior Department.

As land is acquired by the Bureau, the State will administer and may begin official development on the land. The associated expenditures by the State will count toward the State's share of the project. The State will complete its share of the project within 10 years of the completion of acquisiton by the Bureau. The State will complete the development outlined herein up to one-fourth of the total project costs or $98,000 (January 1977 prices) plus or minus such amounts, if any, as may be required by reasons of changes in the appropriate cost indexes.

9. Review. The project status will be reviewed as needed. Either party to this agreement may call for a review of a project feature(s).

10. Accounts, Records, and Audits. During the performance of work under this agreement the State and the United States shall maintain books of accounts separate and apart from any other of its books of accounts, and so keep them, and all other books, records, and memoranda which support in any way the entries in such books of accounts, so as to be able to furnish readily full information as to any item included in any account. Each entry shall be supported by such detailed information as will permit a ready identification, analysis, and verification of all of the facts relevant thereto. Any costs which are not so supported will be deducted in calculating the amount which fulfills each party's contribution to the project. The books and records shall be retained by each party for three (3) years after completion of all work called for in the agreement. The books of accounts maintained by the State and by the United States, relating to matters covered by this contract, shall be open to inspection and audit by representatives of the United States and the State at all times during regular office hours.

11. Administration. Pursuant to the devleopment plan and to the terms of this agreement:

a. The State shall administer the enhancement area in a manner to facilitate wildlife management. The State shall permit access to the enhancement area by the general public for hunting, fishing, and related outdoor activities permitted by State regulations.

b. The State shall observe adequate safety practices in its administration of the leased and developed area.

c. The State agrees that in the development, operation, maintenance, and replacement of facilities, it will comply with all applicable Federal, State, and County laws, orders, and regulations concerning pollution of the land and waters within and adjacent to the American Falls Reservoir.

d. The State may take water from American Falls Reservoir when there is a sufficient supply available, as determined by the Bureau, after satisfying all outstanding water entitlements. Such water may be taken free of charge and shall be used for irrigation of the waterfowl pasture areas located on leased lands in section 19 and 20, T. 5 S., R 32 E., as described in Article 6a. The Bureau does not warrant the quality of water made available for such use nor the annual availability of a sufficient water supply for the above purposes. The amount of water required is estimated to be less than 100 AF annually.

e. The State and the Bureau will, within the limits of their jurisdiction, make and enforce, or provide for the enforcement of such rules and regulations as are necessary for the use of the enhancement area consistent with the terms of this agreement and with Federal, State, County, and local laws and regulations as are necessary and desirable to protect the health and safety of persons using the area; to protect endangered plants, fish, and wildlife; to preserve the scenic, scientific, esthetic, historic, and archeological resources of the area; and to preserve law and order in the interest of public safety.

f. The State shall continue to take appropriate measures for conservation of soil and moisture resources of the area, including reasonable control of animal pests, noxious weeds, and other harmful growth; development of vegetative cover; and control of soil erosion in a manner consistent with good land management practice. The State shall cooperate with any weed control district or other governmental entity which may be established for control of noxious weeds on lands within the leased area. In use of pesticides on the lands covered in this agreement, the State shall comply with all provisions of Federal and State pesticide laws and any amendments thereto.

g. The State may issue and administer licenses and permits affecting the lands described herein, including the issuing of agricultural and grazing permits. Said licenses and permits shall be issued for the sole purpose of benefiting wildlife resources. Licenses and permits issued for periods exceeding five (5) years shall have Bureau approval.

h. The State shall submit to the Bureau, not later than October 1 of each year during the term of this agreement, a report of its receipts from licenses and permits issued for Bureau lands leased hereunder and its expenditures for operation and maintenance of said lands during the State's preceding fiscal year. Receipts less expenditures, up to a maximum of $5,000 annually, may be accumulated by the State to meet future operation and maintenance costs. Receipts less expenditures accumulated in excess of $5,000 shall be transferred to the

Bureau with the annual report. The State shall maintain such accounting records as are necessary to satisfy the requirements of this subarticle and shall permit officers of the United States to check the accounts and records of the State to determine the correctness of such records,

i. The State will cooperate with Federal agencies and other organizations which are responsible for fire prevention and suppression activities within the leased and developed areas. The Bureau hereby agrees to arrange and pay any fire protection and suppression costs for lands included in this agreement.

j. The State and the Bureau shall mutually agree on all species of nonnative plant proposed for establishment within the lands covered by this agreement.

k. All signs erected on or in connection with the enhancement project shall be approved jointly by the Bureau and the State as to design and wording.

12, Liability. The State hereby agrees to indemnify and hold harmless the United States, its agents and employees, from any loss or damage and from any liability on account of personal injury, death, or property damage, or claims for personal injury, death, or property damage of any nature whatsoever and by whomsover made arising out of the State's activities under this agreement. The State does not assume any liability for injury or damage to persons or property incidental to or that may arise during and in consequence of the Bureau's activities provided for herein.

13. Assignment. The State shall not assign or transfer its rights or obligations without prior written consent of the Bureau, but the provisions of this agreement shall apply to and bind the successors and assigns of the Bureau and the State.

14. Term. The term of this agreement shall be for a period of fifty (50) years from the date first signed above. The agreement may be renewed at the end of such period upon mutual agreement of the parties hereto.

15. Termination. This agreement shall terminate:

a. At the expiration of term as provided in Article 14 hereof, unless renewed as provided for in said article.

b. Upon mutual agreement of the parties hereto.

c. Upon the failure of the State or the Bureau to observe any of the conditions or to fulfill any of the provisions set out in this agreement. Either party may give written notice to the other indicating the obligations that are in default or the provisions of this agreement that have been violated. If violation of this agreement continues for ninety (90) days after such notice, this agreement may be terminated by either party with a second written notice to the other.

16. Contingent Upon Appropriations or Allotment of Funds. The expenditure of any money or the performance of any work herein provided for, which requires appropriations of money by Congress or the allotment of Federal funds, or which require appropriation of money by the State Legislature or the allotment of state funds, shall be contingent upon such appropriations or allotments being made.

17. Notices. Any notice required or authorized by this agreement shall be deemed properly given if mailed postage prepaid, or delivered to the Regional Director, Pacific Northwest Region, Bureau of Reclamation, Box 043 - 550 West Fort Street, Boise, Idaho 83724, on behalf of the United States and to the Director, Idaho Department of Fish and Game, P.O. Box 25, 600 South Walnut Street, Boise, Idaho 83707, on behalf of the State.

18. Coordination of Responsibilities. The State and the Bureau shall cooperate to achieve coordination of the State's responsibilities under this agreement with the Bureau's general responsibility for administration of the entire American Falls Reservoir area.

19. Equal Employment Opportunity. This agreement is subject to the Equal Employment Opportunity provisions attached hereto, marked Exhibit E, and by this reference made a part hereof.

20. Nondiscrimination in Public Accommodations. The State agrees that it and its employees will not discriminate because of race, color, religion, sex, or national origin against any person by refusing to furnish such person any accommodation, facility, service, or privilege offered to or enjoyed by the general public. Nor shall the State or its employees publicize the accommodations, facilities, services, or privileges in any manner that would directly or by implication reflect upon or question the acceptability of the patronage of any person because of race, color, religion, sex, or national origin. The State agrees to include and require compliance with a provision similar to the foregoing

provision in any contract made with respect to the operations to be carried out hereunder.

21. Certification of Nonsegregated Facilities. By signing this agreement, the State certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. It certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. It further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause; that it will retain such certifications in its files; and that it will forward the following notice to such proposed subcontractors

(except where the proposed subcontractors have submitted identical certifications for specific time periods):

> Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities
>
> A Certification of Nonsegregated Facilities, as required by the May 9, 1967, Order (32 R.F. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).
>
> NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

22. Officials not to Benefit. No member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this agreement or to any benefit that may arise herefrom. This restriction shall not be construed to extend to this contract if made with a corporation or company for its general benefit.

23. Environmental Quality. In furtherance of the purpose and policy of NEPA of 1969, the Bureau and the State recognize the importance of preservation and enhancement of the quality of the environment and the elimination of environmental pollution. Prior to action by either party, all possible effects upon the project resources will be evaluated and appropriate measures taken to insure that the quality of the environment will not be degraded or unfavorably altered. The State further agrees that any licenses and permits it may enter into with a third party will contain a similar water and air pollution control article.

24. Uniform Administrative Requirements. The State shall comply with policy and procedures set forth in the Office of Management and Budget (OMB) Circulars A-87, A-95, A-102, and A-110. Said circulars are hereby incorporated into and made a part of this agreement.

IN WITNESS WHEREOF, the parties hereto have executed this agreement the day and year first written above.

BUREAU OF RECLAMATION

BY _____
Regional Director
Pacific Northwest Region, Boise, Idaho

STATE OF IDAHO
Through Idaho Department of Fish and Game
600 S. Walnut Street, Boise, Idaho

BY _____
Director

APPROVED:

John C. Vehlow 9/25/79
John C. Vehlow, Deputy Attorney General

S-1 - 9/10/79
Stephen M. Barton, Chief, Bureau of Administrati

STATE OF IDAHO)
: ss
County of Ada)

On this 4th day of October, 1979,

personally appeared before me Rod Vissia, to me known to be the official of THE UNITED STATES OF AMERICA that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of said United States, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

John H. Welch
Notary Public in and for the
State of Idaho
Residing at Boise
My commission expires: 6-10-83

(SEAL)

* * * * *

STATE OF IDAHO)
: ss
County of Ada)

On this 28th day of September, 1979,

personally appeared before me Joseph C. Spencley to me known to be the official of THE STATE OF IDAHO that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of said State of Idaho, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Anne Epeldi
Notary Public in and for the
State of Idaho
Residing at: Boise
My commission expires: June 1, 1984

(SEAL)

Wildlife Mitigation
Status Report

ANDERSON RANCH DAM AND RESERVOIR

Final Report

Prepared by:

E. Chaney
S. Sather-Blair

U.S. Fish and Wildlife Service
Ecological Services Office
John P. Wolflin, Field Supervisor

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
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Northwest Power Planning Council
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
January 1985

TABLE OF CONTENTS

I. PROJECT NAME

Anderson Ranch Dam

II. PROJECT OPERATOR

Bureau of Reclamation

III. PROJECT DESCRIPTION

a. Location and Size

Anderson Ranch Dam is located at approximately mile 37 of the South Fork of the Boise River about 20 air miles north of Mountain Home, Idaho. The earth-fill structure is 456 feet high and has a total storage capacity of 493,200 acre feet of water. Two power plants operate at a maximum generating capacity of 40 megawatts (USBR 1981). At full pool the reservoir has a surface area of 4,740 acres. It extends 14 miles up the South Fork in a steep-to-sheer canyon ranging from one-fourth to one mile wide (USFWS 1950).

b. Authorized Purposes

The Anderson Ranch project is part of a Federal water storage system in the Boise River drainage. It is authorized for irrigation, flood control, power production, fish and wildlife, and recreation (USBR 1981).

c. Brief History

Construction of Anderson Ranch Dam was authorized by the Department of the Interior Secretary's Findings of Feasibility, June 25, 1940, under Section 9 of the Reclamation Project Act of 1939 (USBR 1953). The dam was completed in 1950 (USBR 1980).

d. Other Pertinent Data

(1) Water Level Fluctuation and Timing

July through September irrigation releases from the reservoir average 1,500 cubic feet per second (cfs) of water. In September, releases from the reservoir are generally reduced to approximately 200 cfs. Winter releases vary with power peaking operations; generally flows are from 200 cfs to 1,600 cfs. Spring flood control releases may reach 5,000 cfs (USBR 1981). Average annual reservoir drawdown is approximately 30 feet (USFWS 1980).

(2) Land Ownership

The 50 miles of reservoir shoreline is publicly owned and managed by the Boise National Forest (BNF) except near the dam and powerhouse which is managed by the USBR. There are a few small and scattered parcels of private land intermixed but the amount of area was not determined (USBR 1981).

(3) Indian Rights

The project is within the ancestral hunting and fishing area of the Shoshone-Bannock Tribe. In preparing this status report, no documentation was found to indicate any tribal involvement in pre- or post-construction project assessment and planning. According to a spokesman for the Shoshone-Bannock Tribes of the Fort Hall Indian Reservation, it is doubtful the tribes were involved in any way (pers. comm. Snoshone-Bannock Tribes of the Fort Hall Indian Reservation).

IV . WILDLIFE SPECIES AND HABITAT ASSESSMENTS

a. Pre-construction

The U.S. Fish and Wildlife Service (USFWS) assessed pre-construction conditions within the proposed impoundment area based upon June - November 1948 field investigations (USFWS 1950). The reservoir site was a deep river canyon and the following cover types were located within the 4,153 acres then thought to be inundated: sagebrush - 1,909 acres; deciduous broadleaf trees - 1,187 acres; conifers - 465 acres; grasses - 275 acres; pasture - 158 acres; water - 66 acres; sand/gravel - 47 acres; browse - 43 acres; marsh/swamp - 3 acres. The actual surface area of the reservoir is 4,740 acres, 587 acres more than what was reported for this report.

The following qualitative assessment of wildlife values was provided. Unfortunately this 1950 report did not quantify wildlife losses within the reservoir area, although the loss of over 1,000 acres of riparian and marsh vegetation as well as the other vegetation communities must have adversely affected many game and nongame animals.

Muie deer and Rocky Mountain elk used the area within and adjacent to the reservoir site. Portions of the impoundment area were "...extremely important winter ranges for these species. In addition, they would have been important fawning grounds for deer" (USFWS 1950). Mallard and teal ducks nested along the river. Ruffed grouse, blue grouse, mountain quail and mourning doves were common within the proposed reservoir site. Furbearing animals included muskrat, beaver, mink, raccoon, skunk and otter.

Composition of the vegetation and associated wildlife community before the project can also be inferred by examining post-construction inventories of the South Fork of the Boise River immediately below the dam. The river channel below the dam varies from 35 feet to 200 feet in width. Relatively flat riparian and bottomland areas extend from 100 feet to 600 feet wider than the channel to the toe of side slopes which have gradients from 40 to 80 percent. Complex riparian and bottomland vegetation communities are dominated by cottonwood, scattered pine, Douglas fir, willow, sedges, and many shrub species. Deciduous trees and scattered dense stands of Douglas fir predominate on north facing slopes. Benchlands with seeps and wet draws support pockets of aspen, cherry and hawthorn. Sagebrush with wheatgrass, cheatgrass and bluebunch grass is prominent on gentler slopes. South facing slopes are generally composed of sagebrush interspersed with bitterbrush, hawthorn, nine-bark and grasses (USFWS 1980).

These diverse vegetation communities provide habitats for a large number and variety of wildlife species. Large mammals include mule deer, Rocky Mountain elk, black bear and mountain lion. Small mammals include beaver, muskrat, bobcat, coyote, fox, badger, skunks, raccoon, river otter, marmot, mink, martin, and weasel.

Eighty-one bird species have recently been observed in the South Fork river corridor (USBR 1982). Wading shorebirds, great blue herons and greater sandhill cranes frequent riparian and wet meadow areas along the South Fork below the reservoir. Numerous nongame birds nest in the riparian zone along the river and many more species rest and feed there during migration. Ferruginous hawks, osprey and northern bald eagles frequent the area, primarily in late winter and early spring.

Upland game birds include blue grouse, ruffed grouse, sage grouse, spruce (Franklin) grouse, chukar, gray partridge, mourning doves and small numbers of mountain quail. Ruffed grouse, mourning doves, and mountain quail are species associated with riparian vegetation while the others usually inhabit more xeric sites.

Mallard, northern pintail, American wigeon, blue- and green-winged teal, wood duck, common goldeneye, Barrow's goldeneye, lesser scaup, ring-necked duck, ruddy duck, red-breasted and common mergansers are among the waterfowl which use the area. These birds frequent the braided side channels of the river where protective cover exists (USBR 1982).

b. Post-construction

The pre-construction riverine ecosystem (described in the 1950 USFWS report (USFWS 1950) and implied by the 1980 post-construction report for the immediate downstream river section (USFWS 1982)) was inundated by the Anderson Ranch reservoir. Adjacent to the reservoir south and west

facing slopes are dominated by sagebrush-grass communities. North and east facing slopes are characterized by sagebrush-grass on dry sites and aspen, Douglas fir and ponderosa pine with grass, forb and shrub understory on moist sites (USBR 1982).

According to theUSFWS report (1950), the reservoir ".....inundated considerable winter range for big game along the South Fork of the Boise River and especially at the upper end of the impoundment." Resident and wintering elk inhabit land surrounding and downstream of the reservoir. Heavy concentrations of deer winter within the canyon, principally in breaks and side draws along the reservoir and in the river canyon from the dam downstream approximate!y 15 miles. A 1979 survey conducted by IDFG counted a total of 2,317 deer and 17 elk from the tailwaters of Anderson Ranch Reservoir approximately 40 miles downstream to the tailwaters of Arrowrock Reservoir (USFWS 1982),

The reservoir eliminated over 14 miles of free-flowing water where several furbearer species resided. Now beaver and muskrat activities are limited to the river below the dam and its tributaries (USSR 1982). Other furbearer species such as the river otter and mink were similarly affected.

Fluctuating water levels of the reservoir do not allow wetland vegetation to establish along its shoreline (USBR 1981). As such the reservoir provides little habitat for waterfowl other than for resting. The reservoir does attract some waterfowl during migration with mallards being the most common.

The reservoir flooded over 4,500 acres of upland gamebird habitat. Currently the most common gamebird in the project area is the chukar, but several other species can also be found (USBR 1981). These species include blue grouse, ruffed grouse, sage grouse, gray partridge, mountain quail and mourning doves. The blue grouse is especially numerous on the north facing slopes of the lands adjacent to the reservoir while mountain quail are limited to the riparian areas below the dam (USBR 1981). Those species most closely associated with the riparian community, i.e. ruffed grouse and mountain quail, were probably most severely affected by the project.

Active nests of ospreys, golden eagles, and bald eagles have been identified near the reservoir (USBR 1982). Bald eagles are common winter residents along the South Fork of the Boise River with 28 counted from the dam to Danskin Bridge during a winter census (USFWS 1980).

The reservoir inundated over 4,500 acres of nongame wildlife habitat. The most significant loss, particularly to nongame birds, was the loss of the riparian vegetation community, Because of the fluctuating water levels no significant amounts of riparian vegetation have established along the reservoir's shoreline.

None of the information reviewed in preparing this status report suggested any impacts on terrestrial wildlife resulting from flows released from Anderson Ranch Reservoir. Information from a 1980 Fish and Wildlife Coordination Act Report (LJSFWS 1980) provides information on the contemporary wildlife conditions below the dam.

V. WILDLIFE MITIGATION HISTORY

Planning and construction of Anderson Ranch Dam occurred prior to the time formal, comprehensive impact assessments and mitigation were required by law. Neither wildlife nor the environmental setting were mentioned in the basic planning documents accompanying the request for authorization (USBR 1940a, 1940b).

The 1934 Fish and Wildlife Coordination Act, for example, largely mandated a "... spirit of cooperation..." among project developers and wildlife interests (House of Representatives Report No. 850, 1934). Strengthening amendments in 1946 fell short of requiring comprehensive impact assessments and mitigation (Senate Report No. 81, 1958).

a. Mitigation Requested or Proposed

The 1950 report (USFWS 1950) concluded "....the continued existence of the big game herds is dependent on the important winter range lying along the South Fork of the Boise River..". As partial compensation for the winter range lost to Anderson Ranch Reservoir the report recommended USBR set aside and fence approximately 3,000 acres around the upper end of the reservoir as a big game management unit. It was estimated this would mitigate ".... about 21 percent of the...big game loss." It was further recommended that "... the Bureau of Reclamation should cooperate with the State in additional development, such as reseeding and acquisition of more land which might be necessary to complete the unit."

No other mitigation was proposed for loss of deer and elk habitat and no mitigation was proposed for loss of other wildlife habitats within the approximately 14-mile long South Fork of the Boise River inundated by Anderson Ranch Reservoir.

b. Mitigation Agreements or Requirements

In December 1952 USBR licensed to the Idaho Department of Fish and Game (IDFG) 2,300 acres of project land adjacent to the upper end of Anderson Ranch Reservoir for game management purposes; term of the license was from January 1, 1953 - January 1, 1978 (USBR 1952). USBR project lands around the reservoir were given national forest status on April 4, 1968 (Fed. Reg. Vol 33, No. 66) however, USBR continued to administer these lands under a July 30, 1952 Memorandum of Understanding with the Forest Service. This MOU was terminated January 16, 1970 (MOA 1970) turning over to the Forest Service administrative authority

over all project lands not required for actual project operations. The license granted IDFG remained in effect during these changes of administration, but was not renewed after it expired in 1978.

c. Mitigation Implemented

Based upon the available records, there was no development to enhance the wildlife values of the licensed lands (pers. comm. IDFG, BNF). Therefore, there was no mitigation for loss of wildlife habitats within the approximately 14-mile long corridor of the South Fork Boise River inundated by Anderson Ranch Reservoir.

VI. CURRENT STUDIES AND PLANNING

In 1974-7.5. public land administered by the Forest Service in the approximately 12 mile-long river corridor from Anderson Ranch Dam downstream to Danskin Bridge was put under a rest-rotation grazing system to control livestock use. There are no grazing allotments around the reservoir. There is minor livestock use at the upper end by sheep moving to and from higher elevations. Six goose nesting platforms and three osprey nest platforms have been installed by BNF and IDFG in the upper reservoir area. There has been one small bitterbrush planting at Lime Creek on the reservoir.

USBR has been the driving force behind a land exchange agreement, now nearing consummation, which would bring into public ownership approximately 640 acres of private land in the South Fork River corridor below Anderson Ranch Dam. These lands were in great demand for recreational subdivision; they have extremely high existing and potential value as wildlife habitat and will be administered by the BNF (pers. comm. USBR).

VII. REFERENCES CITED

U.S. Bureau of Reclamation. 1940a. Report on Anderson Ranch and Twin Springs Reservoir sites, Boise Project. April 1940.

_____ 1940b. Supplemental report on Anderson Ranch Reservoir site, Boise Project. June 1940. .

_____ 1952. Lease of land for game management area. Boise Project, Idaho. December 1952.

_____ 1953. Supplemental allocation report on Anderson Ranch Dam and Payette Division. June 1953.

_____ 1980. Boise Project.

_____ 1981. Anderson Ranch Powerplant Third Unit, Boise Project, Idaho, Environmental Statement. April 1981.

_____. 1982. Final Environmental Impact Statement and Feasibility Report for Anderson Ranch Powerplant Third Unit, Boise Project, Idaho. June 1982.

U.S. Fish and Wildlife Service. 1950. Report on fish and wildlife resources, Arrowrock Division, Boise Project, Boise River, Idaho. January 1950.

_____. 1980. Fish and Wildlife Coordination Act report on the Anderson Ranch Power-plant Third Unit Addition, Boise Project, Idaho. May 1980.

APPENDIX A

Study Team

Ed Chaney
Signe Sather-Blair

APPENDIX B

Consultation/Coordination

A. Project Contacts

1. Boise National Forest

Chuck Arns
Al Boss

2. Idaho Department of Fish and Game

Ralph Pehrson
Dale Turnipseed

3. Shoshone-Bannock Tribes of the Fort Hall Indian Reservation

Dan Christopherson

4. U.S. Bureau of Reclamation

Bob Adair
Jack Hanson
John Keys
Fred Stillings
Dick Woodworth

5. U.S. Fish and Wildlife Service

Jim Nee
John Wolflin

B. Summary

Dates	Agency	Summary
October 1 - November 15, 1983	Boise National Forest	Discussed land management around and below reservoir
" "	Idaho Department of Fish and Game	Discussed management on leased lands and other management operation in and near the project
" "	Shoshone-Bannock Tribes	Discussed Indian involvement in planning
" "	Bureau of Reclamation	Discussed mitigation and current studies/planning for the project
" "	U.S. Fish and Wildlife Service	Discussed 1980 Coordination Act Report and mitigation needs for Anderson Ranch

APPENDIX C

Comments

(1) State Agency (IDFG)

(2) Federal Agencies (USFS and USFWS)

(3) Tribes
The Shoshone-Bannock Tribe was contacted but no correspondence was received.

(4) Facility Operator (USBR)

IDAHO DEPARTMENT OF FISH **AND** GAME
600 South Walnut • Box 25
Boise . Idaho • 83707

December 4, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Adminstration
P. 0. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

Thank you for the opportunity to review the Wildlife Mitigation Status Report for Anderson Ranch Dam. The Idaho Department of Fish and Game looks forward to seeing fulfillment of the Northwest Power Act's and the Columbia River Basin Fish and Wildlife Program's goal "to protect, mitigate, and enhance . . . wildlife to the extent affected by the development and operation of any hydroelectric project of the Columbia River and it's tributaries....'

This goal has not yet been achieved at the Anderson Ranch Project. The status report demonstrates that no appreciable mitigation for wildlife habitat losses was accomplished. This is understandable, considering that legal mandates and concerns for wildlife resources have changed since the project was built.

Although net impacts have not been determined, it is obvious that substantial impacts to wildlife occurred as a result of the project inundating 14 miles of free-flowing river and 4,740 acres of excellent wildlife habitat (which included waterfowl nesting habitat; year-round game bird, furbearer, nongame, black bear and mountain lion habitat; mule deer fawning grounds, and extremely important elk and mule deer winter range).

In order to "protect, mitigate, and enhance" wildlife resources affected by the Anderson Ranch Project, it my be necessary to determine what impacts have occurred. Upon the approval of, and funding by, the Council and Bonneville Power Administration, the Department is prepared to take the lead in conducting an assessment of impacts to wildlife resources resulting from this project and to prepare a net impacts statement. The Department is also ready to take the lead in developing mitigation plans.

Consultation and coordination with appropriate agencies and tribes regarding all aspects of the Fish and Wildlife Program is very important. The Idaho Department of Fish and Game supports the goals of the program and wants to see those goals fulfilled at this project.

Sincerely,

Jerry M. Conley
Director

JMC:BM:db

United States Department of Agriculture
Forest Service
Boise National Forest
1750 Front Street
Boise. ID 83702

AUG 06 1984

Reply to 2600

Date July 31, 1984

Mr. John Palensky, Director
Division cf Fish and Wildlife
Bonneville Power Administration
P.O. Box 3621
Portland, OR 97208

Dear Mr. Palensky:

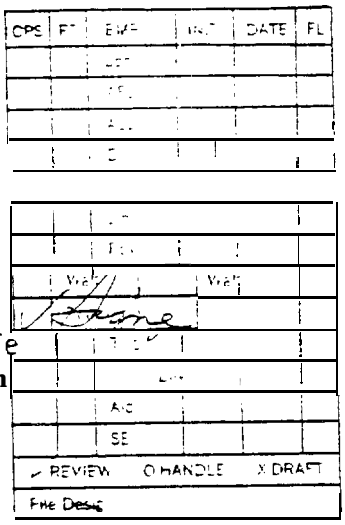
We have reviewed the "Wildlife Mitigation Status Review" for Anderson Ranch Dam, which was prepared by the U.S. Fish and Wildlife Service.

We find the review to be quite thorough with a considerable amount of information and detail. I recommend, however, that maps be included to show the mitigation areas and land exchange blocks. I have no other corrections or additions to propose for this review, and appreciate this opportunity to comment on this segment of the report.

Sincerely,

Truman C Ruchsamer

&Q JOHN J. LAVIN
Forest Supervisor



January 21, 1985

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter, we have reviewed the Wildlife Mitigation Status Report for the Anderson Ranch Dam Project in south central Idaho. The following comments are being provider! for inclusion in the final report.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. Based on the report's content it is evident that the construction and operation of the project resulted in adverse impacts to wildlife resources which have not been adequately identified. Therefore, the Service recommends that the Bonneville Power Administration provide funds to conduct an evaluation of the impacts of the project on wildlife resources.

An evaluation of the project's impact on wildlife resources should be conducted by a lead resource agency which would then be responsible for coordinating the study with other appropriate agencieAgencies that should be involved in such an evaluation include the Idaho Department of Fish and Game, Bureau of Land Management, Fish and Wildlife Service, the Forest Service, and the Bureau of Reclamation. The evaluation should include an evaluation of 1) pre-construction wildlife habitat conditions, 2) mitigation actions which have been implemented, and 3) current project area habitat conditions. We recommend that the evaluation be habitat-based and supported by existing wildlife population data when available. We suggest that collection of new population data be limited and applied only to species of special interest, i.e. bald eagle.

In conclusion, we believe that the analysis of losses and mitigation needs should be done as quickly as possible. However, we also recognize that the mitigation recommendations should be based on a technical assessment of losses.

Sincerely yours,

Original signed by
J. W. Teeter

James W. Teeter
Acting Assistant Regional Director
Habitat Resources

cc: ES Boise Field

RECEIVED
JAN 25 1985
BOISE FIELD OFFICE
U.S. F W S

BFO/R.Giger:plm

United States Department of the Interior
BUREAU OF RECLAMATION
PACIFIC NOTHWEST REGION
FEDERAL BUILDING & U. S. COURTHOUSE
BOX 043-550 WEST FORT STREET
BOISE. IDAHO 83724

IN REPLY REFER TO PN 150
565.

SEP 13 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Attention: James Meyer
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Meyer:

We have completed our review of the wildlife mitigation status report for Anderson Ranch Dam, which was prepared by the Fish and Wildlife Service. We are sorry for the length of time it has taken to provide you with comments.

Following are our comments.

III. Project Description

a. 'Location and Size. In the third sentence, 34.5 megawatts should be 40 megawatts.

b. Authorized Purposes. The words "conservation storage" imply that a minimum pool was an authorized purpose of the project. We do not understand this to be the case. Further explanation of the meaning of these words is needed to indicate wnether reference is made to the inactive space, dead storage, or silt retention.

d. Other Pertinent Data

(1) Water level fluctuation and timing. The last sentence can be misinterpreted. We suggest referring to average annual drawdown and including the historic range of annual drawdown.

(2) Land Ownership. First sentence - the term "bulk" should be clarified by indicating the amount of shoreline; i.e., miles or feet not in public ownership.

Second sentence - the term "most" should be quantified by further describing the corridor width, total acres, and the number of acres or percent in public ownership.

Sincerely yours,

John R. Woodworth

John R. Woodworth
Regional Environmental Officer

APPENDIX D

Mitigation Instruments

No mitigation has been implemented for this project.

Wildlife Mitigation
Status Report

BLACK CANYON DAM AND RESERVOIR

Final Report

Prepared by:

E. Chaney
S. Sather-Blair

U.S. Fish and Wildlife Service
Ecological Services Office
John P. Wolflin, Field Supervisor

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number DE-A179-84BP12149
Northwest Power Planning Council
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
January 1985

TABLE OF CONTENTS

I. PROJECT NAME

Black Canyon Dam and Powerplant

II. PROJECT OPERATOR

Bureau of Reclamation

III. PROJECT DESCRIPTION

a. Location, Size and Physical Features

Black Canyon Dam and Powerplant is located on the Payette River near Emmett, Idaho. The 183-foot high structure is a concrete gravity type dam with an ogee overflow spillway. Crest length is 1,039 feet. The facility has the capacity to divert water from the Payette River at a rate of 1,360 cubic feet per second (cfs). The dam contains two electrical generating units with a total installed capacity of 8,000 kilowatts. The reservoir at full pool extends approximately nine miles upstream from the dam and covers 1,100 acres.

b. Authorized Purposes

The Black Canyon project's authorized purposes are irrigation and power production (pers. comm. USBR).

c. Brief History

Black Canyon Dam and Powerplant are part of the Bureau of Reclamation (USBR) Boise Project authorized March 27, 1905. The dam was authorized June 26,1922 by the Secretary of the Interior under provisions of the Reclamation Act of June 17, 1902. Construction was completed in 1924.

The reservoir initially had the capacity for about 44,000 acre feet of water. By the early 1970's, sedimentation, mainly at the upper end of the reservoir, had reduced the capacity by about one-third. Chronic deposition of sediments has continued to reduce the reservoir's capacity. This contributed to spring flooding of adjacent lowlands which necessitated USBR acquisition of all properties within the extended 100-year floodplain of the lower Montour Valley **adjacent to the upper end of the reservoir.**

d. Other Pertinent Data

(1) Water Level Fluctuation and Timing

During the summer, flows, averaging 1,800 cfs, are released from Black Canyon Reservoir to meet downstream irrigation requirements. During spring,the project passes flood flows ranging from 6,000 cfs to

as high as 30,000 cfs. The reservoir's small storage capacity (approximately 25,000 acre feet) has no significant control on flood flows past the project. October 15 - December 1 flows are tied to power demands, and generally range from 1,200 cfs to 1,800 cfs (pers. comm. USBR). The age of the dam now requires that the reservoir be drawn down every year after October 15 for dam repairs (pers. comm. USBR).

(2) Land Ownership

There are 2,317 acres of non-flooded project lands. The land surrounding the reservoir project is a mosaic of private and public lands, the latter managed by the USBR, Bureau of Land Management (BLM) or the State of Idaho (pers. comm. USBR).

There are also several isolated tracts in the Payette River watershed that are a part of this project. Many of these are adjacent to irrigation canals and leased to other users including local farmers and Idaho Department of Fish and Game(IDFG).

(3) Indian Rights

The project is within the ancestral hunting and fishing area of the Shoshone-Bannock Tribe. In preparing this status report no documentation was found to indicate any tribal involvement in pre- or post-construction project assessment and planning. According to a spokesman for the Shoshone-Bannock Tribes of the Fort Hall Indian Reservation, it is doubtful the tribes were involved in any way (pers. comm. Shoshone-Bannock Tribes).

IV. WILDLIFE SPECIES AND HABITAT ASSESSMENTS

a. Pre-construction

The USBR, IDFG and U.S. Fish and Wildlife Service (USFWS) have no documentation of pre-project conditions for wildlife (pers. comm. USBR, IDFG and USFWS). In preparation of this status report, queries requesting pre-project perspective were directed to Emmett Public Library, Idaho Historical Society, U.S. Geological Survey, Idaho Department of Water Resources and BLM. The LJSBR provided material from its archives. No useful information was identified.

Prior to project construction the 1,100 acres inundated by Black Canyon Reservoir was a riverine environment likely dominated by a cottonwood-willow complex with an understory of various shrubs and grasses. Adjacent uplands were dominated by a shrub-steppe vegetation community.

Mule deer probably used the area year round with population density increasing during the winter. Furbearers such as beaver, muskrat, and mink probably inhabited the area and waterfowl nested along the shores or on islands of the river. It can also be assumed that numerous nongame species inhabited the vegetation communities inundated by the project.

b. Post-construction

There has been no formal, comprehensive assessment of post-construction conditions for wildlife in the project area (pers. comm. IDFG). Approximately nine miles of what was once a free-flowing Payette River and the riparian and shrub-steppe vegetation communities are now flooded by the reservoir. Terrestrial wildlife associated with these communities were lost and/or displaced.

Nearly sixty years have passed since the project was completed. During that time vegetation communities adjacent to, above and below the project and the hydrology of the Payette River itself have been altered by man's activities. The lands adjacent to the project are mostly grassland dominated by cheatgrass and/or medusahead rye. There are some sagebrush areas and willows that have been established along the shoreline in some locations (pers. comm. BLM). Most of the isolated tracts associated with the project are leased for agriculture or grazing purposes. The USBR leases to IDFG without charge four isolated tracts of project land downstream from Black Canyon Dam for management for wildlife, predominately for upland game and nongame species. These tracts contain a total of 35.6 acres and are irrigable. The present lease was signed June 17, 1981 and runs 25 years (Memorandum of Agreement, 1981).

Extensive deposition of river-borne sediments in the upper end of Black Canyon Reservoir contributed to chronic spring flooding of adjacent low-lying agricultural lands. The USBR acquired 1,095 acres within the extended 100-year floodplain and in cooperation with IDFG drafted the Montour Wildlife/Recreation Plan for the area (USBR 1980). A memorandum of understanding was signed by the respective parties outlining management responsibilities in August 1983 (MOU 1983).

Wildlife habitats in the Montour area have been extensively and intensively modified from native conditions due to the long period of farming and grazing in the area. As a result a variety of introduced plants predominate in the valley floor. Native species persist only on steep slopes and rocky areas that have not been heavily grazed or cultivated.

The interspersion of agricultural lands with the wetland vegetation communities of the Payette River provide good habitat for upland game birds, particularly pheasants and California quail. The Payette River islands in the Montour area provide safe nesting sites for waterfowl and the pastures serve as brood rearing areas for the resident Canada geese.

v. WILDLIFE MITIGATION HISTORY

Planning and construction of the Black Canyon project occurred many years prior to the time formal, comprehensive impact assessments and mitigation were required by law. The project was completed in 1924, ten years before the Fish and Wildlife Coordination Act was enacted by Congress.

a. Mitigation Requested or Proposed

No mitigation for project impacts on wildlife was proposed prior to, during or following construction and operation of the Black Canyon Dam and Powerplant (pers. comm. IDFG and USBR).

b. Mitigation Agreements or Requirements

None are documented (pers. comm. IDFG, USFWS, and USBR).

c. Mitigation Implemented

None are documented (pers. comm., IDFG, USFWS, and USBR).

VI. CURRENT STUDIES AND PLANNING

In August 1983 USBR and IDFG executed a memorandum of understanding for the development and management of the Montour Wildlife/Recreation Area (MOU 1983). This 1,095 acre area is located in the lower portion of Montour Valley 13 miles east of Emmett, Idaho adjacent to the upper end of Black Canyon Reservoir.

The Montour Wildlife/Recreation Area Management Plan is due to be published by the USBR soon. The draft report (USBR 1980) identified the following management actions that are planned. Proposed upland habitat development measures will include planting hedgerows, shelterbelts and grass-legume strips. Pasture lands will be grazed in a manner designed to enhance wildlife values and cultivated lands will be planted and share-cropped to benefit the upland game birds. Riparian vegetation will also be reestablished along the Payette River.

Proposed wetland habitat development measures include stabilization of water levels and island construction in slough and marsh areas, construction of small ponds, installation of wood duck nesting boxes and goose nesting platforms, provision of waterfowl resting areas, and goose brooding and grazing areas. In early 1983 the USBR installed ten goose nesting platforms, ten wood duck nesting boxes and 35 blue bird nesting boxes (pers. comm. USBR).

VII. REFERENCES CITED

Memorandum of Agreement, 1981, between the Bureau of Reclamation and the State of Idaho concerning lease of federal lands, July 13, 1981

Memorandum of Understanding, 1983, between the Bureau of Reclamation and the Idaho Department of Fish and Game concerning management responsibilities of the Montour area, August, 1983

U.S. Bureau of Reclamation, Undated, Boise Project, Pacific Northwest Region Off ice

U.S. Bureau of Reclamation, 1980, Montour Wildlife/Recreation Area Management Plan, (Draft Report). Boise, Idaho, April 1980

APPENDIX A

Study Team

Ed Chaney
Signe Sather-Blair

APPENDIX B

Consultation/Coordination

A. Project Contacts

1. Idaho Department of Fish and Game

   Dale Von Steen
   Ralph Pehrson

2. Shoshone-Bannock Tribes of the Fort Hall Indian Reservation

   Dan Christopherson

3. U.S. Bureau of Land Management

   Allan Sands
   Chuck Jones

4. U.S. Bureau of Reclamation

   Bob Adair
   Jack Hanson
   Neil Stessman
   Fred Stillings
   Dick Woodworth

5. U.S. Fish and Wildlife Service

   Jim Nee
   John Wolflin

B. Summary

Dates	Agency	Summary
October l-November 15, 1983	USBR	Obtained information on past and present mitigation efforts.
"	IDFG	Discussed history of Black Canyon Project and current plans for the Montour area along the Payette River.
"	Shoshone-Bannock Tribe	Discussed Indian rights and participation in planning of the Black Canyon Project.
"	IDFG	Obtained information on past and present mitigation efforts. Talked about wildlife enhancement efforts on the Payette below the project.
April 3, 1984	USBR-Adair	Talked about Montour area and project lands.
April 5, 1984	USBR-Hansen	Talked about project operations.
April 5, 1984	BLM-Sands	Talked about condition of BLM lands around the reservoir.
April 6, 1984	BLM-Jones	Talked about condition of BLM lands around the reservoir.
April 9, 1984	USBR-Hansen	Discussed where the 2,000 acres of project lands were located and how they are managed.

APPENDIX C

Comments

(1) State Agency

No formal comments were received.

(2) Federal Agencies (USFWS)

(3) Tribes

No formal comments were received by any Indian tribe although the Shoshone-Bannock Tribe of the Fort Hall Indian Reservation were contacted.

(4) Facility Operator (USBR)

)) JUL 2 5 1984

United States Department of the Interior

BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U.S. COURTHOUSE
BOX 043-550 WEST FORT STREET
BOISE, IDAHO 83724

IN REPLY
REFER TO PN 150
565.

JUL 20 1984

Mr. James Meyer
Bonneville Power Administration
Department of Energy
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Meyer:

We have reviewed the Wildlife Mitigation Status report on the Black Canyon Project which we received on June 20, 1984. The report appears to be an accurate description of the project and its history.

Thank you for the opportunity to review this report.

Sincerely yours,

John R. Woodworth

John R. Woodworth
Regional Environmental Officer

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

JUL 13 1984

In Reply Refer To: Your Reference:

July 11, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter of May 18, 1984, we have reviewed the Wildlife Mitigation Status Report for the Black Canyon Project in western Idaho. The following comments are being provided for inclusion in the final report.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. Based on the report's content it is evident that the construction and operation of the project has resulted in substantial adverse impacts to wildlife resources which have been neither adequately identified nor mitigated. Therefore, the Service recommends that the Bonneville Power Administration provide funds to: 1) conduct an evaluation of the impacts of the project on wildlife resources; and 2) based on the findings of that evaluation, develop a mitigation and enhancement plan which would fully compensate the adverse wildlife impact attributable to the project.

An evaluation of the Project's impact on wildlife resources should be conducted by a lead resource agency which would then be responsible for coordinating the study with other appropriate agencies. Agencies that should be involved in such an evaluation include the Idaho Department of Fish and Game, Bureau of Reclamation, Bureau of Land Management, and the Fish and Wildlife Service. The evaluation should include an analysis of 1) immediate post-construction losses, 2) mitigation actions which have been implemented, and 3) current project area conditions. We recommend that the evaluation be habitat-based and supported by existing wildlife population data when available. We suggest that collection of new population data be limited and applied only to species of special interest, i.e. bald eagle.

We believe that a habitat-based evaluation could be accomplished in a timely manner using a tool such as the Habitat Evaluation Procedures (HEP) developed by the Fish and Wildlife Service. It provides a mechanism to assess project impacts and evaluate potential mitigation actions, and can thus streamline our efforts to evaluate losses and develop a mitigation plan for this project. Conduct of the proposed Palisades study should provide a basis for determining the evaluation method.

We foresee that an evaluation of losses for this project would include 1) an analysis of existing data such as pre- and post-construction photography and 2) brief field evaluation of current habitat conditions in the project area and sites considered representative of habitat inundated by the project. These field inspections would be conducted by a team of wildlife biologists familiar with the area's wildlife resources. The results of the evaluation would be presented in a loss statement report.

In conclusion, we believe that the analysis of losses and mitigation needs should be done as quickly as possible. However, we also recognize that the mitigation recommendations should be based on a technical assessment of losses.

Sincerely yours,

Jay F. Watson

Jay F. Watson
Acting Assistant Regional Director
Habitat Resources

cc: FWS-ES Boise Field Office
IDFG (Pehrson)

APPENDIX D

Mitigation Instruments

No mitigation has been implemented for this project.

Wildlife Mitigation Status Report

BOISE DIVERSION DAM PROJECT

Final Report

Prepared by:

R. C. Martin
L. A. Mehrhoff

Idaho Department of Fish and Game
Jerry M. Conley, Director

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number 83-478D
in compliance with
Northwest Power Planning Council's
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
December 1984

TABLE OF CONTENTS

I. PROJECT NAME

Boise Diversion Dam

II. PROJECT OPERATOR

U.S. Bureau of Reclamation (USBR)

III. PROJECT DESCRIPTION

A. Location and Size

Boise Diversion Dam is on the Boise River about 4 miles southeast of the city limits of Boise, Idaho. The dam is a rubble-concrete, weir-type structure 68 feet high, with a crest length of 500 feet. The spillway is a concrete overflow section on the dam. The power plant has a capacity of approximately 1,500 kilowatts (USBR 1981). At full pool, the reservoir is about 1.3 miles long and 130 yards wide.

B. Authorized Purposes

The Boise Diversion Dam and power plant were built to supply power for the construction of Arrowrock Dam and to divert water for irrigation in the Arrowrock Division of the Boise Project (USBR 1916, 1957, 1981).

C. Brief History

The Boise Project, of which the Diversion Dam is a part, initially was authorized in 1905, by the Secretary of the Interior, under the Reclamation Act of 1902. The dam was completed in 1908, and was designed to divert water into the New York Canal. The power plant was authorized by the Secretary of the Interior in 1911 (USBR 1957). It began operation in 1912, but currently is not operating (J. Hansen, USBR, pers. commun.).

D. Other Pertinent Data

1. Water Level Fluctuations and Timing

The Diversion Dam is supplied by water stored in Arrowrock and Lucky Peak reservoirs. It has a diversion capacity of 2,815 cubic feet per second. Most water flows into the New York Canal, although some flows into the smaller Penitentiary Canal (USBR 1981). The canals provide irrigation water for the Arrowrock Division of the Boise Project. The dam has no effect on flood control, except by reducing flood flows by the amount being diverted (U.S. Army Corps of Engineers 1956).

The dam impounds about 3,000 acre-feet from mid-April to mid-October. During that time, the pool elevation is about 20 feet higher than the river elevation during winter (J. Hansen, USBR, pers. commun.). Water is backed up more than 1.3 miles above the dam.

2. Land Ownership

The shoreline of the Diversion Dam and pool is in public ownership, and is managed by the USBR (J. Hansen, USBR, pers. commun.). State Highway 21 is adjacent to the north side of the Diversion Dam and pool; it is administered by the Idaho Department of Highways.

3. Indian Rights

The Diversion Dam is within the ancestral hunting and fishing area of the Shoshone-Bannock Tribes. It is assumed that the Tribes retain hunting rights over open and unclaimed federal lands within the Diversion Dam area. If so, it is assumed that treaty rights are affected by any impact or management decision that affects wildlife that exist on, or cross, open and unclaimed federal lands within this area. To date, the Tribes have not claimed any rights or voiced any interests in wildlife associated with the project.

TV. WILDLIFE SPECIES AND HABITAT ASSESSMENTS

A. Pre-construction

The Boise River was described as wooded and grassed its entire length during the 19th century (Eagleson 1930). Near Boise, the river was said to be fringed on both sides by cottonwoods and willows (Chaffee 1931, Idaho Water Resources Research Institute 1974). Elk, deer, otters, beavers, mink, and waterfowl were abundant (Ross 1855, Eagleson 1930).

Photographs taken during construction of the dam contradict descriptions of trees in the vicinity. The photos show very little woody riparian vegetation, even in the downstream area which is presently an extensive forested wetland.

B. Post-construction

Along the reservoir shoreline at full pool, there is almost no woody vegetation for the 1.3 miles of the north side of the pool, or for 0.6 miles on the south side of the pool. Almost all of this 1.9 miles of shoreline is classified as lacustrine (USFWS 1983). For the remaining 0.7 miles of the south side of the pool, there is a very narrow strip of shrubs and cattails. From mid-October, when the pool is lowered, until mid-April, when it is filled, there is a barren zone on both

sides of the river. The shoreline habitat below the dam is dominated by a forested wetland, which probably developed in response to upstream flood control. Reservoir fluctuations, sand accumulations, and topography have prevented the same response above the dam.

Resource Systems, Incorporated (1983) inventoried wetland habitat6 and species on the Boise River from the Diversion Dam downstream to Eagle Island State Park. They documented high-quality riparian habitat that, over the course of a year, support6 at least 150 species of birds and 37 species of mammals.

Many raptors occur between Lucky Peak Dam and Walnut Avenue in Boise. Golden eagles and prairie falcons nest on cliffs above this reach. A peak of 20 bald eagles was counted during the winter of 1984 (S. Sather-Blair, LJSFWS, pers. commun.). Average winter counts have been 10 to 12 (Reynolds et al. 1983).

Immediately downstream from the Diversion Dam is the Barber Pool. Within the Barber Pool area, the Boise River is braided, and many islands exist. The area supports a vast. diversity of plant and wildlife species (Idaho Park Foundation, Inc. 1984). The Barber Pool is considered to be one of the few relatively pristine riparian areas on the Boise River. It supports 40 resident mule deer and an additional 50 to 100 deer during the winter (A. Ogden, IDFG, pers. commun.). It also supports the most consistent and concentrated bald eagle use of the reach between Lucky Peak Dam and Walnut Avenue in Boise (Reynolds et al. 1983).

V. WILDLIFE MITIGATION HISTORY

Planning and construction of the Boise Diversion Dam occurred prior to the time formal, comprehensive impact assessments and mitigation were required by law. The 1934 Fish and Wildlife Coordination Act was passed 22 years after the power plant was operating in the existing dam.

A. Mitigation Requested or Proposed

None.

B. Mitigation Agreements or Requirements

None.

C. Mitigation Implemented

None.

VI. CURRENT STUDIES AND PLANNING

The current power plant cannot be run economically at this time, althcugh it can be restarted under short notice. The USBR is planning a replacement power plant that would generate power by run-of-the-river, as does the current plant (J. Hansen, USBR, pers. commun.).

The USFWS is in the final stages of their wetland inventory of the Boise River. They have mapped the wetlands between Lucky Peak Dam and the Snake River.

The Boise River Plan Committee (comprised of private individuals and representatives of numerous public or private agencies, commissions, companies, and groups) is assessing proposals for developments along the Boise River between Eagle Island and the Diversion Dam. One proposal is to extend the Greenbelt (a paved path along the river) through the Barber Pool area to the Diversion Dam.

Under Section 1004(b)(2) of the Columbia River Basin Fish and Wildlife Program, IDFG field personnel have proposed that the IDFG request mitigation for the Diversion Dam in the form of habitat improvement and increased protection for the Barber Pool area (A. Ogden, IDFG, pers. commun.).

VII. REFERENCES CITED

Idaho Water Resources Research Institute. 1974. Economic and ecological history support study for a case study of federal expenditures on a water and related land resource project; Boise project, Idaho and Oregon. Principal investigators: H.H. Caldwell and M. Wells. Idaho Water Resource Board. 18Opp.

Chaffee, E.B. 1931. Early history of the Boise region: 1811-1864. M.S. thesis, Univ. of California, Berkeley.

Eagleson, E.G. 1930. Boise Indian sanctuary centuries before whites. Idaho Statesman, 22 June 1930.

Idaho Park Foundation. 1984. Management study: Barber Pool Natural Area. Principal investigators: Sharon Hubler and Lydia Kading-Lloyd.

Resource Systems, Inc. 1983. Boise River wildlife and fish habitat study. Principal investigators: Signe Sather-Blair and Charles Blair. Boise City Community Development Program. 158pp.

Reynolds, R.D., N.D. Ertter, D.K. Broemeling, and R.P. Howard. 1983. Winter bald eagle use along a segment of the Boise River. Unpublished manuscript, USFWS, Div. of Endangered Species. Boise, Idaho. 14pp.

Ross, A. 1855. Fur Hunters of the Far West, Vol. 2. London.

U.S. Army Corps of Engineers. 1956. Reservoir regulation manual for Boise River reservoirs.

U.S. Bureau of Reclamation. 1916. History of the Boise Project, Idaho from the beginning to 1912.

_____. 1957. Bureau of Reclamation project feasibilities and authorizations.

_____. 1981. Project data.

U.S. Fish and Wildlife Service. 1983. Boise River wetland inventory. Unpublished data. Portland regional office.

A P P E N D I C E S

APPENDIX A

STUDY TEAM

Idaho Department of Fish and Game

Bob Martin
Arch Mehrhoff

APPENDIX B

CONSULTATION/COORDINATION

1. Project Contacts

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Jack Hansen
Bob Adair
Al Bolen
Glade Walker
Neil Stessman
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Lou Nelson
Ralph Pehrson

U.S. Fish and Wildlife Service

Signe Sather-Blair
John Wolflin
Rich Howard
Jim Nee
Sue Preston
Walt Ray

Shoshone-Bannock Tribes

Jack Robs
Dave Lundgren

2. Summary

Dates	Agency	Summary
6 June 1984	All	Sent letters requesting contact person(s).
11 June 1984	USBR	Meeting at central Snake projects office.
25 June 1984	USBR	Obtained information from central Snake projects office.

26 June 1984	USBR	Meeting at regional office to discuss rough draft.
28 June 1984	USFWS	Meeting to review rough draft.
29 June 1984	USFWS	Telephone conversation regarding rough draft
29 June 1984	USBR	Telephone conversation to obtain information.
24 July 1984	USFWS	Meeting to review draft.
25 July 1984	Sho-Ban	Sent letter requesting statement of Tribal rights and interests.
27 July 1984	Sho-Ban	Telephone contact to obtain information from Tribal legal staff.
8 August 1984	USBR	Meeting at central Snake projects office to review draft.

APPENDIX C

FORMAL COMMENTS ON AUGUST 1984 DRAFT REPORT

State Agency:	IDFG
Federal Agencies:	USFWS USFS
Tribes:	Shoshone-Bannock (no formal comments received)
Project Operator:	USBR

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise · Idaho • 83707

September 25, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Port I and, OR 97208

Attention : Mr. James Meyer

Dear Sirs:

During planning of the Boise Diversion Dam (prior to 1905), the U.S. Bureau of Reclamation (USBR) anticipated both the need for upstream storage reservoirs and the need for power to construct the required dams (USBR 1916, History of the Boise Project, Idaho, from the beginning to 1912). In 1905, the USBR requested blds for constructing the power plant at the Boise Diversion Dam (ibid). This was two years before dam construction began. Furthermore, the USBR stated "This Boise River Diverslon Dam was orglnally built to supply power for the construction of Arrowrock Darn" (USBR 1981, Project data).

We consider the Boise Diversion Dam, in addition to being an irrigation facility, to be a hydroelectric project. Therefore, the impacts of the dam and reservoir should be mitigated under Section 1004(b)(2 or 3) of the Columbia River Basin Fish and Wildlife Program.

Due to hab i tat inundation, reservoir fluctuations, and sand accumulation, at least 2 miles and an unknown acreage of riparian habitat have probably been lost. We request mitigation in the form of habitat improvements and increased protection for the Barber Pool area (immediately downstream from the Boise Diversion Dam).

The area could be protected from trespassing cattle and off-road vehicles by only 2 miles of fence. Habitat improvements could include, but not be limlted to, construct ion of bald eagle perches, osprey platforms, wood duck boxes, bluebird/tree swallow boxes, and goose nesting platforms.

The Barber Pool is currently held in trust by the Idaho Parks Foundation, primarily as a wildlife refuge. The Pool Is one of the few relatively pristine riparian areas remaining on the Boise River. We consider it the most appropriate location for mitigation measures.

Sincerely,

for Jerry M. Conley
Director

JMC:RM: pkk

CC: IDFG Region 3

JAN 0 7 1985

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

In Reply Refer To: Your Reference:

January 4, 1985

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter, we have reviewed the Wildlife Mitigation Status Report for the Boise Diversion Project in western Idaho. We believe the report is well written and adequately describes the status of wildlife mitigation for the project. We have no additional recommendations for the project at the present time.

Sincerely yours,

Acting Assistant Regional Director
Habitat Resources

SEP 18 1984

United States Department of Agriculture
Forest Service
Boise National Forest
1750 Front Street
Boise, ID 83702

Reply to 2600

Date September 11, 1984

Bonneville Power Administration
ATTN: James Meyer
Division of Fish and Game
P.O. Box 3621
Portland, OR 97208

Dear Mr. Meyer:

I have reviewed your project reports on the Wildlife Mitigation Status Review for the Boise Diversion and Cascade Dams, which were prepared by the Idaho Fish and Game Department and have the following comments to submit:

As you describe, the Boise Diversion is responsible for virtually eliminating the riparian wood vegetative cover along the 1.3 miles on the north aide of the pool above the dam and for 0.6 miles on the south aide of the pool above the dam. For the remaining 0.7 miles on the south side of tbe pool, there is 8 narrow strip of shrubs and cattails.

I realize the narrow riparian zones along streams of this relatively arid area is usually the most productive wildlife habitat, and acknowledge that we are continually losing this valuable habitat to development activities. For these reasons, I support the Fish and Game Department in their proposal for mitigation of the Diversion Dan in the form of habitat improvement and increased protection for the Barber Pool area.

• • •

JOHN J. LAVIN
Forest Superviaor

E-14

USAS

SEP 2 1 1984

United States Department of the Interior

BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U. S. COURTHOUSE
BOX 043-550 WEST FORT STREET
BOISE, IDAHO 83724

IN REPLY
REFER TO: PN 150
565.

SEP 17 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Attention: James Meyer
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Meyer:

We have reviewed the Wildlife Mitigation Status report for the Boise Diversion and Cascade Dams which we received from you on August 21, 1984. We have the following comments.

Boise Diversion Dam

IV. A. Pre-construction, paragraph 1, and
B. Post -construction, paragraph 4

Pre and postconstruction descriptions of the Boise River corridor in the Diversion Dam vicinity as "wooded and grassed. . ." and "similar to today's heavy riparian zone" are incorrect. Historic photos of the construction at the Diversion Dam show exposed, barren river shoreline and no vegetation. Today's high quality riparian zone is the result of controlled flows from the dams on the river. The photos are available for viewing.

VI. Current Studies and Planning

Paragraph 1. At the end of the first sentence add ". . .at this time, although it can be restarted under short notice."

Paragraph 3. Further explanation of the makeup of the Boise River Plan Committee would be helpful.

• • •

Thank you for the opportunity to review this report.

Sincerely yours,

John R. Woodworth

John R. Woodworth
Regional Environmental Officer

E-16

Wildlife Mitigation Status Report

CASCADE DAM AND RESERVOIR PROJECT

Final Report

Prepared by:

R. C. Martin
L. A. Mehrhoff

Idaho Department of Fish and Game
Jerry M. Conley, Director

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number 83-478D
in compliance with
Northwest Power Planning Council's
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
December 1984

TABLE OF CONTENTS

I. PROJECT Name

Cascade Dam and Reservoir

II. PROJECT OPERATOR

U.S. Bureau of Reclamation (USBR)

III. PROJECT DESCRIPTION

A. Location and Size

Cascade Dam is on the North Fork of the Payette River, l/2 mile northwest of Cascade, Idaho, and about 80 miles north of Boise, Idaho. The dam is a rolled earth and rockfill embankment 107 feet high, with a crest length of 785 feet. The spillway is 45 feet wide, with a capacity of 12,000 cubic feet per second (CFS); the outlet works have a capacity of 2,530 cfs, for a total capacity of 14,530 cfs (USBR 1981). The original power plant had a capacity of 300 kilowatts. The current power plant has a capacity of 12.8 megawatts (Idaho Power Company 1980). At normal full pool level (elevation 4,828 feet), the reservoir is 22 miles long, has a maximum width of 4.5 miles, and is 28,300 acres in size.

B. Authorized Purposes

The Payette Division of the Boise Project and its storage facilities were originally authorized for irrigation and power production (USBR 1949). The purpose of Cascade Reservoir was to provide water for the 26,000 acre pumping division of the Payette Division, to supplement the water supply of the gravity division, and to furnish water for power development (USBR 1938, 1940, 1941).

C. Brief History

Prior to the Cascade Project, the Boise-Payette Lumber Company built a diversion dam and power plant a short distance downstream from the location of the current dam. Later, Idaho Power Company bought this power plant.

The Payette Division of the Boise Project, of which the Cascade Project is a part, initially was authorized in 1935, by the President, under the Reclamation Act of 1902, the Act of 25 June 1910, and the Act of 5 December 1924 (USBR 1949).

Construction of Cascade Dam began in 1941, and was completed in 1948. Outlet facilities with a large penstock were built into the dam, The facilities were built to assomodate a larger power plant, and had a

mush greater capacity than the needs of the existing plant. In 1981, Idaho Power Company obtained a license to construct a 12.8 megawatt power plant to replace the original 300 kilowatt plant. It was constructed during 1982, and began partial operation in 1983.

D. Other Pertinent Data

1. Water Level Fluctuation and Timing

Cascade Reservoir has a total capacity of 703,200 acre-feet, and an active capacity of 653,200 acre-feet (Idaho Power Company 1980). Full or supplemental irrigation service is provided to 114,000 acres (USBR 1981). The minimum reservoir elevation is set at 40.5 feet below the normal high pool level. However, the maximum drawdown of the reservoir has been 28 feet below the normal high pool. Between 1960 and 1975, the average annual drawdown was 15 feet; the average peak pool was in July, and the average low pool was in Marsh (Idaho Power Company 1980).

2. Land Ownership

Cascade Reservoir has 86 miles of shoreline; approximately 3% is privately owned, and 97% is publically owned. The USBR manages approximately 86% of the shoreline, and the U.S. Forest Service (USFS) manages 11%.

3. Indian Rights

The treaty of 1855 between the U.S. Government and the Nez Perse Tribe defined the responsibilities and rights of both parties, and defined the boundaries of the Nez Perce Reservation. Subsequent treaties reduced the size of the reservation, but the Nez Perse Tribe retained hunting and fishing rights over open and unclaimed lands within the boundaries of their aboriginal area. Nez Perse treaty rights are affected by any management decision that impacts wildlife populations that exist on, or cross, federally owned land within the ceded area. The northern half of Cascade Reservoir is included in this area. The Nez Perce Tribe, therefore, has a voice in management decisions impacting treaty right resources (M. Joye, Nez Perse Tribe, letter of 13 July 1984).

IV. WILDLIFE SPECIES HABITAT ASSESSMENT

A. Pre-construction

In 1946, the USFWS published a pre-project assessment of Cascade Dam and Reservoir's projected impacts on fish and wildlife. The report did not address downstream impacts or nongame wildlife. The field investigation lasted 11 days.

The reservoir encompassed 34 miles of the North Fork of the Payette River, and at least 32 miles of tributary streams. The vegetation of the drainage was second-growth conifers, broadleaved trees, brush, and pasture. Streambanks were covered mostly with willows, hawthornes, cottonwoods, and aspens. Within the impoundment area, there were approximately 7,870 acres of timber, 70 acres of broadleaved trees, 1,440 acres of streambank browse, 280 acres of marsh, and 16,840 acres of cultivation and pasture (USFWS 1946).

The impoundment area was estimated to contain 9,380 acres of mule deer habitat, 9,380 acres of ruffed grouse habitat, 18,360 acres of gray partridge habitat, and 7,940 acres of blue grouse habitat. Canada geese and ducks were supported on an estimated 23 miles of streams and sloughs. The area provided "excellent" habitat for furbearers, including muskrats, weasels, beavers, mink, coyotes, river otters, raccoons, bobcats, and skunks (USFWS 1946).

Elk, mule deer, and white-tailed deer were present in the area. Historically, elk and mule deer migrated through the area now inundated.

B. Post-construction

No quantitative wildlife studies were documented, except for the endangered bald eagle and the osprey - a USFWS' Species of Concern in Idaho. Within the reservoir area, there are 2 bald eagle nests. One is on USBR land, and has not been active since 1979. The other is on USFS land, and has been active every year since 1978 (R. Aoward, USFWS, pers. commun.). Osprey numbers have been increasing. In 1980, there were 28 active nests at the reservoir (Van Daele et al. 1980).

Over the course of a year, the reservoir supports a diversity of water-related birds, including ducks, geese, swans, heron6 grebes, and shorebirds. There is an abundance of wildlife in the reservoir's upper arms, due to an absence of shoreside homes and little recreation disturbance. The Duck Creek area is noted for numbers of Canada geese and ospreys and a western grebe colony by the mouth of the'creek. Sugarloaf Island is known for snow geese and tundra (whistling) swans which use the area for resting during spring migration. The island has one active osprey nest (USBR 1982).

The land in the reservoir area supports small mammals, furbearers, upland birds, nongame birds, and big game. Although limited in numbers, mule deer, black bears, elk, and an occasional cougar occur in lands around the reservoir (USBR 1982).

V. WILDLIFE MITIGATION HISTORY

Planning and construction of Cascade Dam occurred prior to the time formal, comprehensive impact assessments and mitigation were required by law. The 1934 Fish and Wildlife Coordination Act mandated only a "...spirit of cooperation..." among project developers and wildlife interests (Senate Report No. 1981, 1958).

A. Mitigation Requested or Proposed

in their pre-project assessment, the USFWS (1946) recommended the following:

1. Fluctuations of reservoir levels should be held to a minimum.

2. Units within the irrigable lands, to be used as refuges, should be transferred to the Idaho Department of Fish and Game (IDFG) for management; IDFG should be given the opportunity to participate in determining the location and number of such units.

3. If wildlife benefits are used to help pay development costs of the project, each farmer's contract with the irrigation district should include a clause which stipulates that public hunting be permitted on his land, with certain controls as may be formulated by proper authorities.

4. The State of Idaho should be given opportunity, during the development stage, to participate in the formulation of a wildlife management program for the project area.

5. Weed control operations by fire along canals, laterals, and drains should be prohibited between 15 March and 1 August.

6. The reservoir, streams, and canals should be opened to free use by the public, and leases of lands within these areas should stipulate the right of public access for hunting and recreation.

7. Management of the wildlife resources on the project should be vested in the State of Idaho.

No wildlife mitigation was requested in response to licensing of the new power plant (Idaho Power Company 1980, 1981). In their Land Use Management Plan, the USBR (1982) proposed the following measures that would benefit wildlife:

1. The water surface in the North Fork inlet, the upper end of the Gold Fork inlet, and the Lake Fork inlet, a total of 2,500 acres, should be closed to motorboats.

2. In addition, the North Fork, Lake Fork, and Gold Fork wildlife management areas (WMAs) should have Canada goose and osprey nesting platforms, wood duck nest boxes, small potholes and channels, and no stump removal.

3. In the Duck Creek WMA, a wildlife interpretation center and a nature trail should be constructed.

4. Dead trees that are potential nest trees should be protected in the reservoir area, and on West Mountain.

5. Osprey and bald eagle nests should be protected by designating a one-quarter-mile radius no-disturbance zone around each nest.

6. Additional enhancement should include constructing wood duck nesting boxes, planting vegetation for food and cover, and fencing areas to control grazing and vehicle use.

After reviewing the Cascade Land Use Management Plan (USBR 1982), the IDFG (1982) proposed the following additional measures that could be used to benefit wildlife:

1. Improve waterfowl nesting and brood rearing habitats and water quality by discontinuing cattle grazing below the high water mark of the reservoir. This could be accomplished by fencing about 30 feet from the shoreline. Presently, cattle grazing below the high water mark is the greatest single detriment to higher water quality and waterfowl nesting and brood rearing habitats. The Sugarloaf Wildlife-Recreation Area and the Duck Creek WMA are the most abused areas.

2. Minimize disturbance to waterfowl by closing the old highway which runs north-south from Sugarloaf point.

3. Preserve and enhance western grebe nesting and rearing areas in the Duck Creek WMA.

4. Improve plant communities in the Duck Creek WMA by restricting vehicle access and cattle use.

B. Mitigation Agreements or Requirements

There were no wildlife mitigation agreements or requirements when the original power plant was built, when the dam was authorized, or when the new power plant was licensed.

C. Mitigation Implemented

Although no mitigation was required, the USBR implemented the following measures:

1. An agreement dated September 10, 1969, between the USBR and the IDFG, provided for utilization of Sugarloaf Island (65 acres) and Sugarloaf Peninsula (35 acres) by the State for "planting grains and grasses for feeding migratory waterfowl."

2. In the mid-1970's, the USFWS, IDFG, and USBR jointly selected 3,398 acres to be designated as wildlife management areas. The Duck Creek WMA is 958 acres, the North Fork WMA is 850 acres, the Lake Fork WMA is 280 acres, the Gold Fork WMA is 90 acres,the Sugarloaf WMA is 1,020 acres, the Willow Creek WMA is 150 acres, and there are 50 miscellaneous acres (USBR 1982). These areas have been designated, but active management has been limited.

3. During the fall of 1977, the USBR erected 17 osprey nesting platforms at Cascade Reservoir. Nine were erected in the Willow Creek area, and 8 in the Duck Creek area (Van Daele et al. 1980).

4. The Youth Conservation Corps constructed and placed about 50 kestrel nesting boxes in the Duck Creek area circa 1977 (R. Adair, USBR, pers. commun.).

5. In 1978, the USBR contracted the University of Idaho to conduct a 3-year study of ospreys in the vicinity of Cascade reservoir (Van Daele et al. 1980).

VI. CURRENT STUDIES AND PLANNING

The USBR is preparing to erect goose nesting platforms in the Duck Creek, Willow Creek, and North Fork areas. The IDFG and the USFWS will be consulted during the site selection process (R. Adair, USBR, pers. commun.).

The USBR supports the proposal to exclude motorboats from the North Fork inlet, the upper end of the Gold Fork inlet, and the Lake Fork inlet (R. Adair, USBR, pers. commun.).

Administrators of the Boise National Forest have closed the logging road leading to the active bald eagle nest on their land (A. Boss, USFS, pers. commun.). Now, the nest is l/4 mile from the end of the road, and the USFS is evaluating the need for a no-disturbance zone.

Cascade Reservoir is a part of 2 current USFWS projects. First, there is a peregrine falcon hacking site near Cascade. Second, as part of the bald eagle recovery plan, the USFWS suggests that an eagle nesting structure should be built on Sugarloaf Island (R. Howard, USFWS, pers. commun.).

In May, 1984, Mr. D. Taggart formally requested that the USBR and the USFS begin study of the Les Bois Resort proposal. The proposed developments would be on the vest side of the reservoir in the Poison Creek drainage. They would include facilities on 600 acres of private land, a ski area on about 2,800 acres of USFS administered land, and a marina on about 120 acres of USBR administered land adjacent to the north boundary of the Duck Creek WMA.

VII. REFERENCES CITED

Idaho Department of Fish and Game. 1982. Letter to regional office of USBR, 13 January. IDFG, Region 3.

Idaho Power Company. 1980. Cascade hydroelectric project.

_____. 1981. Order issuing license: Federal Energy Regulatory Commission Project No. 2848.

Senate Report No. 1981. 1958. 85th Congress, 2nd Session.

Star Nevs. 1984. Reflections from the past, 21 March 1984.

U.S. Bureau of Reclamation. 1938. Boise Project history.

_____. 1940. Boise Project history.

_____. 1941. Boise Project history.

_____. 1949. Bureau of Reclamation project feasibilities and authorizations.

_____. 1981. Project data.

_____. 1982. Cascade land use management plan.

U.S. Fish and Wildlife Service. 1946. A report on fish and wildlife resources in relation to water development plan for the proposed Columbia Basin, Payette Unit, Mountain Home Project,

Van Daele, L.J., B.A. Van Daele, and D.R. Johnson. 1980. The status and management of ospreys nesting in Long Valley, Idaho.

A P P E N D I C E S

APPENDIX A

STUDY TEAM

Idaho Department of Fish and Game

Bob Martin
Arch Mehrhoff

APPENDIX B

CONSULTATION/COORDINATION

1. Project Contacts

U.S. Bureau of Reclamation

Bob Adair
Jack Hansen
Al Bolen
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Idaho Department of Fish and Game

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Andy Ogden
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U.S. Fish and Wildlife Service

Signe Sather-Blair
Rich Howard
Jim Nee
Sue Preston
Walt Ray
John Wolflin

U.S. Forest Service

Al Boss
Don Corley

Nez Perce Tribe

Keith Lawrence

2. Summary

Dates	Agency	Summary
6 June 1984	USBR	Meeting at regional office.
11 June 1984	USBR	Meeting at central Snake projects office.
19 June 1984	USFWS	Meeting at endangered species office.
25 June 1984	USBR	Obtained information from central Snake projects office.
26 June 1984	USBR	Meeting at regional office to review rough draft.
27 June 1984	Nez Perce	Discussed tribal interest.
27 June 1984	USFS	Discussed their activities around the reservoir.
27 June 1984	USBR	Discussion with Ron Golus.
28 June 1984	USBR	Discussion with Steve Jakuboweis.
29 June 1984	USFWS	Meeting at ecological services office to review rough draft.
24 July 1984	USFWS	Meeting to review draft.
8 August	USBR	Meeting at central Snake projects office to review draft.

APPENDIX C

FORMAL COMMENTS ON AUGUST 1984 DRAFT REPORT

State Agency: IDFG

Federal Agencies: USFWS
USFS

Tribes: Nez Perce (no formal comment6 received)

Project Operator: USBR

DEC 1 8 1984

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

December 10, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

Thank you for the opportunity to revlew the Wildlife Mitigation Status Report for the Cascade Dam and Reservoir Project. The Idaho Department of Fish and Game looks forward to seeing fulfillment of the Northwest Power Act's and the Columbia River Basin Fish and Wildlife Program's goal "to protect, mitigate, and enhance . . . wildlife to the extent affected by the development and operation of any hydroelectric project of the Columbia River and its tributaries....*'

Th is goal has not yet been achieved at the Cascade Project. The status report demonstrates that noteworthy measures to benefit wildlife have been implemented, but sufficient mitigation for wildlife habitat losses has not been accomplished. This is understandable, considering that legal mandates and concerns for wildlife resources have changed since the project was built. The Department commends the Bureau of Reclamation for setting aside wildlife management areas on the reservoir; however, these lands need more active management if their potential values for wildlife to be realized.

A l though net impacts have not been determi ned, it is obvious that substant ia l impacts to w i ld l l fe occurred as a resu lt of the project inundating more than 66 miles of free-flowing water and 28,000 acres of habitat. In order to "protect, mitigate, and enhance" Wildlife resources affected by the project, it may be necessary to determine what impacts have occurred. Upon the approval of, and funding by, the Council and Bonneville Power Administration,,the Department is prepared to take the lead in conducting an assessment of impacts to wildlife

resources resulting from this project and to prepare a net impacts statement. The Department is al so ready to take the lead in developing mltigation plans.

Consultation and coordination with appropriate agencies and tribes regarding all aspects of the Fish and Wildlife Program is very important. The Idaho Department of F ish and Game supports the goals of the program and wants to see those goals fulfilled at this project.

Sincerely,

Jerry M. Conley
Director

JMC:BM:db

JAN 07 1985

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

In Reply Refer To: Your Reference:

January 4, 1985

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter, we have reviewed the Wildlife Mitigation Status Report for the Cascade Project in western Idaho. The following comments are being provided for inclusion in the final report.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. Based on the report's content it is evident that the construction and operation of the project resulted in adverse impacts to wildlife resources which have not been adequately identified. Therefore, the Service recommends that the Bonneville Power Administration provide funds to conduct an evaluation of the impacts of the project on wildlife resources.

An evaluation of the project's impact on wildlife resources should be conducted by a lead resource agency which would then be responsible for coordinating the study with other appropriate agencies. Agencies that should be involved in such an evaluation include the Idaho Department of Fish and Game, Bureau of Land Management, Forest Service, Fish and Wildlife Service, Bureau of Reclamation as well as the Idaho Power Company. The evaluation should include an analysis of 1) preconstruction habitat conditions, 2) mitigation actions which have been implemented, and 3) current project area habitat conditions. We recommend that the evaluation be habitat-based and supported by existing wildlife population data when available. We suggest that collection of new population data be limited and applied only to species of special interest, i.e. bald eagle.

In conclusion, we believe that the analysis of losses and mitigation needs should be done as quickly as possible. However, we also recognize that the mitigation recommendations should be based on a technical assessment of losses.

Sincerely yours,

J. W. Coeter

Acting Assistant Regional Director
Habitat Resources

SEP 1 8 1984

United States Department of Agriculture
Forest Service
Boise National Forest
1750 Front Street
Boise, ID 83702

Reply to 2 6 0 0

Date September 11, 1984

Bonneville Power Administration
ATTN: Mr. James Meyer
Division of Fish and Game
P.O. Box 3621
Portland, OR 97208

DearMr. Meyer:

I have reviewed your project reports on the Wildlife Hitigation Status Review for the Boise Diversion and Cascade Dams,which were prepared by the Idaho Fish and Game Department and have the following comments to submit:

• • •

The Status Report on Wildlife Mitigation for Cascade Dam and Reservoir contains a considerable amount of timely information and detail. We have no additional recommendations to make on this report.

JOHN J. LAVIN
Forest Supervisor

SEP 2 1 1984

United States Department of the Interior

BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U.S. COURTHOUSE
BOX 043-550 WEST FORT STREET
BOISE, IDAHO 83724

IN REPLY
REFER TO PN 150
565.

SEP 17 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Attention: James Meyer
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Meyer:

We have reviewed the Wildlife Mitigation Status report for the Boise Diversion and Cascade Dams which we received from you on August 21, 1984, We have the following comments.

• • •

Cascade Dam and Reservoir

III. Project Description

C. Brief History

Paragraph 3. Idaho Power Company's powerplant was not completed until 1984, although one unit began operation in November 1983.

IV. Wildlife Species Habitat Assessment

B. Post -construction

It appears that this section should mention the agreement dated. September 10, 1969, between the Bureau and the Idaho Department of Fish and Game. The agreement provided for utilization of Sugarloaf Island (65 acres) and Sugarloaf Peninsula (35 acres) by the State for "planting grains and grasses for feeding migratory waterfowl." An update on the success, failure, and continued need for this agreement should also be included.

Thank you for the opportunity to review this report.

Sincerely yours,

John R. Woodworth

John R. Woodworth
Regional Environmental Officer

F18

Wildlife Mitigation
Status Report

DWORSHAK DAM AND RESERVOIR

Final Report

Prepared by:

L. A. Mehrhoff
S, Sather-Blair

U.S. Fish and Wildlife Service
Ecological Services Office
John P. Wolflin, Field Supervisor

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number DE-A179-84BP12149
Northwest Power Planning Council
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
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TABLE OF CONTENTS

I. PROJECT NAME

Dworshak Dam and Reservoir

11. PROJECT OPERATOR

United States Army Corps of Engineers

III. PROJECT DESCRIPTION

a. Location and Size

The project consists of Dworshak Dam and Reservoir, located l.9 miles upstream from the mouth of the North Fork of the Clearwater River. The dam and lower portions of the reservoir are within the Nez Perce Indian Reservation and the entire project is in Clearwater County, Idaho. The nearest community is Orofino, Idaho, four miles to the east (USACE 1975).

The dam is a concrete-gravity structure rising 717 feet above the river bed. The length of the dam crest is 3,287 feet. Three turbine generator units are housed within the dam and skeleton facilities for future installation of three additional units are provided for. The reservoir extends 53.6 miles upstream on the North Fork of the Clearwater River and at full pool elevation it has a surface area of 17,000 acres. The shoreline length is 175 miles (USACE 1975).

b. Authorized Purposes of Project

The project was primarily authorized for flood control. Other purposes included power generation and recreation (USACE 1977).

c. Brief History

On November 20, 1953 the Army Corps of Engineers (Corps) publicly announced their plans for this project. Early planning for the Dworshak Dam and Reservoir referred to the project as the "Bruces Eddy Project." The name was changed by Congressional action in August, 1963, in honor of the late Senator Henry C. Dworshak of Idaho. The authority was contained in Public Law 87-874, and approved by the Flood Control Act of 1962. Construction started in April, 1963, when access roads were built. Filling of the reservoir was started in 1972 and power generation began in 1973 (USACE 1975). The final Environmental Impact Statement (EIS) was completed in 1975. Project construction is scheduled for completion in 1985. Finalization and implementation of land-use plans are not completed.

d. Other Pertinent Data

(1) Water Level Fluctuation and Timing

Dworshak Dan and Reservoir is a unit of the Federal Columbia River Power System and a major storage project in the Columbia River Basin, It provides regulation of downstream flow control, system power generation, water quality, recreation, and other requirements (USACE 1974).

Since Dworshak is a flood control reservoir, operational procedures determine the quantity of water released or stored. The reservoir has a usable storage capacity of 2 million acre-feet of water. The reservoir is drawn down during the winter and after April 1 it is slowly filled for the summer months when high recreational use occurs. Dworshak Reservoir Regulation Manual states that it may not be drafted below its Operational Rule Curve to serve provisional energy (USACE 1974).

(2) Land Ownership

All lands adjacent to the shoreline and up to the take-line, are under Corps ownership. Twenty-six thousand acres are contained in this strip of land and distributed along the 175 miles of shoreline. This Corps land averages under one quarter mile in width (USACE 1977). Land ownership contiguous to the project boundary is 70% private, 23% state lands and 7% are national forest lands.

(3) Indian Rights

The Treaty of 1855 between the U.S. Government and the Nez Perce Tribe defined the responsibilities and rights of both parties. The Treaty also defined the boundaries of the Nez Perce Reservation. Subsequent treaties reduced the size of the Reservation, but the Nez Perce Tribe retained hunting and fishing rights over "open and unclaimed" lands within the boundaries of the original reservation. These lands, consisting of more than 13 million acres, are called ceded lands. The entire North Fork of the Clearwater River is contained within the ceded lands. The Nez Perce Tribe also retained hunting and fishing rights in areas the Tribe historically frequented that were outside of the ceded lands. These areas are called, "usual and accustomed." State and Federal Supreme Court decisions have affirmed the rights stated in the treaties, and further defined "open and unclaimed" land as all federally owned land. Any impact on wildlife populations that exist on, or across, federally owned land can impact on the Nez Perce Tribe's rights.

The Nez Perce Tribe was not involved in project planning until recently and that involvement has been limited. The low level of involvement has been in part due to the lack of natural resource expertise of the tribe and lack of planning involvement extended to the tribe by the Corps and resource agencies (pers. comm. Nez Perce Tribe).

IV. WILDLIFE SPECIES AND HABITAT ASSESSMENTS

a. Pre-construction Period

The topography and vegetation of the Clearwater River drainage are characteristic of the Idaho batholith. There is a relative scarcity of topsoils, terrain is rugged, the area is densely timbered and the nature of the runoff in undisturbed areas results in few suspended sediments in the river.

The area flooded by the reservoir consisted of a narrow, steep river channel with some scattered bench and open areas. Vegetation consisted of open coniferous timber (7,300 acres), dense coniferous timber (6,100 acres), brush (1,190 acres), and grass (510 acres) (USFWS 1962). Major desirable wildlife browse species were redstem ceanothus, serviceberry, cascara, mountain maple, and willow.

The river corridor and protected slopes of the upland areas provided vital environmental needs for the wide variety of wildlife. Big game migrated down these ridges and river corridors to winter in the lower elevations. Records indicate that deer and elk used the North Fork drainage prior to 1910, however not extensively (USFWS 1962). Archeological studies show that a site at the mouth of Weitas Creek was used seasonally as an Indian hunting camp for deer and elk. Estimates place its use fairly constant for the past 10,500 years (Keeler 1973). Two large fires in 1910 and 1919 burned 1,180 square miles of forested lands creating an environment conducive to growth of deciduous browse plants. Soon after elk populations rapidly increased (USFWS 1962).

During the late 1950's, intensive field studies were initiated by the Idaho Department of Fish and Game (IDFG) to investigate the project area's importance to wintering big game populations (Norberg and Trout 1957). These studies identified the reservoir area as emergency winter range for elk, mule deer, and white-tailed deer. Black bears were common in the project area and were historically hunted. Moose and mountain lions were also identified as being present within the project area, but no population data are available (USFWS 1962).

Furbearers along the North Fork within the project area included beaver, mink, river otter, raccoons, coyote, lynx, bobcat, and weasels. Marten may have also been present (USFWS 1962). Upland game birds consisted of quail, gray partridge, and forest grouse. Ruffed grouse were the principal game bird in the drainage. Blue and spruce grouse were present at higher elevations. Common mergansers, mallards, common and Barrow's goldeneyes, canvasbacks, American widgeon, wood ducks, gadwalls, green-winged teal, and Canada geese were observed in the project area (USFWS 1960). Numerous nongame species also utilized the project area, though their numbers were never estimated.

Historic accounts of bald eagles limit their use of the project area to the winter period only (pers. comm. USFWS, Clearwater Forest). Golden eagles and osprey nested in the area, but were not common. Other raptors had been observed, but numbers are not available,

b. Post-construction Period

Dworshak Reservoir eliminated a major part of the free-flowing North Fork of the Clearwater River to form a long narrow lake. The reservoir flooded 16,417 acres of habitat for several species of wildlife (including the area of free-flowing river). Inundation of 15,000 acres of low level terrestrial habitat created a major problem for wildlife. The habitat flooded was most capable of supporting animals during periods of stress caused by adverse winter weather conditions (Norberg and Trout 1957). The amount of food available during winter is a major factor controlling the size of the big game herds. The project Environmental Impact Statement (EIS) indicated that the flooded 15,000 acres were useable big game range (USACE 1975), However, less than 8 percent of this was shrub vegetation which is the critical food source for elk (Sports Fishery Institute 1981).

The major effect of Dworshak on the big game herds was the loss of the winter range. White-tailed deer were severely impacted. They lost approximately 650 vertical feet of their range, while elk lost approximately 200 vertical feet of their winter range (USACE 1975). The project also affected the seasonal movement of game populations. Before impoundment, both elk and deer could easily cross the river in certain locations in response to weather, food conditions, or disturbance. Many of their favorite crossings were flooded by the reservoir which impeded movement (USACE 1975) .

White-tailed deer losses were predicted to be significant because of lost winter range (USFWS 1962). As Dworshak Reservoir was being filled, in the fall of 1971 and the spring and summer of 1972, the impact became apparent (USFWS 1972). The ice cover over the lake would rise each day and the areas of ice along the perimeter became death traps for white-tailed deer and elk. Deer mortality resulted from drowning, from injuries inflicted in fighting ice conditions, and from predation by coyotes that found the ice-bound animals easy prey. In 1975 it was estimated that white-tailed deer losses were approximately 40% of the pre-project population (Meske 1975).

Although the elk population was adversely impacted as a result of lost winter range, the losses were not as high as predicted (Meske 1975). However, Meske (1975) also pointed out that " . ..major losses are yet to come. More pressure is now concentrated on the remaining range; deterioration has accelerated . ..A combination of future logging roads on Smith Ridge (if the trade isn't accomplished) plus added people pressure caused by the Dworshak Project, could be very detrimental in the future,..."

Big game mitigation and winter range has been such a complex issue that little attention has been given to other species. Significant losses of ruffed grouse were expected and it has been estimated that over 1,500 could have been displaced and lost (Sport Fishing Institute 1981). Similarly, furbearers along the free-flowing stretch were displaced, but no estimate of total losses were ever calculated. The open water areas improved the migratory bird use of the area and increased the use by osprey, bald eagles, and golden eagles (Asherin and Orme 1979). Fish turbine mortalities at the dam site contribute to the bald eagles' increase in winter use. No bald eagle nesting is known to occur in the area presently, although no surveys have been done (pers. comm. USFWS).

Impacts to wildlife, from operational aspects of the reservoir, have been documented in the project EIS and management plans prepared by IDFG and U.S. Fish and Wildlife Service (USFWS) (Patton 1973, USACE 1975, USFWS 1962). Frequent reference has been made to the problems associated with timber harvest and recreation development in areas that could be used for wildlife mitigation habitat (IDFG 1980).

V. WILDLIFE MITIGATION HISTORY

a. Wildlife Mitigation Requested or Proposed

Much of the planning and construction of the Dworshak project occurred prior to the time formal, comprehensive impact assessments and mitigation were required by law. The 1934 Fish and Wildlife Coordination Act, for example, largely mandated a "...spirit of cooperation..." among project developers and wildlife interests. Strengthening amendments in 1946 fell short of requiring comprehensive impact assessments and mitigation. Further amendments to the Coordination Act in 1958, and the synergistic effect of other, subsequent legislation including the Federal Water Pollution Control Act, Sikes Act Extension, National Environmental Policy Act, etc., resulted in formal, explicit mandates for comprehensive impact assessments and mitigation (Environmental Law Institute 1977).

The extent of wildlife use in the reservoir basin before the area was inundated was documented (Norberg and Trout 1957, USFWS 1960, USFWS 1962). The IDFG and the USFWS have studied the area to determine the wildlife losses and proposed measures necessary to mitigate and/or compensate those losses.

In 1960 the USFWS published the first Coordination Act Report (CAR) for the Dworshak Project. At that time they recommended 24,000 acres for mitigation in three areas: (1) 4,000 acres between Elk Creek and Cranberry Creek; (2) 16,000 acres in Big Island - Swamp Creek area; and (3) 4,000 acres at Smith Ridge. However, later that year the Corps released Design Memorandum No. 2 (USACE 1961) increasing the size of the pool area by 52%. This, in essence, invalidated the mitigation recommendations in the CAR.

In 1962 the USFWS updated the CAR based on the increase in project size. The project would now flood approximately 15,000 acres of terrestrial habitat. This time they recommended 16,000 acres in Big Island-Swamp Creek area, 10,000 acres on Smith Ridge and clearing of 50-100 acre tracts along the project downstream from Little North Fork Clearwater River. The latter areas were intended to mitigate for white-tail deer and ruffed grouse losses.

In March of 1963, the IDFG proposed establishing a 50,800 acre management area at the junction of the Little North Fork and the North Fork of the Clearwater Rivers (Heezen 1963). This area encompassed the headwaters of the Dworshak pool and was referred to as the "Heezen Block." It included 34,700 acres of state land administered by the Idaho State Land Board (ISLB), 13,400 acres of private lands (452 of which was owned by Potlatch Forest, Inc. (PFI), and 2,700 acres of federal lands. The area was contiguous with Forest Service land and considered desirable for vegetation manipulation to improve its value for big game (Heezen 1963).

In March of 1964 the LJSFWS recommended that the Corps purchase 2,616 acres of private lands and sign management agreements for remaining 9,600 acres of private land and 34,700 acres of state land. The proposal for private lands, however, met with opposition from the Corps and PFI (Sport Fishing Institute 1981). An agreement between IDFG and ISLB was signed on August 12, 1965 concerning management of state lands for big game.

After studies by the USFWS and IDFG within the "Heezen Block" in 1966, the FWS recommended that the management area be reduced to 46,000 acres (USFWS 1966). No management agreements on private lands were requested. The FWS recommended that 7,045 acres of private lands be purchased in fee. About 4,850 acres of this private land was located in the "Heezen Block" and was commonly referred to as the "hard core" area. A little over 2,000 acres of private land was added in this proposal located at the extreme upper end of the reservoir on the Little North Fork Clearwater River. This area was commonly referred to as the Gobbler's Knob area. The Corps refused to consider this area as part of the mitigation acquisition package (USACE 1967). Later in 1967 the IDFG reluctantly signed a management agreement with PFI for the Gobbler Knob area.

In response to a request from the Corps in 1967 the USFWS again submitted a justification report for the mitigation proposed (USFWS 1968a). They submitted that the 46,000 acre Heezen Block was necessary to develop and manage winter range for elk and mule deer. They recommended that the "hard core" area be purchased in fee title while the rest of the private and state lands be managed under agreements with their respective owners. The greatest vegetation manipulation for browse production was to occur on the "hard core" lands. In this report the USFWS estimated that there would be a net increase of **915** elk if the proposed plan was adopted (this figure becomes important in late negotiations). During 1968 IDFG and the USFWS repeatedly insisted that the "hard core" lands should be purchased by the Corps rather than managed under agreement (USFWS 1968b).

In 1970 the Corps released its Public Use Plan for the Dworshak Project (USACE 1970). Besides developing the "hard core" area exclusively for wildlife, they proposed three other levels of wildlife management on project lands: (1) fish and wildlife project lands (3,017 acres) - development freedom except no interference with project operation; (2) general access lands (10,687 acres) - available for wildlife use with management designed for wildlife given consideration; (3) public recreation areas (6,806 acres) - incidental wildlife use when not a detriment to recreational goals. However, the USFWS estimated that only 2,000 acres of these lands could be managed for big game (USFWS 1970).

In 1971 the IDFG and the USFWS reopened negotiations on the additional acquisition of Smith Ridge lands. This proposal was based on the fact that the management agreements in the Heezen Block had not succeeded in providing additional benefits to big game (Meske 1971). Smith Ridge lands are administered by ISLB, and they and IDFG could not reach agreement on a management scheme given their divergent views on timber and browse.

In 1972 the USFWS once again was asked to prepare a report justifying the mitigation proposal. In their report the USFWS stated: "It is our judgement that full control of 4,500 acres on Smith Ridge are required, in addition to the 3,217 acres within project takeline, plus the 5,120 acres of hard core land under intensive management, to adequately compensate for big game losses caused by construction and operation of Dworshak Dam and Reservoir." (USFWS 1972).

After 1972 the IDFG and USFWS continued to stress the need for acquisition of the hard core area and Smith Ridge to complete mitigation. The hard core area was acquired through land transfer with the Bureau of Land Management in 1978. However, Smith Ridge land negotiations were deadlocked. In two letters dated March 14 and November 17, 1981 the Corps suggested to IDFG that 24,000 acres of project lands be used to mitigate for big game losses. This new proposal was in response to the stalled situation in acquiring the Smith Ridge area. The Corps proposed to use project lands for browse production.

The IDFG responded on February 11, 1983 that "...if sufficient browse can be developed, mitigation will be considered complete." The amount of browse necessary was defined as that ".. required to feed 915 elk for a 100-day winter period." If this goal can not be achieved on project land, IDFG suggested that other off-project lands be obtained, specifically Smith Ridge. The Corps responded on April 7, 1983, accepting the IDFG's revised goal and plans are being made to modify project documents.

b. Mitigation Agreements or Requirements

The Corps released General Design Memorandum No. 2 (USACE 1961) for the Dworshak Project on September 15, 1961. In this important planning document the Corps was committed to a mitigation goal by stating "...the

feeding capability of big game winter range inundated by the project would be replaced by equivalent feeding areas and improved feeding measures." Further they suggest that 12,000 acres of project lands be used for big game and they state that ".. these lands will be augmented by purchase of an additional 12,000 acres of the most suitable land available,.," (USACE 1961).

On August 12, 1965 the first formal agreement involving land management for wildlife mitigation was signed by IDFG and the ISLB. There was clearly a conflict in their management mandate and using the 34,700 acres of state land in the Heezen Block for management of big game. The Memorandum of Understanding (MOU) stated that the lands "...described would be managed with "special attention" given to fish and wildlife and especially to meet winter range requirements for big game animals compatible with management for timber production and other multiple uses." The MOU could also be cancelled at any time by either party (Sports Fishery Institute 1981). The conflict of management goals became apparent when the ISLB granted an open pit mining lease for kyanite on 5,000 acres of excellent winter range (Sports Fishery Institute 1981).

In view of the limited management freedom under the agreements the IDFG and the USFWS in 1967 agreed that future mitigation lands should be acquired in fee title. However, this position received strong political opposition especially concerning acquisition of PFI's lands in the Gobbler's Knob area (Sports Fishery Institute 1981). Because of this mounting pressure, an agreement was signed by IDFG and PFI on October 27, 1967 for management of the Gobbler's Knob lands.

Through the years the IDFG and USFWS insisted that the hard core area of the Heezen Block be purchased rather than managed through agreements. Finally the Bureau of Land Management (BLM) worked out a land transfer with PFI for their lands and on January 16, 1978 the BLM State Director recommended that the entire hard core area be withdrawn for wildlife mitigation purposes. On May 17, 1978 the Secretary of Interior approved the withdrawal of the 4,028 acres.

The mitigation goals stated in the Corps General Design Memorandum No. 2 (USACE 1961) were still far from being realized. The IDFG and USFWS continued to insist that acquisition of Smith Ridge lands was necessary to complete mitigation. Negotiations with the ISLB for acquisition of these lands were going nowhere. In frustration the Corps suggested that 24,000 acres of project lands be used to mitigate for wildlife losses. On February 11, 1983 the IDFG agreed that if sufficient browse could be produced on project lands then mitigation could be considered completed. The IDFG did, however, leave the door open for future negotiations for acquisition of Smith Ridge lands.

c. Mitigatin Implemented

The Corps did acquire 5,120 acres of land as the "hard core" portion of the Heezen Block, and this area is currently being managed for wildlife under the MOU signed by the Corps and IDFG on October 18, 1981. The value of this area to wildlife, however, may be being reduced as a result of human intrusions in and adjacent to the area. Numerous roads now bisect the hard core area that were not present at the time the area was recommended for mitigation (IDFG 1980). There are two logging dumps, one large rock quarry site, and unauthorized camp sites within the area. The Grandad Creek road which bisects the area is being upgraded to carry more traffic and there are plans to develop an intensive recreation site upstream of the Hughes Point Unit (pers. comm. Corps).

The management agreements between the IDFG and the ISLB and PFI are still acknowledged, though they have been ineffective for mitigating wildlife losses (pers. comm. IDFG).

PI . CURRENT STUDIES AND PLANNING

Neither the Corps nor the IDFG are conducting studies that will lead to further acquisition. Both agencies are involved with studies and investigations designed to evaluate the results of the present habitat manipulation program. Biologists are concerned about the repetitive burning of vegetation to hold it at an optimum forage level. Browse production on old reburned brush fields tends to be much less than on areas burned the first time after clearcutting mature timber. The IDFG, with funding by the Corps, has assigned a biologist to the Dworshak area to study the effect of mitigation actions. According to IDFG earlier expectations that mitigation goals were achievable on available lands have not been realized, and additional study and mitigation including acquisition are necessary (Appendix C).

VII. REFERENCES CITED

Asherin, D. S. and M. L. Orme. 1978. Inventory of riparian habitats and associated wildlife along the Dworshak Reservoir.

Congressional Record. 1956. Bruces Eddy - A conservation test in river basin planning. 84th Congress-2nd Session. July 26.

Idaho Department of Fish and Game. 1980. Summary of Dworshak Dam mitigation (compiled by Lloyd Oldenburg).

Keeler, R. 1973. An upland hunting camp on the North Fork of the Clearwater River, North Central Idaho. Occasional papers of Idaho State University Museum, No. 30.

Meske, T. 1975. Memorandum from game biologist to supervisor. Idaho Dept. of Fish and Game, Boise, ID. November 10. 1975.

Nor-berg, E. R. and D. Trout. 1957. Clearwater game and range study. Idaho Department of Fish and Game.

Osmundson, J. and 0. Hulse. 1961. Preliminary report on archaeological survey of Bruces Eddy Reservoir.

Pattcn, R. 1973. Smith ridge elk browse land justification. U.S. Army Corps of Engineers Staff Review Report.

Sport Fishing Institute. 1981. Evaluation of Planning for Fish and Wildlife - Dworshak Reservoir Project U.S. Army Corps of Engineers, Washington, D.C. 228 p.

U.S. Army Corps of Engineers. 1967. Letter from District Engineer, Walla Walla District, to Regional Director, Bureau of Sports Fisheries and Wildlife. May 10, 1967.

_____. 1970. Design Memorandum No. 10 -- public use plan for development and management of Dworshak Reservoir, N.F. Clearwater River, Idaho. Walla Walla District, Walla Walla, Washington.

_____, U. S. Army Corps of Engineers. 1972. Big game habitat development plan for Magnus Bay Dworshak Reservoir. Walla Walla District, Walla Walla, Washington.

_____. 1974. Dworshak Reservoir Regulation Manual (Preliminary).

_____. 1975. Final Environmental Impact Statement - Dworshak Reservoir.

_____. 1977. Dworshak Master Plan (Draft).

_____. 1978. Plan for development of Rocky Mountain elk habitat. Design Memo Number 15.

_____. 1961. Bruces Eddy Dam and Reservoir - Walla Walla District. General Design Memo Number 3.

U. S. Fish and Wildlife Service. 1960. Bruces Eddy Dam and Reservoir. A report on fish and wildlife resources.

_____. 1962. Bruces Eddy Dam and Reservoir, a detailed report on fish and wildlife resources.

_____. 1966. Letter from Regional Director to District Engineer, Walla Walla District, Walla Walla, Washington. June 28, 1966.

_____. 1968a. Statement in support of land acquisition recommended to mitigate project associated wildlife losses at Dworshak Dam and Reservoir. N.F. Clearwater River, Idaho. February 27, 1968.

_____. 1968b. Letter from Deputy Regional Director to District Engineer, Walla Walla District, Walla Walla, Washington. August 29, 1968.

_____. 1969. Dworshak Dam and the Clearwater elk herd, or the Fish and Wildlife Coordination Act at work in Idaho. Unpublished summary of events. Boise, Idaho. February 1969.

_____. 1970. Big game habitat management plan - Dworshak Reservoir. N.F. Clearwater River, Idaho. April 1970.

_____. 1972. Dworshak Reservoir Study.

_____. 1973. Procedure used in determining elk mitigation values, Dworshak Project, N.F. Clearwater River, Idaho. Detailed report for the General Accounting Office. August 1973.

_____. 1977. Letter from Regional Director to BLM State Director on transfer of mitigation lands in Heezen Block, December 23, 1977.

APPENDIX A

Study Team

L. A. Mehrhoff
Signe Sather-Blair

APPENDIX B

Consultation/Coordination

i. Project Contacts

Idaho Department of Fish and Game

Jerry Thiessen
Lloyd Oldenburg
Walt Brown
Ralph Pehrson
Sam McNeil
Ted Meske

Idaho State Land Board

Pat Kole
(Attorney General's Office)

Nez Perce Tribal Executive Council

Keith Lawrence

United States Army Corps of Engineers

John McKern
Mike Passmore

United States Fish and Wildlife Service

John Wolflin

2. Summary

Dates		Agency	Summary
October 1 - November 15, 1983		Idaho Dept. of Fish and Game - State Office	Obtained information on past and present mitigation efforts
	"	Idaho Dept. of Fish and Game - Region 2, Lewiston	Obtained information on pre- and post-construction big game populations.
	"	Idaho State Land Board	Discussed agreement between ISLB and IDFG.
"	"	Nez Perce Tribe	Discussed their concerns and interests on the project.
"	"	U. S. Army Corps of Engineers	Discussed past and present mitigation efforts.
"	"	U. S. Fish-and Wildlife Service	Discussed past and present mitigation efforts.
February 28, 1984		U. S. Army Corps of Engineers - Passmore	Discussed current mitigation situation.
February 29, 1984		Idaho Dept. of Fish and Game - Oldenburg	Discussed status of MOA with the ISLB and mitigation success on these lands.
Marsh 12, **1984**		Nez Perce Tribe - Keith Lawrence	Discussed past and current planning involvement.

Dates	Agency	Summary
March 20, 1984	Idaho Dept. of Fish and Game - McNeil	Discussed status of MOA between PFI and IDFG in Gobbler's Knob area.
April 6, 1984	U..S. Army Corps of Engineers - Passmore	Discussed Corps informal comments of draft.
April 9, 1984	Idaho Dept. of Fish and Game - Meske	Discussed current activities in and near hard core area.
April 9, 1984	Clearwater National Forest - Davis	Discussed historic and current bald eagle use of the project area.

APPENDIX C

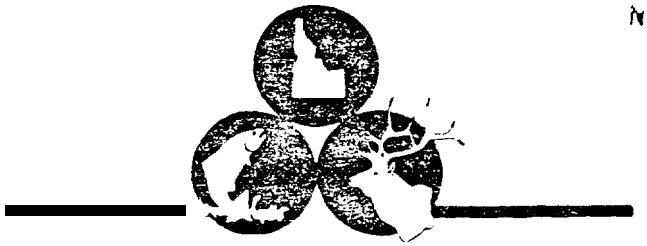
Comments

(1) State Agencies (IDFG, ISLB)

(2) Federal Agencies (USFW)

(3) Tribes (Nez Perce Tribe)

(4) Facility Operator (USACE)



IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut. Box 25
Boise • Idaho • 83707

June 12, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, Oregon 97208

ATTENTION: Mr. James R. Meyer

Dear Mr. Palensky:

Thank you for the opportunity to comment on tbe Wildlife Mitigation Status Review for Dworshak Dam.

The Idaho Departmentof Fish and Game has been actively involved in wildlife studies and mitigation for the Dworshak Dam for almost three decades. The description of the project, the situation faced by wildlife in the area, and mitigation efforts to date are concise and well written; however, the section on current studies and planning needs elaboration.

In February, 1983, when there appeared to be no hope of ever obtaining the long-sought-after Smith Ridge land, the Idaho Department of Fish and Bame agreed to tbe concept of developing lower reservoir land for mitigation. This lower reservoir land would be used to help meet the goal of providing sufficient browse to support 915 elk through a 100 day winter period. At that time, the Corps proposed reclassifying the mahority of lower reservoir land for wildlife mitigation. Subsequent public input led the Corps to limit the mitigation classification to six areas along the lower reservoir. Other lands are proposed for the classification "wildlife management - moderate" and some development may be allowed; however, due to various restrictions, e.g., esthetic, steepness, rocky soils, inaccessibility, etc., the browse potential of these lands is minimal. Estimates of current and potential browse production for the lower reservoir will be made in 1984/85. Based on the results from the hard core areas, we do not believe that it is possible to meet the mitigation goal on the lands now available.

Recent developments lead us to believe that it is possible to obtain the Smith Ridge land. This possibility should be pursued as the most productive step possible.

Corps funding for the Idaho Fish and Game biologists is currently limited to the evaluation of mitigation action, The mitigation is limited to efforts to produce browse for elk. Dworshak Dam influenced far more than elk, and studies should be initiated to address these problem. Following is a brief list of some potential projects:

1. Long term follow-up of the Bracken Fern eradication program.

2. Fencing of newly-developed habitat units to exvclude use until browse plants are large enough to withstand constant browsing pressure.

3. Study of migration and seasonal use by elk of the lower reservoir area and the Long Creek - Robinson Creek portion of the hard core area.

4. Study of migration routes and seasonal use of the lower reservoir area by deer.

5. Study of the feasibility of obtaining land for deer winter range in the vicinity of Dent and some off-site locations.

6. Study of tbe impacts of the water budget and temperature of water releases on wildlife.

7. Study of the potential to mitigate for furbearer habitat lost to inundation.

Sincerely,

for Jerry M. COnley
Director

JUL 1 0 1984

STATE OF IDAHO

DEPARTMENT OF LANDS
STATEHOUSE. BOISE. IDAHO83720
STANLEY F. HAMILTON
DIRECTOR

3 July 1984

Mr. Jonn Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, OR 97208

Attention: Mr. James Meyers

Dear Sir:

We have received and reviewed the Project Report on the "Wildlife Mitigation Status Review" for Dworshak Dam, prepared by the U.S. Fish and Wildlife Service. We recognize that the deadline for submitting comments has long passed; however, we do have comments for the record.

Our concern relates to tne last paragraph on page 6 of the report which references the Management Agreement between Idaho State Land Board and Idaho Department of Fish and Game. ---"Smith Ridge lands are administered by ISLB and they rejected IDFG's proposal to manage 4,000 acres for browse instead of timber production."

This statement is not entirely correct, as the ISLB did offer to harvest the timber on the south side of Smith Ridge by clearcutting in patches and burning to enhance browse production. These clearcuts would have produced both browse and timber. IDFG rejected this concept as they wanted perpetual brush fields.

More correctly stated, IDFG rejected a management proposal that would have provided browse and maintained desirable cover in a revolving cycle for the Smith Ridge big game herds.

Sincerely yours,

STANLEY F. HAMILTON
Director

SFH/mt

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

In Reply Refer To: Your Reference:

January 17, 1985

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested by Mr. Meyer we have reviewed the Wildlife Mitigation Status Report for the Dworshak Project in northern Idaho. The following comments are being provided for inclusion in the final report.

We believe the report is well written and adequately describes the status of past and present wildlife mitigation for the project. Based on the report's content it is evident that the construction and operation of the project has resulted in substantial adverse impacts to wildlife resources which have been neither adequately identified nor mitigated, Mitigation efforts by the Corps of Engineers (COE) to date have concentrated on Rocky Mountain elk habitat acquisition and management. There were substantial habitat losses to other wildlife such as white-tailed deer, furbearers, waterfowl, upland pane birds, and nongame birds which were not addressed during early mitigation negotiations with the COE.

We suggest as an initial step that a meeting be held between interested parties to (1) discuss the current status of wildlife mitigation at Dworshak and future planning efforts of the COE and Idaho Department of Fish and Game (IDFG) with regard to wildlife mitiaation, and (2) decide what course of action is appropriate for this project under the intent of Section 1000 of the Columbia River Basin Fish and Wildlife Program pursuant to Section 4(h) of the Northwest Electric Power Planning and Conservation Act of 1980.

This neeting should occur as soon as possible, If you have any questions concerning our proposed plan of action please feel free to contact me.

Sincerely yours,

James W. Teeter
Acting Assistant Regional Director
Habitat Resources

[redacted]

JUN 14

Nez Perce

NEZ PERCE INDIAN TRIBE OF IDAHO

TRIBAL EXECUTIVE COMMITTEE

[redacted]

(208) 843-2253

June 11, 1984

John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P.O. Box 3621
Portland, OR 97208

Dear Mr. Palensky:

I have reviewed the Dworshak Wildlife Mitigation Status Review, The report appears to be technically correct according to the information available to us here.

I wish to make comments on two sections of the report and one comment regarding the impacts of ice at Dworshak. In the Wildlife Species Habitat Assessments section of the report there are two subsections. In subsection a., entitled Pre-construction period, paragraph five consists of a species list of furbearers and upland game birds inhabiting the area prior to construction of Dworshak. This is consistant with the rest of the section that lists the occurrence of moose, bear, elk, deer, and other species. However, in the last half of paragraph five an attempt is made to quantify waterfowl use of the area. It is inconsistent to quantify waterfowl use of the area and not quantify the use, by big game, fur bearers, and upland game birds, Therefore the reference to "small numbers" in sentence six (6) of this paragraph should be deleted.

In subsection b., entitled Post-construction Period, the only reference to waterfowl is contained in paragraph five. That reference states that migratory bird use of the area. The source cited for this information is a 1978 inventory by Asherin and Orme. Upon reviewing this inventory data I noticed that 22 species of waterfowl were documented in the Dworshak pool area that were not documented in the pre-construction period. The increase in use seems to be dramatic. The species list approach, utilized in subsection a., should be carried forward in subsection b. The additional species now utilizing the area should be listed.

In the References Cited section the Asherin reference listed was published in 1978 instead of 1979 as listed.

In the Consultation/Coordination table, the Nez Perce Tribal Executive Council is listed. This listing should be changed to read "Nez Perce Tribe." The Nez Perce Tribal Executive Committee is an elected body, which is the official representative and spokesman for the Tribe. Thus, the organization listed should be the Nez Perce Tribe.

It is apparent, after reviewing the comments made by other agencies, regarding ice formation at Dworshak; that the managers concerned acknowledge the impact exists, but do not agree on the nature or the extent of this impact. The best way to resolve this dissagreement is by performing a study that would document the current situation.

If you have any questions concerning these comments please feel free to contact me at (208) 843-2253.

Sincerely,

Melvin S. Joye

Melvin S. Joye, Chairman
Fish and Wildlife Subcommittee

ATTEST:

Allen Pinkham

Allen Pinkham, Chairman
Nez Perce Tribe

DEPARTMENT OF THE ARMY
NORTH PACIFIC DIVISION CORPS OF ENGINEERS
P.O.B O X 2870
PORTLAND. OREGON 97208-2870

FEB 2 8 1985

REPLY TO
ATTENTION OF

February 25, 1985

Construction-Operations Division

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky,

We have reviewed the Wildlife Mitigation Status Review for Dworshak Dam and Reservoir. The following comments are provided for your consideration in the preparation of the final Mitigation Status Review and the consultation meeting scheduled for March 19, 1985.

Although the report addresses past studies and mitigation planning, the descriptions provided for past mitigation, current studies, and planning efforts are inadequate. Under Section V, Mitigation History, an entry should be added to indicate that interim mitigation measures were implemented by the Corps of Engineers between 1973 and 1977. These measures resulted in the creation of 811 acres of brushfields at eight lower reservoir sites including Magnus Bay, Little Bay, Elk Creek, Ladd's Creek, Harris Bay, Reed's Creek, Freeman Creek, and Dent Acres.

In the same section, another entry should be made to identify the 1981 management agreement between the U.S. Army Corps of Engineers District, Walla Walla, and Idaho Department of Fish and Game. The entry should be adequately developed to express the intent and understanding of the agreement reached between the two agencies. In addition, the agreement reached between the Corps and Idaho Department of Fish and Game in 1983, that project lands downstream of Grandad Bridge could be used to provide browse for elk mitigation needs to be emphasized in the report. An important part of the agreement is that mitigation goals would be based on pounds of browse produced rather than number of elk in acknowledgenent of the fact that other wildlife have been impacted to some unknown extent. Therefore, the position of the Corps remains, that until the current browse evaluation studies and habitat development planning for the lower project lands is completed, any conclusions regarding the adequacy of our mitigation effort are premature.

In evaluating the protection, mitigation and enhancement neds for the other species, adequate consideration should be given to our elk mitigation program. Both the planned and the accomplished management for elk mitigation will obviously affect the other wildlife species of concern to the tribes and the agencies. Essentially, reversing the plant succession on the area and

creating various types of habitat in uneven age classes with an associated edge will benefit most of the species of concern including both white-tailed and mule deer. We further recommend that the goals and objectives presented in any Federal, State or Tribal plan or program for the wildlife of concern be identified. The use of such existing plans would assist the Corps in the preparation of management plans for Dworshak.

The development, operations and maintenance of the elk mitigation program at Dworshak spans many years of sincere coordination, cooperation, and negotiation upon the part of all the agencies involved. The most recent plans of the Corps to use our lower project lands in support of the elk mitigation program needs to be acknowledged. Lidewise, the ongoing coordination and cooperation between the Corps, the Nez Perce, and the Idaho Department of Fish and Game is very important to the success of this plan and needs to be addressed in the Mitigation Status Review and any future studies conducted at Dworshak.

We recommend Bonneville Power Administration send all reports (draft and final) concerning Corps administered projects to the appropriate district and the North Pacific Division for review. In the Walla Walla District, Mr. John McKern is the coordinator for all field reviews and studies conducted by agencies and Tribes in that district. We trust that appropriate comments submitted by the district will be incorporated into the respective reports. Comments from the final review of completed draft reports, however, will be subnitted by the North Pacific Division.

Sincerely,

James R Fry
Colonel, Corps of Engineers
Acting Division Engineer

APPENDIX D

Mitigation Instruments

(1) MOU signed by the IDFG and the Corps on October 18, 1981.

(2) Management Agreement between the IDFG and the ISLB.

(3) Management Agreement between the IDFG and PFI.

Agreement No. DACW68-82-C-0008

COOPERATIVE AGREEMENT
FOR
FISH AND WILDLIFE MANAGEMENT AT DWORSHAK DAM AND RESERVOIR, IDAHO
BETWEEN THE
U. S. ARMY CORPS OF ENGINEERS
AND
STATE OF IDAHO DEPARTMENT OF FISH AND GAME

1. PARTIES

The parties to this Cooperative Agreement are the U. S. Army Corps of Engineers, represented by the District Engineer, Walla Walla District (hereinafter referred to as the CORPS), and the State of Idaho Department of Fish and Game, represented by its Director (hereinafter referred to as the STATE). Addresses of the parties are as follows:

District Engineer
Walla Walla District
Corps of Engineers
Building 602, City-County Airport
Walla Walla, WA 99362
(509) 525-5500, Ext. 100

Director
State of Idaho
Department of Fish and Game
600 S. Walnut Street
Boise, ID 83701
(208) 384 3700

2. RESPONSIBILITIES

As the construction agency that developed Dworshak Dam and Reservoir, the CORPS is responsible for fish and wildlife losses caused by the project . In accordance with the Fish and Wildlife Coordination Act, PL 85-624, the Corps, through coordination with the STATE and other fish and

wildlife agencies, prepared Design Memorandum No. 3 (D.M.), the General Design Memorandum, 15 September 1961, which outlined, among other things, the fish and wildlife mitigation requirements for the project. Additional design memoranda dealing with fish and wildlife features were D.M. No. 8, Real Estate Part 1 (31 December 1962) and Part 2 (10 December 1963); D.M. No. 9, Diversion Tunnel, Temporary Fish Facilities, Cofferdams (22 April 1964); D.M. lOA, Reservoir Preliminary Master Plan (14 October 1964; D.M. 10, Reservoir Public Use Plan (April 1970); D.M. 14, Permanent Fish Facilities at Dam (3 June 1966); D.M. 14.1, Steelhead Fish Hatchery (July 1966); D.M. 15, Plan for Development of Rocky Mountain Elk Habitat (4 November 1977); and numerous other supplements to fish hatchery and other design memoranda. Under these plans, the CORPS has taken responsibility for developing and providing for the management of fish and wildlife mitigation and management features of the project. By statute, the STATE has public responsibility for all wildlife including wild animals, wild birds, and fish within the State of Idaho, and such wildlife is the property of the STATE to be preserved, protected, perpetuated, managed, and regulated by the STATE, to provide continued supplies for hunting, fishing and trapping for the citizens of Idaho and as permitted by law to others. The CORPS recognizes the responsibility of the STATE to manage wildlife populations on lands managed under this Cooperative Agreement, and will consult with the STATE on all habitat development and management activities. Furthermore, the CORPS will request the STATE to participate in periodic evaluations to determine the effectiveness and progress Of habitat development and the response of wildlife populations.

3. PURPOSE

a. The purpose of this Cooperative Agreement is to set forth the arrangements under which the CORPS and STATE will carry out the planning, programming, development, operation, and maintenance of fish and wildlife mitigation and management measures to be performed in connection with the reservoir and land management associated with Dworshak Dam and Reservoir, Idaho.

b. It is contemplated that the STATE will participate with the CORPS in the preparation of annual plans for implementation of the Fish and Wildlife Management Plan for Dworshak Dam and Reservoir, and that recommendations of the STATE will be given due consideration by the CORPS in programming and implementing development, operation, and maintenance activities under the plan. Elements of the program will include evaluation of vegetative stands on project lands, the development of plans for clear cuts, selective cuts, tree thinning, brush removal by hand slashing, rolling and crushing, chaining, cabling, broadcast burning, or herbicide application, meadow and pasture development, tree and shrub planting, food-plot planting, improvement of water sources, construction of brush piles or quail roosts, installation of nest boxes and structure, fence construction, plant material acquisition, development of fish habitat structures and improvement of tributary stream channels, development of angler access, stocking of fish, and programming of hatchery production for reservoir stocking. Maintenance activities will include the annual inspection of habitat components, maintenance and refurbishment of components as required, maintenance of public access facilities, maintenance of informational signs and public access control structures, annual stocking of fish, and enforcement of hunting and fishing regulations. Maintenance work shall be apportioned between the STATE and CORPS in accordance with responsibilities defined in the annual plan. It is expected that development, operation, and maintenance measures will vary as plans are implemented, and prosecution of work by the CORPS, STATE, or other parties will be determined during the course of the agreement.

c. It is not contemplated that the provisions of this Cooperative Agreement will fully address all of the necessary actions of either the STATE or CORPS with respect to their individual responsibilities, and it is understood t-hat each agency will be free to accomplish such responsibilities without recourse or support from the other.

4. AUTHOR IZATION

a. Detailed planning for the project was authorized by Public Law 85-500, approved 3 July 1958.

b. Construction of the dam for flood control and other purposes was authorized in Section 201 of the Flood Control Act of 1962, Public Law 87-874, approved 23 October 1962.

C. Development and management of the reservoir and project lands was authorized by Section 1 of Public Law 534, the Flood Control Act of 1944, and Section 1 of Public Law 14, the Rivers and Harbor Act of 1945.

d. Fish and wildlife features were provided under the auspices of Public Law 85-624, the Fish and Wildlife Coordination Act, as amended 12 August 1958.

e. Further guidance for management of fish and wildlife features of the project was given by Public Law 89-72, the Federal Water Project Recreation Act, approved 9 July 1965.

f. The Cooperative Agreement is authorized by Section 6 of Public Law 95-224, the Federal Grant and Cooperative Agreement Act of 1977.

5. DURATION OF AGREEMENT

a. This Cooperative Agreement will take effect upon execution of this document by the District Engineer, U.S. Army Corps of Engineers, Walla Walla District, and will continue in effect until terminated. Either party may terminate this agreement upon giving at least 90 days' advance written notice of termination to the other party.

b. The CORPS may serve notice to the STATE to cease performance under this agreement or under any individual Task Order for which the CORPS is reimbursing the STATE hereunder. The CORPS will not be responsible for any costs incurred by the STATE except those authorized under a Task Order, and the CORPS will not be responsible for any costs incurred by the STATE after the effective termination date of the Task Order or order to cease performance under the Task Order.

6. TASK ORDERS

a. The CORPS, in cooperation with the STATE, will identify work and responsibilities to be carried out by each of the two parties. Work which will be carried out by the STATE under reimbursement from the CORPS will be identified in specific written Task Orders. Task Orders will define the work to be accomplished, set the time frame for accomplishment, and specify the terms and level of reimbursement. Tasks not accepted by the STATE will be accomplished by the CORPS, either by its own forces or by contract. In every case, the most cost effective means of obtaining the desired end product will be used.

b. Tasks currently contemplated to be accomplished by the STATE include but are not limited to the following:

(1) Evaluation of the response of vegetation manipulated for wildlife mitigation purposes in accordance with the Plan for Development of Rocky Mountain Elk Habitat, Dworshak Dam and Reservoir, by establishment of transects, photo points, and exclosures in the mitigation area and related project areas;

(2) Evaluation of animal response to vegetation manipulation for wildlife mitigation through monitoring of animal behavior through aerial surveys, pellet group transect, and use of colored collars or radio collars to monitor big game use and movement patterns;

(3) Evaluation of human use of wildlife resources in and around the mitigation area and related project areas, monitoring hunter use in the mitigation area, and evaluation of returns from hunter surveys pertaining to management units encompassing the mitigation and other project areas;

(4) Providing recommendations on methods and procedures of operating, maintaining, and improving the wildlife carrying capacity of the mitigation area including but not limited to changing management unit boundaries, changing reserve areas, removal of timber, rejuvenation of brush and browse species, recommending controlled burning, recommending herbicide treatments, recommending mechanical methods of timber, slash, or brush removal, recommending seeding of brush, browse, and ground-cover species, prescribing fertilization of treated areas, and other recommendations;

(5) Providing recommendations on methods and procedures of developing, operating, and maintaining wildlife habitats on nonmitigation wildlife management or other project lands following criteria prescribed in the Dworshak Master Plan and the Fish and Wildlife Management Plan for Dworshak Dam and Reservoir, and;

(6) Providing recommendations for methods and procedures of developing fishery habitats within Dworshak Reservoir and in tributary streams where they flow across project lands.

c. Work which will be accomplished by the STATE without reimbursement through a Task Order will include:

(1) Coordination and dissemination of information pertaining to fish and wildlife management at Dworshak Dam and Reservoir within the agency of the STATE or with other fish and wildlife agencies, the public, or news media;

(2) The gathering of or use of fish and wildlife management information not related to the direct management of fish and wildlife resources found in the waters of Dworshak project or on project lands;

(3) Stocking of game birds and fish on project lands or in project waters, and;

(4) Enforcement of hunting and fishing regulations on project lands and waters.

d. Task Orders may contain one or more separate subtasks and will Include at least the following:

(1) A full and complete description of the nature and extent of the work to be performed;

(2) Performance dates including the starting and ending dates and dates by which any performance reports are to be provided;

(3) Detailed cost estimates upon which payment per job can be based for fixed-price jobs, or unit costs upon which cost-reimbursable payment for units of work accomplished can be based;

(4) Funding limitations, accounting and appropriation data, and other fiscal information as required by the CORPS;

(5) Other provisions as deemed necessary by the CORPS or STATE.

e. Tasks may be added, deleted, or modified as agreed to by the CORPS and STATE as the needs of the program become apparent.

f. Upon execution, each Task Order will become part of this Cooperative Agreement as though fully set forth herein.

7. ALLOWABLE COSTS AND PAYMENT

a. Payment or reimbursement for the performance of Task Orders under this agreement shall be determined as follows:

(1) For any task to be performed on a fixed-price or fixed-fee basis, the amount negotiated by the CORPS and STATE in establishing the Task Order will be the amount paid upon completion of the task, or on a partial payment basis as arranged.

(2) For any task to be performed on a cost-reimbursable basis, the cost will be as allowable in accordance with Part 7 of Section XV of the Defense Acquisition Regulations in effect on the date of issuance of the Task Order, or as otherwise specified in the Task Order, and reimbursement will be made upon completion of the task, or on a partial payment basis as arranged.

8. EXAMINATION OF RECORDS

The STATE will maintain books, records, documents, and other evidence pertaining to costs and expenses incurred under this Cooperative Agreement to the extent and in such detail as will properly reflect all net costs, direct and indirect, for labor, materials, equipment, supplies, services, or any other costs or expenses of whatever nature involved therein for any Task Order assigned for performance by the STATE under this Cooperative Agreement. The STATE will make all accounting records available at its offices for inspection and audit by an authorized representative of the CORPS during the period in which this Cooperative Agreement is in effect.

9. GOVERNMENT-FURNISHED PROPERTY

For the performance of each Task Order assigned to the STATE, the CORPS reserves the right to provide such Government-furnished property, equipment, facilities, supplies, or materials, as are required for the performance of that Task Order. Government-furnished property will be indentified

in the description of the Task Order, and will be provided to the STATE by the CORPS for the period of time specified in the Task Order. Government-furnished property will be transferred to the STATE as specified by the CORPS, and made available at locations specified by the CDRPS. While in the possession of the STATE, the STATE will be accountable for Government-furnished property. Expendable items, materials and supplies, should be used up in the performance of work identified in the Task Order. Unused expendable items will be returned to the CORPS upon expiration of the Task Order. Nonexpendable items, equipment, tools, and facilities, provided for use in performing the Task Order will be retained by the STATE as specified in the Task Order and returned to the CORPS upon completion of use. The STATE will be liable for loss or damage to Government-furnished property when such loss results from willful misconduct or negligence on the part of the STATE's employees. Normal wear and tear will be allowed for by the CORPS based upon examination at the time of return of Government-furnished porperty. When not in use by the STATE, Government-furnished equipment will be returned to the CORPS for maintenance or other use. The CORPS will keep maintenance records for Government-furnished equipment, and the STATE will return or exchange such items to the CORPS upon request so scheduled maintenance can be performed. Daily and unscheduled maintenance will be performed by the STATE. Unscheduled maintenance requirements or damage to equipment will be reported to the CORPS as soon as possible when breakdown occurs.

10. SAFETY

When working on CORPS lands and when operating Government-furnished equipment on CORPS lands, the STATE will observe current safety and health standards. If there is any question or dispute as to which standards prevail, the "U.S. Army Corps of Engineers Safety and Health Requirements Manual," EM 385-1-1 dated April 1981 or revisions thereto, will be considered the final authority. Copies of this manual will be available at the Dowrshak Project Office.

11. OFFICIALS NOT TO BENEFIT

No member of or delegate to the Congress, or Resident Commissioner, shall be admitted to any share or part of this Cooperative Agreement, or to any benefit that may arise therefrom; but his provision shall not be construed to extend to this Cooperative Agreement if made with a corporation for its general benefit.

12. COVENANT AGAINST CONTINGENT FEES

The STATE warrants that no person or selling agency has been employed or retained to solicit or secure this Cooperative Agreement upon agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting a bona fide employee or bona fide established commercial or selling agency maintained by the STATE for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this Cooperative Agreement without liability or in its discretion to add to the Cooperative Agreement price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

13. RELATIONSHIP OF PARTIES

The parties to this Cooperative Agreement act in their independent capacities in the performance of their respective functions under it, and neither party is to be considered the officer, agent, or employee of the other.

14. TRANSFER OF JURISDICTION

The United States Government may, in its discretion, transfer administrative jurisdiction over its interest in the work herein included and any facilities constructed hereunder to another Federal agency. If such action is taken, the obligations of the Government recognized herein shall

continue to be recognized by the successor agency either by assumption of this agreement or by issuance of a new agreement assuming simi lar obligations.

15 AMENDMENTS.

This agreement may be amended or altered by written agreement of the parties, duly executed and attached hereto.

APPROVED:

State of Idaho Department of Fish and Game

BY: _____
JERRY M. CONLEY
Director

DATE: _____

U. S. Army Corps of Engineers

BY: _____
H. J. THAYER
Colonel, CE
District Engineer

DATE: _____

IDAHO

DEPARTMENT OF PUBLIC LANDS

STATE OF IDAHO

O. J. BUXTON
COMMISSIONER

ST. BOARD OF LAND COMMISSIONERS

ROBERT E. SMYLIE
GOVERNOR AND CHAIRMAN

ARNOLD WILLIAMS
SECRETARY OF STATE

ALLAN G. SHEPARD
ATTORNEY GENERAL

JOE R. WILLIAMS
STATE AUDITOR

DELMER F. ENGELKING
SUPT. OF PUBLIC INSTRUCTION

August 17, 1965

John R. Woodworth, Director
Idaho Fish and Game Department
Statehouse
Boise, Idaho

Dear Mr. Woodworth:

The State Board of Land Commissioners has approved and executed the "Memorandum of understanding between the Idaho Fish and Game Department and the State Board of Land Commissioners regarding management of Fish and Wildlife and Timber Resources in the Clearwater River Drainage." Two copies are enclosed herewith for your files.

Sincerely yours,

O. J. BUXTON
State Land Commissioner

VP
enc.

MEMORANDUM OF UNDERSTANDING BETWEEN THE IDAHO FISH AND GAME DEPARTMENT AND THE STATE BOARD OF LAND COMMISSIONERS REGARDING MANAGEMENT OF FISH AND WILDLIFE AND TIMBER RESOURCES IN THE CLEARWATER RIVER DRAINAGE

WHEREAS, The State Board of Land Commissioners, hereinafter referred to as the "Board," is responsible for protecting State-owned endowment lands of the State and is responsible for securing the maximum returns therefrom and more particularly certain timberlands now owned or hereafter acquired by the State; and

WHEREAS, the Fish and Game Department of the State of Idaho, hereinafter referred to as the "Department," is responsible for the protection, maintenance, enhancement and management of the fish and wildlife resources which are the property of the State and also essential to the economy, well-being and progress of the State, more particularly those fish and wildlife resources abounding in the Clearwater River drainage in Clearwater County, Idaho; and

WHEREAS, inundation of the reservoir area above the proposed Dworshak Dam on the North Fork of the Clearwater River in Clearwater County, Idaho, will result in losses of presently useful big game winter range; and

WHEREAS, losses of present big game winter range through flooding make it important that State-owned timberlands in Clearwater County, Idaho, be managed with clos -cooperation between the Board and the Department; and

WHEREAS, it is the desire of both the Board and the Department to cooperate to the end that the Board's management of State-owned timberlands in the Clearwater River drainage in Clearwater County, Idaho, progresses but at the same time with a minimum of damage or loss to the fish and wildlife resources of the said area; and

WHEREAS, both the Board and the Department desire to enter into a cooperative agreement regarding management of selected lands of special importance to big game in the watershed drainage of the North Fork of the Clearwater River, said lands being now owned or hereafter acquired by the State and managed by the Board.

NOW, THEREFORE, the Board and the Department hereby understand and agree to the following terms and conditions:

1. That lands hereinafter described will be managed with special attention given to benefits for fish and wildlife, and especially to meet winter range require-

ments for big game animals, compatible with their management for timber production and other multiple uses.

2. The lands to be covered by this Memorandum of Understanding are more particularly described on the attached EXHIBIT "A" which is made a part hereof as if set out in full herein.

3. The Department and the Board agree that management planning for the above-described lands shall be done by a Technical Committee appointed in the manner hereinafter set forth, and said Technical Committee shall follow the hereinafter set forth and agreed upon guide lines:

(a) A Technical Committee, consisting of a minimum of two persons appointed by the Department and a minimum of two persons appointed by the Board, shall be responsible for reviewing management plans for these lands. The assignment of a Technical Committee shall include classification of lands to designate areas having high potential for production of timber and/or wildlife. It is understood that timber cutting methods, selection and sequence of timber stands to be cut, rotation and site treatment methods will be planned to provide as much palatable browse and useful cover for big game animals and upland game birds as practicable and to afford maximum protection to stream and river habitat for fish. In those areas where conflicts may appear between wildlife and other uses, advance plans will be considered to prevent these conflicts or to minimize them. Establishment of home sites, recreational facilities, road construction and forest management practices constitute developments which may conflict with wildlife use in local sites. It is agreed that some management of human activity will be desirable on critical areas of winter big game range.

(b) The annual record of the Committee's review of management plans, together with recommendations regarding execution of the plans, shall be made not later than the first day of July of each year and copies supplied to the Department and the Board. Within 60 days after receipt of such plans and recommendations, the Director of the Idaho Fish and Game Department, the State Land Commissioner, and the State Forester shall jointly present the same to the State Land Board and secure its approval of said annual plans and recommendations. It is expressly provided that the sole function of the Committee is for planning and review and that any action or development programs resulting from recommendations or suggestions made by the

Committee shall be carried out through the usual business channels of the respective agencies rather than by the Technical Committee.

4. Recognizing that more basic information is needed for wildlife management and forest management, this Memorandum of Understanding encourages research into such matters as wildlife management in relation to conifer reproduction, timber harvesting practices in relation to production of wildlife, plant succession and wildlife use in logged and/or burned areas, the palatability of various browse species used by big game animals in forested areas, and other related matters.

5. Recognition is made of the need for development work of an experimental or exploratory nature to find ways to manage bracken fern areas, to produce browse in the post-timber harvest period, and to regulate public access in the interests of improved wildlife and timber management. The Department will prepare plans for experimentation to determine the most beneficial methods of cutting and treatment of cutover sites, burned over lands and other sites to provide and maintain habitat for upland game birds and big game animals, and these plans for experimentation will be incorporated into the management plans developed by the Committee.

6. Public access for fishing and hunting in accordance with the official regulations established by the Department shall generally be permitted on lands managed by the Board, except that certain roads may be closed at various times for the following reasons:

(a) For public safety around active logging or construction operations.

(b) By State law during fire season in areas of high hazard.

(c) To prevent excessive rutting and erosion of soft roads during wet weather.

(d) To discourage theft and vandalism of equipment and supplies.

(e) For the safety of livestock in certain areas under grazing lease.

7. Inasmuch as construction of temporary or permanent dwellings or structure roads, landings or log docks can be detrimental to critical big game winter range, any plans for such development will be made in close cooperation with the Technical Committee.

8. Public access, road maintenance, fire protection, and harvesting of game and fish can proceed satisfactorily if the public understands the significance

of the involved resources and the nature of the common problems. Hence, the Department and the Board agree to discuss mutual problems related to public information at least once each year so that helpful informational materials can be prepared for public use.

9. This Memorandum of Understanding shall continue in force until cancelled or terminated by either party, and it is agreed that either party shall have the privilege, with reasonable cause, to cancel and annul this Memorandum of Understanding at any time upon ninety (90) days prior written notice by registered mail or personal delivery of notice to the other party.

IN WITNESS WHEREOF, the State Board of Land Commissioners has caused these presents to be executed by its President, the Governor of the State of Idaho, and countersigned by the Secretary of State, the State Land Commissioner, and the State Forester, and the Idaho Fish and Game Department has caused these presents to be executed by the Director of the Fish and Game Department.

STATE BOARD OF LAND COMMISSIONERS

Governor of the State of Idaho and
President, State Board of Land Commissioners

Countersigned:

Secretary of State

State Land Commissioner

State Forester

IDAHO FISH AND GAME DEPARTMENT

Director

STATE OF IDAHO)
: ss.
County of Ada)

On this [illegible] day of [illegible], 1965, before me, a Notary Public in and for said State, personally appeared Robert E. Smylie, known to me to be the President of the State Board of Land Commissioners and Governor of the State of Idaho, and Arnold Williams, known to me to be the Secretary of the State of Idaho, that executed the within instrument and acknowledged to me that the State Board of Land Commissioners and the State of Idaho executed the same.

[illegible]
Notary Public for Idaho
Residing at Boise, Idaho

My Commission Expires: [illegible]

STATE OF IDAHO)
: ss.
County of Ada)

On this [illegible] day of [illegible], 1965, before me, the undersigned, a Notary Public in and for said State, personally appeared John R. Woodworth, known to me to be the Director of the Idaho Fish and Game Department that executed the said instrument, and acknowledged to me that such Idaho Fish and Game Department executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the day and year in this certificate first above written.

[illegible]
Notary Public for Idaho
Residing at Boise, Idaho

My Commission Expires: [illegible]

All lands owned by the State of Idaho and managed by the State Board of Land Commissioners within the following described townships located in Clearwater County, Idaho.

Township 40 North, Range 4 East, Boise Meridian

Township 40 North, Range 5 East, Boise Meridian

Township 41 North, Range 4 East, Boise Merician

Township 41 North, Range 5 East, Boise Meridian

EXHIBIT "A"

IDAHO FISH AND GAME DEPARTMENT

November 1 , 1967

COPY

Regional Director
Fish and Wildlife Sevice
Bureau of Sport Fisheries and Wildlife
P.O. Box 3737
Portland, Oregon 97208

Reference: RBS
DWORSHAK D.& R.

Dear Sir:

Reference is made to your letter of September 8, 1967, in which you commented on the proposed agreement with Potlatch Forests, Inc. and recommended that the agreement be signed.

At its meeting on October 27, 1967, the Idaho Fish and Game Commission approved the Agreement and a Supplemental Agreement which changed paragraph 11. Copies of the signed documents are enclosed for your information.

We concur with your recommendfation that private lands in Township 40 North, Range 4 and 5 East. within the Heezen Block must be acquired in fee title to provide the hard-core area necessary for intensive habitat management as the primary means of mitigation for the loss of big game winter range, and request that you proceed with this plan in further negotiation with the Corps of Engineers.

Sincerely,

IDAHO FISH AND GAME DEPARTMENT

John R Woodworth
Director

cc: Liven Peterson

Enclosures

AGREEMENT

THIS AGREEMENT, entered into this 19th day of July, 1967, by and between Potlatch Forests, Inc., a Delaware corporation with its principal place of business at Lewiston, Nez Perce County, Idaho, hereinafter referred to as "Potlatch," and the State of Idaho, hereinafter referred to as the "State," acting by and through the Fish and Game Department of the State of Idaho,

WITNESSETH:

WHEREAS, inundation of the reservoir area above the proposed Dworshak Dam on the North Fork of the Clearwater River in Clearwater County, Idaho, will result in losses of presently useful big game winter range; and

WHEREAS, the United States of America, acting by and through its Army Corps of Engineers, will pay certain sums of money to Potlatch in consideration of land management practices to be carried out on lands owned by Potlatch in Clearwater County, including lands which will not be purchased in fee simple but which are important to big game; and

WHEREAS, mitigation of losses of present big game winter range will require that certain lands of Potlatch be managed under agreement between Potlatch and the State; and

WHEREAS, both Potlatch and the State desire to enter into a cooperative agreement regarding management of selected lands of special importance to big game in the watershed drainage of the North Fork of the Clearwater River, said lands being owned by Potlatch.

NOW, THEREFORE, that for and in consideration of the sum of No ($0.00) paid by the United States Army Corps of Engineers to Potlatch and for other good and valuable consideration, Potlatch and the State agree as follows:

1. That lands hereinafter described will be managed to provide maximum benefits for fish and wildlife, and more specifically to meet winter range

requirements for big game animals, compatible with their management for timber production.

2. The lands to be covered by this Agreement are the lands owned by Potlatch within Sections 7, 8, 9, 10, 15, 16, 17 and 18 of Township 41 North, Range 5 East, Boise Meridian, Clearwater County, Idaho.

3. The State and Potlatch agree that the management of the above-described lands shall be handled by a Technical Committee appointed in the manner hereinafter set forth, which said Technical Committee, in managing said lands, shall follow the hereinafter set forth and agreed upon guidelines:

(a) A Technical Committee, consisting of a minimum of two persons appointed by the State and a minimum of two persons appointed by Potlatch shall be responsible for reviewing management plans for these lands. The assignment of the Technical Committee shall include classification of lands to designate some lands as having high priority for management of fish and wildlife and habitat and some lands as having high priority for management of timber. It is understood that timber cutting methods, selection and sequence of timber stands to be cut, rotation and site treatment methods will be planned to provide as much palatable browse and useful cover for big game animals and upland game birds as practicable and to afford maximum protection to stream and river habitat for fish. In those areas where conflict may appear between wildlife and other uses, advance plans will be considered to prevent these conflicts or to minimize them. Establishment of home sites, recreational facilities, road construction and forest management practices constitute developments which may conflict with wildlife use in local sites. It is agreed that some management of human activity will be desirable on critical areas of winter big game range.

(b) A record of the Committee's review of management plans, together with recommendations [illegible] plans, shall be made and copies supplied to the State and Potlatch. Such plans and recommendations shall become effective only following their approval by the State and Potlatch.

It is expressly provided that the sole function of the Committee is for planning and review and that any action or development programs resulting from recommendations or suggestions made by the Committee shall be carried out through the usual business channels of the respective agencies rather than by the Technical Committee.

(c) Provided that, in the event plans reviewed by the Technical Committee have not been approved by the State's Director and Potlatch within sixty (60) days after the State's Director and Potlatch have received the record of the Committee's review and/or suggestions, then the plans outlined in the Committee's review shall be submitted to an Arbitration Committee for final decision concerning the action or development programs to be carried out by the State and Potlatch. The arbitrators shall be selected and shall determine and settle matters submitted to it for arbitration, in the manner hereinafter set forth, to-wit: Either party may, by written notice to the other, appoint an arbitrator. Thereupon with thirty (30) days after the giving of such notice, the other shall by written notice to former appoint another arbitrator, and in default of such second appointment, the arbitrator first appointed shall be the sole arbitrator. When any two arbitrators have been appointed as aforesaid, they shall, if possible, agree upon a third arbitrator and shall appoint him by notice in writing, signed by both of them, in triplicate, one of which triplicate notices shall be given to each party hereto; but if thirty (30) days shall elapse after the appointment of the second arbitrator without notice of appointment of the third arbitrator being given as aforesaid, then either party hereto (or both) may in writing request that a District Judge of the State of Idaho of the Second Judicial District appoint the third arbitrator and upon appointment of the third arbitrator (whichever [illegible] as aforesaid) the three arbitrators shall meet and shall give opportunity to each party hereto to present its case and witnesses, if any, in the presence of the other, and shall then make their decision; and the decision of the majority of the arbitrators shall be binding upon the parties hereto. Such decision shall include the fixing of the expense of the arbitration and [illegible] against either or

both parties.

4. Recognizing that more basic information is needed for wildlife management and forest management, this Agreement encourages research into such matters as wildlife management in relation to conifer reproduction, timber harvesting practices in relation to production of wildlife, plant succession and wildlife use in logged and/or burned areas, the palatability of various browse species used by big game animals in forested areas, and other related matters.

5. Recognition is made of the need for development work of an experimental or exploratory nature to find ways to manage bracken fern areas, to produce browse in the post-timber harvest period, and to regulate public access in the interests of improved wildlife and timber management. The State will prepare plans for experimentation to determine the most beneficial methods of cutting and treatment of cutover sites, burned over lands and other sites to provide and maintain habitat for upland game birds and big game animals, and these plans for experimentation will be incorporated into the management plans developed by Potlatch.

6. Employees of the State shall have free access to the lands owned or controlled by Potlatch for any purposes pertaining to fish and game management, research, or law enforcement, including such specialized jobs as trapping and marking of game animals. Provided that prior written approval from Potlatch shall be obtained by employees of the State before any structures, fences, exclosures, or other devices used for research or development purposes are actually built, constructed, or installed, and further provided that no cutting of timber by the State shall be done without written approval of the land owner.

7. Public access for [illegible] in accordance with the official regulations established by the State shall generally be permitted on lands owned or controlled by Potlatch, except that certain roads may be closed at various times for the following reasons:

(a) For public safety around active [illegible] or construction

operations.

(b) By State law during fire season in areas of high hazard.

(c) To prevent excessive rutting and erosion of soft roads during wet weather.

(d) To discourage theft and vandalism of equipment and supplies.

(e) For the safety of livestock in certain areas under grazing lease.

8. Camping and construction of temporary or permanent dwellings or structures shall be prohibited on critical winter game ranges. Construction of roads, landings, or log decks which would reduce winter range shall be prohibited excepting where absolutely essential to approved harvesting of timber, and every effort will be made to locate such structures only on less vital game range.

9. If lands owned by Potlatch are made available for sale or exchange, the State shall have an opportunity to purchase or obtain by exchange any parts of such lands as are deemed vital to wildlife management or public access to streams before the said lands are offered to other potential buyers. Provided that this Agreement shall not bind the State to purchase any or all of such lands, and further provided, that if Potlatch sells any such lands to the State that Potlatch shall be given opportunity to purchase the first crop of timber which may become available from such lands.

10. Public access, road maintenance, fire protection, and harvesting of game and fish can proceed satisfactorily if the public understands the significance of the involved resources and the nature of the common problems. Hence, the State and Potlatch agree to discuss mutual problems related to public information at least once each year so that helpful informational materials can be prepared for public use.

11. This Agreement shall continue in force and effect for a period of ten (10) years from and after the date first set forth hereinabove.

IN WITNESS WHEREOF, the parties have executed this Agreement the

day and year first set forth hereinabove.

POTLATCH FORESTS, INC.

ATTEST:

By _____
Vice President

_____
Assistant Secretary

IDAHO FISH AND GAME DEPARTMENT

By _____
Director

IDAHO FISH AND GAME COMMISSION

Approved by: _____
Chairman

Approved as to content and form.

_____
J. J. Jones, III

STATE OF IDAHO)
: ss.
County of Nez Perce)

10-25-67
Date

On this 19th day of July, 1967, before me, the undersigned, a Notary Public in and for said State, personally appeared G. H. Rauch and G. W. Tompkins, known to me to be the Vice President and Assistant Secretary, of the corporation that executed the instrument and the person who executed the instrument on behalf of said corporation, and acknowledged to me that such corporation acknowledged the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the day and year in this certificate first above written.

_____
Notary Public for Idaho
Residing at Lewiston, Idaho

STATE OF IDAHO)
: ss.
County of Ada)

On this 30th day of October, 1967, before me, the undersigned, a Notary Public in and for said State, personally appeared John R. Woodworth, known to me to be the Director and Secretary of the Idaho Fish and Game Department and the Idaho Fish and Game Commission, and acknowledged to me that [illegible] said instrument, [illegible] partment and Idaho Fish and Game Commission [illegible]

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the day and year [illegible] above written.

_____
Idaho
Idaho

SUPPLEMENTAL AGREEMENT

THIS SUPPLEMENTAL AGREEMENT, entered into this 17th day of October, 1967, between Potlatch Forests, Inc., a Delaware corporation with its principal place of business at Lewiston, Nez Perce County, Idaho, hereinafter referred to as First Party, and the State of Idaho, acting by and through the Fish and Game Department of the State of Idaho, hereinafter referred to as Second Party,

W I T N E S S E T H:

That by consent of the parties hereto, that certain Agreement entered into the 19th day of July, 1967, between the First Party herein as "Potlatch" therein, and the Second Party herein as the "State" therein, shall be, and is hereby modified, altered and changed in the following respects only:

By eliminating and striking out from said Agreement of the 19th day of July, 1967, all of Paragraph 11 thereof on page 5 thereof, and inserting in its lieu and stead the following paragraph denoted as paragraph 11, page 5 of the Agreement of July 19, 1967:

> 11. This Agreement shall continue in force and effect for a period of ninety nine (99) years from and after the date first set forth hereinabove.

IN WITNESS WHEREOF, the parties have executed this Supplemental Agreement the day and year first set forth hereinabove.

POTLATCH FORESTS, INC.

By _____
Its

ATTEST:

_____
Assistant Secretary

DEPARTMENT

By _____

IDAHO FISH AND GAME COMM

Approved by _____ 6-44

Title

nt and form

_____
Jones, III

STATE OF IDAHO)
: ss.
County of Nez Perce)

On this 17th day of October, 1967, before me, the undersigned, a Notary Public in and for said State, personally appeared G. H. Rauch and G. W. Tompkins, known to me to be the Vice President and Assistant Secretary, of the corporation that executed the instrument and the person who executed the instrument on behalf of said corporation, and acknowledged to me that such corporation acknowledged the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the day and year in this certificate first above written.

Notary Public for Idaho
Residing at Lewiston, Idaho

STATE OF IDAHO)
: ss.
County of Ada)

On this 20th day of October, 1967, before me, the undersigned, a Notary Public in and for said State, personally appeared John R. Woodworth, known to me to be the Director and Secretary of the Idaho Fish and Game Department and the Idaho Fish and Game Commission that executed the said instrument and acknowledged to me that such Idaho Fish and Game Department and Idaho Fish and Game Commission executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the day and year in this certificate first above written.

Notary Public for Idaho
Residing at Boise, Idaho

Wildlife Mitigation Status Report

MINIDOKA DAM AND RESERVOIR PROJECT

Final Report

Prepared by:

R. C. Martin
L. A. Mehrhoff

Idaho Department of Fish and Game
Jerry M. Conley, Director

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number 83-478D
in compliance with
Northwest Power Planning Council's
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
December 1984

TABLE OF CONTENTS

I. PROJECT NAME

Minidoka Dam and Reservoir

II. PROJECT OPERATOR

U.S. Bureau of Reclamation (USBR)

III. PROJECT DESCRIPTION

A. Location and Size

Minidoka Dam is on the Snake River, 10 miles northeast of Rupert, Idaho. The dam backs water up the Snake River to Eagle Rock, about 7 river miles below American Falls Dam. At the normal full pool level (elevation 4,245 feet), the reservoir is about 34 miles long, up to 1.7 miles wide, and 11,850 acres in size. The large portion of the reservoir is known as Lake Walcott.

The dam is 86 feet high, with a crest length of 4,475 feet. Of the structure's total crest length, a zoned earth and rock-filled section occupies 670 feet, the power plant occupies 150 feet, an earthen dike occupies 800 feet, and the overflow spillway occupies 2,385 feet; the remainder includes the canal headworks, administration building, and the switchyard (USBR 1981b).

The power conduit6 have a capacity of 4,850 cubic feet per second (cfs). The power plant has a maximum capacity of 15.8 megawatts. The spillway is a combination of four 10-foot by 12-foot radial gate6 and an uncontrolled overflow weir consisting of 5-foot-high flashboards (USBR 198lb). The spillway flows average 4,000 to 5,000 cfs during summer (USBR 1982). However, spills in excess of 20,000 cfs have occurred (USBR 1981b). The total capacity of the spillway, the outlet works, and the diversion works is rated at 113,125 cfs (USBR 1981c).

B. Authorized Purposes

The original authorized purpose6 were for irrigation and power production. The Secretary of the Interior authorized Minidoka Dam after he concluded that the Director of the Geological Survey had proven the project to be feasible. The Director's report stated that "it is possible to irrigate by gravity about 68,000 acres of good land; in addition, it is possible to generate over 10,000 horsepower, which can be used to pump and supply water to about 53,000 acres of land lying above the gravity canals" (USBR 1949).

C. Brief History

Minidoka Dam was authorized in 1904, by the Secretary of the Interior, under the Reclamation Act of 1902. Dam construction began in 1904, and was completed in 1906. In 1908, construction began on the first federal hydroelectric power plant in the northwest. In 1909, it was supplying power for pumping water to lands south of the Snake River.

By Executive Order in 1909, President Theodore Roosevelt created the management area known now as the Minidoka National Wildlife Refuge (NWR). He named it the Minidoka Reservation, and established it for the purpose of protecting native birds. Under the Migratory Bird Conservation Act of 1934, more land was added to the refuge in 1936, 1940, and 1953. Now, the NWR contains 20,721 acres. Lake Walcott comprises about half of this acreage.

In 1975, congress authorized the Secretary of the Interior to determine the feasibililty of rehabilitation and enlargement of the power plant (USBR 1981a). The final draft of the environmental statement and feasibility report was completed in 1982.

D. Other Pertinent Data

1. Water Level Fluctuation and Timing

Lake Walcott has a storage capacity of 210,000 acre-feet. The dam impounds 95,200 acre-feet of active storage for power production and the irrigation of about 120,000 acres of farmland (U. S. Fish and Wildlife Service (USFWS) 1980). Irrigation releases are made between April and November. Reservoir elevation during this period is 4,245 feet. It is lowered to 4,240 feet by the first part of December to prevent ice damage to the spillway flashboards (USBR 1981a).

2. Land Ownership

The dam and most of the reservoir are within the boundary of the Minidoka NWR. When full, Lake Walcott has about 92 miles of shoreline; all is in public ownership. The USBR administers the shoreline to 200 horizontal feet above the maximum high-water line. Within this zone on the refuge, the USFWS has secondary management authority.

On the surrounding lands adjacent to the USBR shoreline administration zone, the USFWS administers about 66 miles (72%), the State of Idaho administers 3 miles (3%), and 12 miles (13%) are privately owned. The U. S. Bureau of Land Management (USBLM) administers 11 miles (12%), and administers extensive areas north and south of Minidoka NWR.

3. Indian Rights

Minidoka Dam is within the ancestral hunting area of the Shoshone-Bannock Tribes. To date, they have not claimed any rights or voiced any interest in wildlife associated with the project.

IV. WILDLIFE SPECIES AND HABITAT ASSESSMENTS

A. Pre-construction

Minidoka Dam backed water up the Snake River for at least 34 miles, and inundated 11,850 acres of free-flowing river, riparian vegetation, and upland vegetation.

Riparian vegetation was predominantly willows. No large native trees were reported to be present prior to dam construction (Kenagy 1914; Davis 1923, 1935).

Upland vegetation of the Snake River plain was characterized by a shrub-steppe community dominated by big sagebrush. The understory consisted of a variety of forbs and grasses (Kenagy 1914; Davis 1923, 1935). Photographs taken in 1904 show extensive tract6 of sagebrush-grass rangelands in the area now inundated. Historically, these rangelands provided winter range for mule deer and pronghorns, provided year-round range for sage grouse, and supported black-tailed jackrabbits and rodents which supported raptors (C. Kvale, IDFG, 'pers. commun.).

There were no studies that quantified pre-construction wildlife populations. However, the first refuge reports (USFWS 1940, 1941) give an indication of wildlife that may have been present. The refuge was reported to be "natural wintering grounds" for sage grouse. They concentrated on the refuge "by the thousands" during summer, then dispersed over sagebrush winter range surrounding the refuge.

Furbearers included muskrats, mink, beavers, badgers, weasels, and skunks. Black-tailed jackrabbit6 were abundant. Numerous rodents "furnished considerable food for short-eared owls and marsh hawks." Coyotes were abundant; two trappers took 219 pelts in 30 days on the area north of the refuge (USFWS 1940, 1941).

B. Post-construction

Current wildlife information is available from USFWS counts on the refuge, USBLM winter bald eagle surveys, IDFG winter counts on the Snake River, and IDFG observations of big game. The creation of Lake Walcott has probably enhanced waterfowl and other water birds, but has adversely affected upland birds and big game.

Sage grouse, once abundant on the refuge, are now seen only occasionally. The peak count in 1982 was 12 (USFWS 1984). The decline resulted from the extensive conversion of sagebrush habitat to irrigated agriculture since the project was built.

Mule deer and pronghorns currently utilize winter range on the north and south sides of the reservoir. In addition to the loss of winter range, the reservoir causes migration delays and blockages. Some mule deer and pronghorns still migrate south to vinter range in the Raft River area; but the strength of this migration has certainly been reduced, and delays and hazards for the animals are apparent. Several pronghorns were found dead this spring along the shores of Lake Walcott. They apparently fell through the ice during their spring-of-1984 movement to the north (C. Kvale, IDFG, pers. commun.).

The USBLM identifies lands adjacent to Lake Walcott and the Snake River as bald eagle winter range. Since 1979, the highest winter count of the reach between American Falls and Bliss was 37 bald eagles (USBLM 1984).

The IDFG conducts a winter survey on the Snake River every January. In the Minidoka Dam vicinity, counts are summarized for 3 reaches: from Massacre Rocks to Minidoka NWR, within the refuge, and from the dam to the Interstate-84 bridge. Aerial counts between 1979 and 1983 had a high variance, but indicated the reach within the refuge was the most important to wintering ducks (average of 234/mi.), and the reach below the dam was the most important to wintering Canada geese (average of 79/mi.) (IDFG 1979, 1980, 1981, 1982, 1983).

Colonial nesting water birds are common on Lake Walcott. In 1979, Gull Island supported 132 nesting pairs of snowy egrets, 329 nesting pairs of double-crested cormorants, 37 nesting pairs of great blue herons, 147 nesting pairs of black-crowned night-herons, 1 or 2 nesting pairs of cattle egrets, and about 3,000 nesting pairs of California gulls (Findholt 1984). In 1977, 5 pairs of American white pelicans also nested there (Findholt and Trost 1981).

In their Coordination Act Report on the proposed Minidoka power plant rehabilitation and enlargement, the USFWS (1980) evaluated wildlife use of the spillway area:

"The reservoir, the dam's spillway area, and the river below the dam create an ecological unit which meets the habitat needs for a large variety of wildlife species, both resident and migratory. This unique and rich environment includes some of the best waterbird habitat in Idaho, and a wintering area for a few endangered bald eagles and peregrine falcons.

"The NWR and adjacent area is the most important site in Idaho for colonial nesting fish-eating birds. Eleven species, totalling over 7,000 individuals, are known to nest there. Five of those species; i.e., white-faced ibis, double-crested cormorant, white pelican, black-crowned night-heron, and snowy egret, are on the USFWS' list of species of concern. The colonial nesters rely on the reservoir, the spillway area, and the river below the dam for their needs.

"At the NWR, waterfowl produce about 1,400 young each year, and in the fall, up to 250,000 ducks and geese are present (recently, peak counts have been 60,000). In the spillway area, fish-eating birds are numerous. At least 14 of those species, including double-crested cormorant, white pelican, great blue heron, and snowy egret, feed and rest there. About three pairs of Canada geese annually nest in the spillway area. Approximately 20 pairs of Canada geese nest on the islands and shore between the dam and Jackson Bridge. They produce about 90 young annually. Ducks use the river primarily for resting, although a minor amount of nesting occurs.

"The most abundant mammal in the spillway segment is the cottontail rabbit. Mink are present in lesser numbers. There is a low abundance of other burro-d-dwelling animals. A few deer live in the spillway area, and coyotes occasionally hunt there in winter.

"The Triangle (a 30-acre upland administered by USBR, and located next to the river's north bank about 3/4 miles downstream from the dam), where the USBR is proposing overnight camping, harbors several species of insectivorous songbirds. Great horned owls occasionally roost and perch in the large cottonwood trees. In the summer, ospreys occasionally rest in the trees. Wintering bald eagles also use these trees for resting, and as hunting perches. The Triangle is especially important as winter habitat for pheasants" (USFWS 1980).

V. WILDLIFE MITIGATION HISTORY

Planning and construction of Minidoka Dam occurred prior to the time formal, comprehensive impact assessments and mitigation were required by law. The power plant was operating at the existing dam 25 years before passage of the 1934 Fish and Wildlife Coordination Act.

A. Mitigation Requested or Proposed

In their Coordination Act Report on the proposed Minidoka power plant rehabilitation and enlargement, the USFWS (1980) recommended the following:

1. Bury the powerlines that pass from the powerhouse southward across the face of the dam.

2. Develop wildlife habitat management plans for the 33-acre area on the west side of the spillway channel, and the 48-acre gravel pit 3 miles downstream from the dam. On the 33-acre area, plant 28 acres of native grass and legumes, as well as 5 acres of native shrubs. On the 48-acre area, plant 10 acres of native shrubs around the inside edge of the site. Plan on watering shrubs at both sites the first 2 to 3 years.

3. Plant replacement cottonwood trees and 28 acres of native shrubs in the Triangle area.

4. Build and place 4 wooden owl nesting boxes in tree groves in the Triangle and in the 33-acre area.

5. Build 5 wooden platforms for ospreys, and place them in cottonwood trees on federal lands in the area.

6, Build 10 rock cairns for ferruginous hawks. Locate them in remote upland areas of the Minidoka NWR.

7. Extend the boundary of the NWR, so that it includes the entire spillway.

8. The USBR should fund a post-construction interagency study to ensure that compensation for project-caused losses is accomplished. The study should also examine the adequacy of project enhancement features.

B. Mitigation Agreements or Requirements

Pursuant to authorization of the proposed power plant rehabilitation and enlargement, the USBR's environmental commitments included the following:

1. Establish wildlife management areas,

2. Plant shrubs and cottonwood trees in Triangle area,

3. Construct nesting structures for ferruginous hawks, ospreys, and owls,

4. Extend Minidoka NWR boundaries, and

5. Fund post-construction fish and wildlife study (USBR 1982).

c. Mitigation Implemented

None

VI. CURRENT STUDIES AND PLANNING

The USBR has completed the final environmental statement and feasibility report for the Minidoka power plant rehabilitation and enlargement project. They propose to construct a new 30 megawatt power plant at Minidoka Dam, preserve the existing power plant, develop recreation facilities, and conserve and enhance fish and wildlife populations along with enhancing consumptive and nonconsumptive uses of these resources (USBR 19829. Tbe proposals are currently in a bill before Congress.

The USFWS is continuing management of Minidoka NWR. The primary management goal is for maintenance of migratory waterfowl. Secondary goals include production of colonial water birds, waterfowl, shorebirds, upland birds, and furbearers, and maintenance of plant and wildlife diversity (J. Hill, USFWS, pers. commun.9.

This summer, the Shoshone District of the USBLM is planning to plant cottonwoods near the Snake River immediately upstream from the refuge. Bald eagles are the target of this effort (T. Rich, USBLM, pers. commun.). Also, the Shoshone District is preparing the final draft of their Monument Resource Management Plan. The document will propose plans for managing public lands north of Lake Walcott.

VII. REFERENCES CITED

Davis, W. B. 1923. On the avifauna of Minidoka County and adjacent territory. Murrelet 4:3-4.

_____. 1935. An analysis of the bird population in the vicinity of Rupert, Idaho. Condor 37:233-238.

Findholt, S.L. 1984. Organochlorine residues, eggshell thickness, and reproductive success of snowy egrets nesting in Idaho. Condor 86:163-169.

_____. and C.H. Trost. 1981. White pelicans nesting in Idaho, Murrelet 62:19-20.

Idaho Department of Fish and Game. 1974-1983. Winter waterfowl and eagle surveys. Unpubl. data.

Kenagy, F. 1914. A change in fauna, Condor 16:120-123.

U.S. Bureau of Land Management. 1984. Monument resource management plan: draft environmental impact statement. Shoshone District, Shoshone, Idaho.

U.S. Bureau of Reclamation. 1949. Bureau of Reclamation project feasibilities and authorizations.

_____ 1981a. Minidoka power plant rehabilitation and enlargement: draft feasibility report.

_____. 1981b. Minidoka power plant rehabilitation and enlargement: draft environmental statement.

_____. 1981c. Project data.

_____ . 1982. Minidoka power plant rehabilitation and enlargement: final environmental statement and feasibility report.

U.S. Fish and Wildlife Service. 1940-1941. Quarterly narrative reports, Minidoka NWR.

_____. 1980. Coordination Act report: Minidoka power plant rehabilitation and enlargement. Principal investigator: James Nee.

_____. 1984. Land use inventory report, Minidoka NWR.

A P P E N D I C E S

APPENDIX A

STUDY TEAM

Idaho Department of Fish and Game

Bob Martin
Arch Mehrhoff

APPENDIX B

CONSULTATION/COORDINATION

1. Project Contacts

U.S. Bureau of Reclamation

Leo Busch
Don Tracy
Harold Short
Bob Adair
Rich Rigby
Dick Woodworth
Mike McAfee

Idaho Department of Fish and Game

Craig Kvale
Dale Turnipseed
Ralph Pehrson
Lou Nelson
Martel Morache
Gary Will

U.S. Fish and Wildlife Service

John Hill
Signe Sather-Blair
Rich Howard
Jim Nee

U.S Bureau of Land Management

Charles Haszier
Terry Rich
Steve Elmore
Karen Steenhof

Shoshone-Bannock Tribes

Jack Ross
Dan Christopherson
Dave Lundgren

Idaho State University

Chuck Trost

2. Summary

Date	Agency	Summary
6 June	Al1	Sent letters requesting contact persons(s) for mitigation status report.
9 July	USFWS	Meeting at endangered species office.
10 July	USBR	Meeting at Burley office.
10 July	USFWS	Meeting at refuge office.
18 July	Sho-Ban	Meeting at Fort Hall.
23 July	USBR	Called Burley office.
24 July	USBLM	Called Burley office.
25 July	Sho-Ban	Sent letter requesting statement of Tribal rights and interests.
27 July	Sho-Ban	Called Tribal lawyer.
2 August	USFWS	Called refuge office.
6 August	USBLM	Called Shoshone office.
8 August	USBR	Meeting at Burley office.
23 August	USBLM	Received Shoshone office's comments regarding rough draft.
23 August	USBR	Called Burley office regarding rough draft.
23 August	USBR	Called regional office regarding rough draft.
23 August	USBR	Meeting at regional office.
27 August	USBLM	Called Burley office regarding rough draft.
28 August	Sho-Ban	Called tribal lawyer.

28 August	USFWS	Called ecological services office regarding rough draft.
29 August	USFWS	Called refuge office regarding rough draft.
29 August	USBR	Called regional office regarding rough draft.

APPENDIX C

FORMAL COMMENTS ON SEPTEMBER 1984 DRAFT REPORT

State Agency:	IDFG
Federal Agencies:	USFWS USBLM (no formal comments received)
Tribes:	Shoshone-Bannock (no formal comments received)
Project Operator:	USBR

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

December 4, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

Thank you for the opportunity to review the Wildlife Mitigation Status Report for Minidoka Dam and Reservoir. The Idaho Department of Fish and Game looks forward to seeing fulfillment of the Northwest Power Act's and the Columbia River Basin Fish and Wildlife Program's goal 'to protect, mitigate, and enhance . . . wildlife to the extent affected by the development and operation of any hydroelectric project of the Columbia River and its tributaries...."

This goal has not yet been achieved at the Minidoka Dam and Reservoir Project. The status report demonstrates that no appreciable mitigation for terrestrial wildlife habitat losses was accomplished. This is understandable, considering that legal mandates and concerns for wildlife resources have changed since the project was built,.

Although net impacts have not been determined, it is obvious that some negative impacts to wildlife occurred as a result of the project inundating 34 miles of free-flowing river and at least 11,850 acres of wildlife habitat (which included important mule deer and prohghorn winter habitat, year-round sage grouse habitat, and habitat for many other game and nongame species).

In order to "protect, mitigate, and enhance" wildlife resources affected by the Minidoka Dam and Reservoir Project, it may be necessary to determine what impacts have occurred. Upon the approval of, and funding by, the Council and Bonneville Power Administration the Department is prepared to take the lead in conducting an assessment of impacts to wildlife resources resulting from this project and to perpare a net impacts statement. The Department is also ready to take the lead in developing mitigation plans.

Consultation and coordination with appropriate agencies and tribes regarding all aspects of the Fish and Wildlife Program is very important. The Idaho Department of Fish and Game supports the goals of the program and wants to see those goals fulfilled at this project.

Sincerely,

Jerry M. Conley
Director

JMC:BM:db

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Porttand Oregon 97232

JAN 07 1985

In Replv Refer To: Your Reference:

January 4, 1985

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter, we have reviewed the Wildlife Mitigation Status Report for the Minidoka Project in south central Idaho. The following comments are being provided for inclusion in the final report.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. Based on the report's content it is evident that the construction and operation of the project resulted in adverse impacts to wildlife resources which have not been adequately identified. Therefore, the Service recommends that the Bonneville Power Administration provide funds to conduct an evaluation of the impacts of the project on wildlife resources.

An evaluation of the project's impact on wildlife resources should be conducted by a lead resource agency which would then be responsible for coordinating the study with other appropriate agencies. Agencies that should be involved in such an evaluation include the Idaho Department of Fish and Game, Bureau of Land Management, Fish and Wildlife Service, and the Bureau of Reclamation. The evaluation should include an analysis of 1) pre-construction wildlife habitat conditions, 2) mitigation actions which have been implemented, and 3) current project area habitat conditions. We recommend that the evaluation be habitat-based and supported by existing wildlife population data when available. We suggest that collection of new population data be limited and applied only to species of special interest, i.e. bald eagle.

In conclusion, we believe that the analysis of losses and mitigation needs should be done as quickly as possible. However, we also recognize that the mitigation recommendations should be based on a technical assessment of losses.

Sincerely yours,

J. W. Teeter

Acting Assistant Regional Director
Habitat Resources

United States Department of the Interior

BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U. S. COURTHOUSE
BOX 043-550 WEST FORT STREET
BOISE, IDAHO 83724

OCT 1 1 1984

IN REPLY
REFER TO PN 150
565.

OCT 09 1984

Director
Division of Fish and Wildlife
Attention: James Meyer
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Meyer:

We have reviewed the Wildlife Mitigation Status Report which you sent on September 13, 1984, for Minidoka Dam in Idaho.

We reviewed this report recently when it was in draft form. It appears that our comments were incorporated in the final report. We have no further comments.

Sincerely yours,

John R. Woodworth

John R. Woodworth
Regional Environmental Officer

Wildlife Mitigation
Status Report

PALISADES DAM AND RESERVOIR

Final Report

Prepared by:

E. Chaney
S, Sather-Blair

U.S. Fish and Wildlife Service
Ecological Services Office
John P. Wolflin, Field Supervisor

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number DE-AI79-84BP12149
Northwest Power Planning Council
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
January 1985

TABLE OF CONTENTS

I. PROJECT NAME

Palisades Project

II. PROJECT OPERATOR

Bureau of Reclamation

III. PROJECT DESCRIPTION

a. Location and Size

Palisades Dam is on the South Fork of the Snake River about 11 miles west of the Idaho-Wyoming border and 55 miles southeast of Idaho Falls, Idaho.

The dam is an earthfill structure 270 feet high with a crest length of 2,100 feet. The spillway is a 28-foot diameter tunnel with a capacity of 48,500 cubic feet per second; a power tunnel has 14,500 cubic feet per second capacity, and an outlet tunnel 33,000 cubic feet per second, for a total capacity of 96,000 cubic feet per second. The powerplant has a total capacity of approximately 119 megawatts (USBR 1978). When full, the reservoir is about 20 miles long and 1.5 miles wide.

b. Authorized Purposes

The original authorized purposes were irrigation, flood control and electrical power production. The reauthorization in 1950 included "facilities for the improvement of fish and wildlife in the headwaters of the Snake River." (Public Law 81-864).

c. Brief History

The project initially was authorized in 1941 by the Secretary of the Interior under the Reclamation Project Act of 1939. It was reau- . thorized by Congress September 30, 1950. Construction began in 1951 and was completed in 1957. All powerplant generating units were operating by May 1958. Authorization for an additional powerplant generating unit is currently being considered.

d. Other Pertinent Data

(1) Water Level Fluctuation and Timing

During years of average and above average runoff, Palisades Dam provides holdover storage for supplemental irrigation water to 670,000 acres of irrigated land in the Upper Snake River Valley to be used during dry years. The project also provides flood control storage used in con- junction with Jackson Lake upstream to limit Snake River flows near Heise, Idaho to no more than 20,000 cubic feet per second.

(2) Land Ownership

Palisades Reservoir has about 7C miles of shoreline most of which is in public ownership and managed by the Targhee National Forest (TNF) headquartered at St. Anthony, Idaho (USBR 1983). Private lands are located in the vicinity of Alpine, Wyoming at the upper end of the reservoir.

(3) Indian Rights

The Palisades Project is within the ancestral hunting and fishing area of the Shoshone-Bannock Tribe. In preparing this status report, no documentation was found to indicate any tribal involvement in pre- or post-construction project assessment and planning. According to a spokesman for the Shoshone-Bannock Tribes of the Fort Hall Indian Reservation, it is doubtful the tribes were involved in any way. However, the tribes are very interested in wildlife resources of the project area and tribal hunters frequent the general area, predominately in pursuit of big game animals (pers. comm. Shoshone-Bannock Tribes).

IV. WILDLIFE SPECIES AND HABITAT ASSESSMENTS

a. Pre-construction

According to a Bureau of Reclamation (USBR) project planning document, Idaho Department of Fish and Game (IDFG) personnel conducted pre-project observations in the project area (USBR 1951). In 1947, the U.S. Fish and Wildlife Service (USFWS) published a pre-project assessment of Palisades Dam and Reservoir's projected impacts on fish and wildlife. This report did not address downstream wildlife impacts (USFWS 1947).

The proposed reservoir encompassed approximately 20 miles of the main-stem Snake River and 18 miles of tributary streams. The proposed dam site is in foothill terrain and the area inundated was a steep-sided canyon with benches occurring along the slopes. Sagebrush, bitterbrush, and various grasses predominated on benchlands within the impoundment area at lower elevations. Lodgepole pine and Douglas fir with aspen, snowberry,and serviceberry were common on the higher elevation slopes. Cottonwoo d, willows, alder, maple,and dogwood were characteristic of bottomland vegetation. Within the impoundment area were approximately 2,700 acres of irrigated land, 4,100 acres of dry farmland, 4,950 acres of sagebrush, 3,330 acres of timber and 1,100 acres of free-flowing river.

Mule deer were common year-round in the south portion of the impoundment area with heavy concentrations of animals in fall and winter. Carrying capacity was judged to be at least 20 deer per square mile (USFWS 1947). This early report noted that approximately 100 elk resided in the nearby Bear Creek drainage, but little movement into the reservoir area was thought to occur. The report did acknowledge some winter use by elk in the reservoir area, but considered it minimal. No mention of moose oc-curred in the early reports, but later reports suggest that it is prob-able that moose did use the reservoir area at least seasonally (USFWS 1979). Black bears were also known to occasionally use the impoundment area.

Ruffed grouse were found in bottomlands and cutover areas; blue grouse were found throughout the site and sage grouse were in the sagebrush community. The IDFG estimated recently that there was an average density of 2.0 to 2.5 blue and ruffed grouse per acre on the adjacent forested lands of the Palisades Reservoir (USFWS 1979).

Approximately 160 acres of marshland and 300 acres of scrub-shrub wetland provided fair nesting habitat for ducks. Five islands in the Snake River ranging from three to 20 acres provided nesting habitat for Canada geese. Unfortunately no quantitative information on the waterfowl species that utilized the area was found though species composition should be considered similar to what is present today.

According to the recollections of long-time area residents, there were at least four bald eagle summer nesting sites and a sizable wintering population of bald eagles within the pre-construction impoundment area (pers. comm. TNF) . Peregrine falcons are known to have nested within about two miles of the project site (pers. comm. USFWS).

Furbearing animals within the impoundment site included beaver, muskrat, mink, and otter. These species were highly dependent on the 38 miles of riverine/riparian habitat in the project area. Many nongame species also were present in the vegetation communities inundated by the dam, although their numbers were never quantified. The pre-construction presence of these additional species and their habitats can be inferred from post-construction studies in and near the project area (USFS 1966, LJSFWS 1979, Boccard 1980).

Below the dam site the Snake River flows through a broad and relatively flat lava plain. The vegetation communities below the dam were essentially the same before the project as they are today. According to the 1979 USFWS report, "Below the dam, the South Fork of the Snake River possesses the most extensive and highest quality of riparian habitat in Idaho. The 25-mile area from the dam downstream to approximately Heise, has extensive stands of cottonwood and willow trees, dry meadows? areas of shrubs, and Douglas-fir forest varying from 25 feet to one mile wide, There are approximately 20,000-?5,000 acres of these habitat types. There are an additional 1,000 acres of island area." (USFWS 1979).

This extensive riparian habitat has supported a myrid of wildlife, including furbearing animals, deer, elk, moose, upland game birds, several species of waterfowl, bald eagles, peregrine falcons, great blue herons, ospreys and many other nongame species. Islands and shoreline areas are used intensively by nesting Canada geese and other waterfowl (USFWS 1979).

The South Fork of the Snake River has historically flooded during spring runoff, even before Jackson Lake was developed (Merrill and Bizeau 1972). While the 1947 USFWS report did not describe pre-project impacts of high spring flows on waterfowl, it did state that fishing in that area was "seriously impaired by the spring floods and the heavy releases of irrigation water from Jackson Lake." These high flows undoubtedly affected waterfowl nesting success along the river prior to impoundment of water behind Palisades Dam.

b. Post-construction

The reservoir flooded approximately 20 miles of the Snake River valley and 18 miles of tributary streams. All wildlife habitat within the reservoir area was expected to be eliminated except for providing resting area for migratory waterfowl (USFWS 1947). Later a post-construction assessment concluded that the reservoir "... resulted in larger wildlife losses than were predicted (in the 1947 assessment) ..." due to the lack of use of the reservoir by migrating waterfowl (USFWS 1959). According to a USFWS planning aid report, goose utilization of exposed mudflats in the upper reservoir did not reach expected levels (USFWS 1979). This report identified waterfowl activity concentrating in the upper and side portions of the reservoir, especially in the Salt River confluence area. In the upper area of the reservoir there have been 4-5 breeding pairs of geese and 100-150 non-breeders observed. The reservoir provides limited wintering habitat for waterfowl since most of it is frozen during that season (USFWS 1979).

Resident mule deer number 300-450 around the perifery of the reservoir. Many of these deer migrate downstream to the river below the dam (USFWS 1979). This report also indicates that 350-500 elk reside on the north side of the reservoir, most in the upper reservoir area. Some moose have also been observed in the McCoy Creek area, primarily in Trout Creek. Muskrat are the most abundant furbearer, but mink and river otter are also common in the tributary areas of the upper reservoir (USFWS 1979).

Blue and ruffed grouse are "abundant" within the forested areas adjacent to the reservoir. Approximately 3,OOO-5,000 birds have been reported by IDFG for these lands (USFWS 1979).

There are three active bald eagle nests in the reservoir area, but no wintering population remains (pers. comm. TNF). There are also 29 active osprey nests located around the reservoir (pers. comm. USFS). No documentation of post-construction impacts on other species within the impoundment area was found in preparing this status report, but the loss of habitat also adversely affect many nongame species.

Post-construction impacts on downstream wildlife habitats are less obvious than for the reservoir area. The available information focuses almost exclusively on Canada goose nesting success below the reservoir (USFWS 1970, Merrill and Bizeau 1972, Parker 1973, DeShon 1976, 1977, 1978). Merrill and Bizeau (1972) surmised that nest losses due to natural, uncontrolled spring flood surges occurred in the years before 1911 when Jackson Lake Reservoir went into operation. According to the study, prior to 1947 there apparently was no effort to minimize goose nesting losses by regulating releases from Jackson Lake.

From 1955 to 1964, high water releases in early spring, which have the effect of forcing nest establishment onto higher ground, occurred five out of the ten years. Following construction of Palisades Dam some observers opined that goose nesting losses increased (Merrill and Bizeau 1972). A separate analysis in 1970 estimated goose nest losses varied

from 50% - 75% annually and that duck nest losses were of similar magnitude (USFWS 1970). The losses were due to high spring flows released from Palisades Reservoir. This same study estimated that 5,000 - 7,000 ducks and 500 - 1,000 Canada geese could be produced in the 65-mile reach of the South Fork of the Snake River from Palisades Dam to the mouth of the Henrys Fork if spring flows were better controlled at the dam. Since 1972 annual meetings to discuss and plan the flow releases from Palisades between the USBR, IDFG, and USFWS have helped to alleviate some of the nesting losses (pers. comm. USBR).

V. WILDLIFE MITIGATION HISTORY

Planning and construction of the Palisades project occurred prior to the time formal, comprehensive impact assessments and mitigation were required by law. The 1934 Fish and Wildlife Coordination Act, for example, largely mandated a "...spirit of cooperation..." among project developers and wildlife interests.
Strengthening amendments in 1946 fell short of requiring comprehensive impac assessments and mitigation (Senate Report No. 1981, 1958).

a. Mitigation Requested or Proposed

The 1947 USFWS report recommended that water in Palisades Reservoir be exchanged for Grays Lake water used to irrigate lands within the Fort Hall Indian Reservation. This exchange would allow stabilization of Grays Lake water levels and benefit muskrat and nesting waterfowl. In combination with acquisition of 9,300 acres of private and 3,500 acres of public lands for wildlife management, the water exchange was expected to result in more than a four-fold increase in Grays Lake wildlife values, principally waterfowl. Previous to project construction, no further mitigation was proposed for the loss of habitat for other species impacted by Palisades Dam and Reservoir (LJSFWS 1947).

In subsequent years, various measures were recommended to mitigate for the loss of wildlife habitat to Palisades Reservoir. One analyst (circa 1977) identified the need to purchase several thousand acres of private land in the Tyghee Creek and Stump Creek drainages to be managed for big game, upland game and waterfowl (USFWS 1977).

In 1979 the USFWS recommended that the USBR "...construct low dams at the upper end of the reservoir to create marsh-type habitat. Goose nesting islands, platforms, and other structures should be constructed near these impoundments. Other likely areas around the periphery of the lake should be evaluated for the possible development of new marsh habitat. Annual seeding and revegetation of indigenous plant species should be thoroughly considered." (USFWS 1979). It also was recommended that the USBR purchase privately owned lands along the South Fork of the Snake River to mitigate for the loss of waterfowl habitat, big game winter range, and habitat for other upland species.

Over the years resource agencies have recommended that flows from Palisades Reservoir be regulated to minimize spring flooding and loss of waterfowl nests along the South Fork of the Snake River below the dam. A series of annual studies initiated in 1972 (Merrill and Bizeau 1972, Parker 1973) led to the recommendation that water releases from Palisades Reservoir should be regulated to 8,000 - 16,000 cubic feet per second during the nest selection period to force geese to nest above the high water mark (pers. comm. IDFG).

b. Mitigation Agreements or Requirements

In 1950 Congress reauthorized the Palisades Dam and Reservoir Project. The authorizing legislation included "...facilities for the improvement of fish and wildlife along the headwaters of the Snake River [specifically including a trout hatchery]..." and reservation of "...not to exceed fifty-five thousand acre-feet of active capacity in Palisades Reservoir for a period ending December 31, 1952, for replacement of Grays Lake storage." (Public Law 81-864). This reservation of Palisades storage was intended to allow the USFWS time to negotiate a Palisades-Grays Lake exchange subsequently was extended to December 31, 1955 by the Secretary of the Interior (USFWS 1959).

c. Mitigation Implemented

The USFWS was unable to resolve land ownership conflicts at Gravs Lake and develop a water exchange and development plan acceptable to local people. On January 10, 1956 the USFWS recommended the storage reserved in Palisades Reservoir be released for other purposes (USFWS 1959). The reservation expired December 31, 1955 and the water was allocated to irrigation use in December 1958 (BR 1959). No structural measures have been implemented to mitigate for loss of wildlife habitat due to the impoundment of Palisades Reservoir or for the loss of wildlife below the reservoir (pers. comm. IDFG and USBR).

VI. CURRENT STUDIES AND PLANNING

In recent years, since 1974, the IDFG and the USFWS have annually met with USBR personnel to discuss the forthcoming water year and projected spring flow releases from-the reservoir. These agencies seek to have the USBR control water releases from Palisades so that spring flows are within the recommended 8,000 cfs - 16,000 cfs (pers. comm. IDFG). The USBR has been responsive to the request within the constraints of water conditions (pers. comm. USBR) and so long as the recommended flows do not conflict with the authorized functions of irrigation and flood control (USBR 1979).

In 1981 an interagency Memorandum of Understanding (MOU) recognizing the many natural values of the South Fork of the Snake River was signed committing the USBR, USFWS, IDFG, TNF, and the Bureau of Land Management to coordinate their activities along a 27-mile reach of the river (MOU 1981). The affected reach extends from a point approximately 12.5 miles below Palisades Dam downstream to the Heise gauging site.

A bald eagle management plan has been prepared for the Greater Yellowstone Ecosystem (GYE), which includes the Palisades project area. It provides for interagency coordination of research, management and planning for bald eagle populations within the ecosystem (GYE Bald Eagle Work Team 1983). The USBR *has* indicated that it will be meeting with the Forest Service to discuss management plans for the bald eagle on Palisades Reservoir in conjunction with the GYE bald eagle management plan (GYE Bald Eagle Working Team 1983). An osprey study on Palisades Reservoir will also be initiated by the Forest Service in the near future.

VII. REFERENCES CITED

Boccard, B. 1980. Important fish and wildlife habitats of Idaho, an inventory. U.S. Fish and Wildlife Service,

Bureau of Reclamation. 1951. Definite plan report for Palisades Project, Snake River, Idaho - Wyoming, November.

_____. 1959. Teletype. (January 15, 1959).

_____. 1978. Palisades powerplant enlargement, Snake River, Idaho - Wyoming.

_____. 1979. Memorandum of comments on planning aid report done by U.S. Fish and Wildlife Service (November 2, 1979).

_____. 1983. Palisades project data book. Pacific Northwest Region (January) .

DeShon, F. 1976. A survey of Canada goose nesting on the South Fork of the Snake River, Idaho. Idaho Department of Fish and Game.

_____. 1977 a A survey of Canada goose nesting on the South Fork of the Snake River, Idaho. Idaho Department of Fish and Game.

_____. 1978. A survey of Canada goose nesting on the South Fork of the Snake River, Idaho. Idaho Department of Fish and Game.

Senate Report No. 1981. 1958. 85th Congress, 2nd Session.

Greater Yellowstone Ecosystem Bald Eagle Working Team. 1983. A bald eagle management plan. Wyoming Game and Fish Department.

Memorandum of Understanding. 1981. U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, Bureau of Reclamation, Bureau of Land Management, and Targhee National Forest. (August 3, 1981).

Merrill, D. and E. Bizeau. 1972. Canada goose production as related to stream flow on the South Fork of the Snake River in Idaho: a preliminary survey. University of Idaho, Cooperative Wildlife Research Unit.

Parker, T. 1973. South Fork Canada goose study. Idaho Department of Fish and Game.

Public Law 81-864. 81st Congress, 2nd Session. (September 30, 1950).

U.S. Fish and Wildlife Service. 1947. Report on fish and wildlife resources, Palisades Project. Snake River, Idaho - Wyoming.

_____. 1959. Initial follow-up report for Palisades Project, Snake River, Idaho - Wyoming.

_____. 1970. Memorandum on waterfowl nesting losses to Bureau of Reclamation. (October 15, 1970).

_____. 1977. Internal memorandum - projects where mitigation has been authorized, but not implemented. Circa 1977.

_____. 1979. Planning aid report. Palisades Project, Snake River, Idaho - Wyoming.

U.S. Forest Service. 1966. Multiple use survey report, Proposed Palisades Reservoir enlargement. Bridger, Caribou, and Targhee National Forests.

APPENDIX A

Study Team

Ed Chaney
Signe Sather-Blair

APPENDIX B

Consultation/Coordination

A. Project Contacts

1. Bureau of Reclamation

Bob Adair
Leo Busch
Fred Stillings
Dick Woodworth

2. Idaho Department of Fish and Game

Ralph Pehrson
Tom Reinecker

3. Shoshone-Bannock Tribes of the Fort Hall Indian Reservation

Dan Christopherson

4. U.S. Fish and Wildlife Service

Rich Howard
James Nee
Chuck Peck
John Wolflin

5. Targhee National Forest

Mike Whitfield

B. Summary

DATES	AGENCY	SUMMARY
October 1 - November 15, 1983	Idaho Department of Fish and Game - State Office	Obtained information on past and present mitigation efforts.
" "	Idaho Department of Fish and Game - Region 6	Obtained information on project-related impacts to wildlife - particularly waterfowl and big game.
" "	Bureau of Reclamation	Obtained informaton on past and present mitigation efforts.
" "	Shoshone-Bannock Tribes	Obtained information on their involvement during project planning.
" "	Targhee National Forest	Obtained information on current wildlife use in and downstream of project area.
" "	U.S. Fish and Wildlife Service	Obtained information on past and present mitigation efforts, Bald eagle population status and other endangered species concerns were discussed with the Endangered Species Office.
March 30, 1984	Bureau of Reclamation	USFWS met with Bob Adair to discuss his comments concerning draft report.
April 3, 1984	Bureau of Reclamation	USFWS met with Bob Adair to further discuss draft report contents.

APPENDIX C

Comments

(1) State Agency
No formal comments were received

(2) Federal Agencies (USFWS and USFS)

(3) Indian Tribes
No formal comments received

(4) Facility Operator (USBR)
No formal comments received

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

In Reply Refer To: Your Reference

June 13, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter of May 18, 1984, we have reviewed the Wildlife Mitigation Status Report for the Palisades Project in eastern Idaho. The following comments are being provided for inclusion-in the final report.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. Based on the report's content it is evident that the construction and operation of the project has resulted in substantial adverse impacts to wildlife resources which have been neither adequately identified nor mitigated. Therefore, the Service recommends that the Bonneville Power Administration provide funds to: 1) conduct an evaluation of the impacts of the project on wildlife resources; and 2) based on the findings of that evaluation, develop a mitigation and enhancement plan which would fully compensate the adverse wildlife impact attributable to the project.

An evaluation of the Project's impact on wildlife resources should be conducted by a lead resource agency which would then be responsible for coordinating the study with other appropriate agencies. Agencies that should be involved in such an evaluation include the Idaho Department of Fish and GAme, Bureau of Reclamation, U.S. Forest Service, Bureau of Land Management, and the Fish and Wildlife Service. The evaluation should include an analysis of 1) immediate post-construction losses, 2) mitigation actions which have been implemented, and 3) current project area conditions. We recommend that the evaluation be habitat-based and supported by existing wildlife population data when available. We suggest that collection of new population data be limited and applied only to species of special interest, i.e, bald eagle.

We believe that such a habitat-based evaluation could be accomplished in a timely manner using procedures such as a modification of the Habitat Evaluation Procedures (HEP) developed by the Fish and Wildlife Service. The HEP is being used with increasing frequency on federal water projects throughout the United States. It provides a mechanism not only to assess project impacts but also to evaluate potential mitigation actions and subsequent management improvement measures. It can thus streamline our efforts to evaluate losses and develop a mitigation plan for this project.

We foresee that such an evaluation of losses for this project would include 1) an analysis of existing data such as pre- and post-construction photography and 2) brief field evaluation of current habitat conditions in the project area and sites considered representative of habitat inundated by the project. These field inspections would be conducted by a team of wildlife biologists familiar with the area's wildlife resources. The results of the evaluation would be presented in a loss statement report.

In conclusion, we believe that the analysis of losses and mitigation needs should be done as quickly as possible. However, we also recognize that the mitigation recommendations should be based on a technical assessment of losses.

Sincerely,

James W. Teeter
Acting Assistant Regional Director
Habitat Resources

United States Department of Agriculture
Forest Service
TARGHEE NATIONAL FOREST
P.0, Box 208
St. Anthony, ID 83445

JUN 0 7 1984

Reply to **2610**

Date June 5, 1984

'Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P.O. Bos 3621
Portland, Oregon 97208
ATTN: Mr. James Meyer

Dear Sir:

Thank you for the opportunity to review the Project Report on the "Wildlife Mitigation Status Review" for Palisades Dam, which was prepared by the U.S. Fish and Wildlife Service.

Part IV of the report (Wildlife Species Habitat Assessment) fails to mention the status of the osprey pre-construction and post-construction. The osprey are currently a very visible and abundant wildlife species utilizing the reservoir, and we would recommend inclusion of their status in this part of the report.

Part V of the report (Wildlife Mitigation History) indicates that some of the mitigation originally proposed for the Palisades Project was never implemented. We are wondering if new mitigation can be proposed and authorized. We would be glad to discuss ideas for mitigation with you and/or the U.S. Fish and Wildlife Service,

JOHN E. BURNS
Forest Supervisor

APPENDIX D

Mitigation Instruments

No mitigation has been implemented for this project.

Wildlife Mitigation Status Report

ASHTON HYDROELECTRIC PROJECT

Final Report

Prepared by:

R. C. Martin
L. A. Mehrhoff

Idaho Department of Fish and Game
Jerry M. Conley, Director

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number 83-478D
in compliance with
Northwest Power Planning Council's
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
December 1984

TABLE *OF* CONTENTS

I. PROJECT NAME

Ashton Dam and Reservoir

II. PROJECT OPERATOR

Utah Power and Light Company (UPLC)

III. PROJECT DESCRIPTION

A. Location and Size

Ashton Dam is on the Henry's Fork (North Fork) of the Snake river, 2 miles west of Ashton, Idaho. The dam is an earth- and rock-filled structure 65 feet high, with a crest length of 252 feet (CH_2M Hill 1984).

The powerhouse is built as a part of the dam. The 3 generator units have a capacity of 6.1 megawatts. The spillway consists of six lO-foot by 12-foot radial gates. Operation is run-of-the-river. The power plant is capable of using 2,130 cubic feet per second (cfs). The highest flow during the last 23 years was 4,372 cfs (CH_2M Hill 1984).

Ashton Reservoir is about 4 miles long, up to 340 yards wide, and 404 acres in size (CH_2M Hill 1984).

B. Authorized Purposes

The Ashton project was licensed for power production (Federal Energy Regulatory Commission (FERC) 1977).

C. Brief History

In 1914, the Ashton and St. Anthony Power Company began constructing the project. The first power was generated in 1918. In 1924, UPLC acquired the project. The second and third generators were installed in 1925. UPLC applied for a power license in 1963 (UPLC 1963), and it was granted in 1977. The 50-year license was issued for the period 1938 to 31 December 1987 (FERC 1977). Currently, UPLC is contracting CH_2M Hill to prepare an application for relicensing.

D. Other Pertinent Data

1. Water Level Fluctuation and Timing

Ashton Dam impounds 9,559 acre-feet at elevation 5,156.0 feet. Operation is run-of-the-river; therefore, the reservoir is maintained at a nearly constant elevation. The power plant can use 2,130 cfs. Excess flows are passed through the spillway during late spring and summer (CH_2M Hill 1984).

2. Land Ownership

Ashton Reservoir has about 13.5 miles of shoreline. UPLC owns or controls a narrow strip of varying width along the entire reservoir shoreline. On the surrounding lands adjacent to UPLC's holdings, about 11.5 miles (82%) are owned by other private concerns; 2.5 miles (18%) are in public ownership, administered by the U.S. Bureau of Land Management (USBLM), but withdrawn for reservoir use.

The Targhee National Forest is to the north and east, within 1.5 miles of the reservoir. Extensive USBLM and State lands are to the north and west of the reservoir. The Idaho Department of Fish and Game's (IDFG) Sand Creek Wildlife Management Area (WMA) begins 6 miles west of the reservoir.

3. Indian Rights

Ashton Dam and Reservoir are within the ancestral hunting area of the Shoshone-Bannock Tribes. Therefore, it is assumed their treaty rights are affected by any impact or management decision that affects wildlife that exist on, or cross, open and unclaimed federal lands within this area. To date, the Tribes have not claimed any rights or voiced any interest in wildlife associated with the project.

IV. WILDLIFE SPECIES AND HABITAT ASSESSMENTS

A. Pre-construction

There were no quantitative preconstruction studies. There are indications that in the late 1800s there were abundant cottonwoods along the Henry's Fork near Ashton. Big game was also abundant (Snake River Echoes 1977).

B. Post-construction

Ashton Reservoir inundated at least 404 acres of free-flowing river, riparian habitat, upland habitat, and islands. Much of the shoreline of the lower half of the reservoir slopes steeply into the water. Big

sagebrush and Rocky Mountain juniper dominate the shoreline of most of this area. Narrow strips of riparian vegetation occur along the shoreline of most of the upper half of the reservoir and in side bays where small drainages were flooded. Riparian habitat is dominated by willows, black hawthorn, serviceberry, common chokecherry, Wood's rose, alder, and birch.

Cottonwoods are common above and below the reservoir. On the reservoir however, there are only a few at the extreme upper end. Woody vegetation in general appears to be less abundant along the reservoir than along the river above and below the reservoir. However, emergent wetland vegetation may be more abundant along the reservoir than along the river.

The area around Ashton Reservoir supports a variety of big game, waterfowl, and other species. CH_2M Hill (1984) listed 38 mammal species and 96 bird species they considered likely to occur in the area. Mammal species include the black bear, cougar, elk, moose, mule deer, white-tailed deer, beaver, mink, river otter, bobcat, red fox, badger, and coyote.

Raptor species of special concern in the reservoir area include the bald eagle and osprey. Since 1979, a peak of 3 bald eagles was counted on Ashton Reservoir during annual midwinter surveys (USBLM 1980-1984). Bald eagles also nest along the Henry's Fork. A pair of bald eagles was suspected to have nested near the reservoir during 1982, 1983, and 1984. During nesting seasons, they were observed on the reservoir many times (T. Trent, IDFG, pers. commun.). The Henry's Fork also supports ospreys. There is one active nest on a powerline pole beside the reservoir.

Waterfowl use the area all seasons of the year. Spring and fall migrations are the heaviest use periods, but some nesting and brood-rearing also occurs (M. Orme, USFS, pers. commun.). On Ashton Reservoir, during their midwinter waterfowl survey on 19 January 1984, the IDFG (1984a) counted 71 trumpeter swans, 52 Canada geese, 59 mallards, 43 common mergansers, and 150 common goldeneyes.

The trumpeter swan is listed as a species of special concern by the IDFG. The entire Rocky Mountain population of trumpeter swans winters in the tri-state area of Idaho, Montana, and Wyoming. Currently, there is concern for the availability and security of swan wintering habitat. Springs occurring within Ashton Reservoir maintain some open water during most winters, but water depth precludes swans from foraging. Prior to dam construction, the river undoubtedly provided a swan winter feeding area (J. Naderman, IDFG, pers. commun.).

V. WILDLIFE MITIGATION HISTORY

Planning and construction of Ashton Dam occurred prior to the time formal, comprehensive impact assessments and mitigation were required by law. The 1934 Fish and Wildlife Coordination Act was not passed until 16 years after the dam and powerhouse were constructed.

A. Mitigation Requested or Proposed

In response to UPLC's 1963 license application, the IDFG (1963) requested that 2 articles be included in the license. They are summarized in section B below.

During the current relicensing application process, the IDFG (1984b) recommended that UPLC and IDFG meet to discuss the impacts of Ashton Dam and Reservoir on wildlife resources. IDFG's mitigation suggestions included the following:

1. Build raptor nesting and perching platforms and goose nesting platforms adjacent to the reservoir.

2. Enhance big game habitat in the vicinity of Sand Creek WMA.

3. Purchase easements on water and wetlands in the vicinity of the reservoir.

4. Fence to control livestock use of the reservoir's riparian zone.

During the current relicensing application process, the U.S. Fish and Wildlife Service (USFWS 1984) recommended the following mitigation measures:

1. Redesign and possibly relocate power poles or power lines to prevent avian electrocution and crippling.

2. Enhance big game habitat on USBLM property north and west of the reservoir.

3. Procure easements to manage the water, wetlands, and peripheral upland areas south of the reservoir in Sections 22, 23, 26, 27 (T. 9N, R. 42E) for waterfowl use.

4. Build osprey nesting platforms at the reservoir site and downstream from the dam.

5. Plant trees for migratory bird roosting sites at and near the reservoir.

The U.S. Forest Service (N. Orme, USFS, pers. commun.) suggested the following on-site habitat improvement projects:

1. For waterfowl, build goose nesting platforms, and plant dry land grasses and alfalfa around the reservoir edges.

2. Build osprey nesting platforms and bald eagle perches,

B. Mitigation Agreements or Requirements

The 1977 license (FERC 1977) requires UPLC to be responsible for the construction, maintenance, and operation of such reasonable facilities and project modifications as may be required to conserve and develop the fish, wildlife, and recreational resources at the project.

The 1977 license also requires UPLC to permit the United State to use, free of charge, UPLC's properties to construct or improve fish and wildlife facilities (FERC 1977).

C. Mitigation Implemented

This year, UPLC installed new transmission lines and rerouted electricity around their powerline pole with the osprey nest on it,

VI. CURRENT STUDIES AND PLANNING

UPLC has contracted CH_2M Hill to prepare their application for relicensing. They hope to include a mitigation plan in the application document that will satisfy wildlife interests both during the relicensing process and under the Northwest Power Act (T. Haislip, CH_2M Hill, pers. commun.).

UPLC is currently funding a survey to delineate their ownership boundaries around the reservoir. The survey should be completed by October.

Ashton Dam and Reservoir are within the planning area of the greater yellowstone ecosystem bald eagle management area and the Pacific states recovery plan. The bald eagle recovery team is continuing to monitor eagle use of the reservoir.

VII. REFERENCES CITED

CH_2M Hill. 1984. Draft exhibits A, B, C, and E; Ashton hydroelectric project. Utah Power and Light Company.

Federal Energy Regulatory Commission, 1977. Order issuing license (major); Ashton-St. Anthony project no. 2381.

Idaho Department of Fish and Game. 1963. Letter to Federal Power Commission from IDFG, 6 November.

_____. 1984a. Winter waterfowl survey. Unpubl. data. Region 6, Idaho Falls.

_____. 1984b. Letter to CH_2M Hill from IDFG, 18 July.

Snake River Echoes. 1977. History of Jane Powell.

U.S. Bureau of Land Management. 1980-1984. National Wildlife Federation sponsored midwinter bald eagle surveys. Unpubl. data. Boise District Office.

U.S. Fish and Wildlife Service. 1984. Letter to CH_2M Hill from USFWS, 10 August.

Utah Power and Light Company. 1963. Application for license from Federal Power Commission; Ashton-St. Anthony project no. 2381.

A P P E N D I C E S

APPENDIX A

STUDY TEAM

Idaho Department of Fish and Game

Bob Martin
Arch Mehrhoff

APPENDIX B

CONSULTATION/COORDINATION

1. Project Contacts

Utah Power and Light Company

Dennis Dummer
Jody Williams
Carly Burton

CH_2M Hill

Tom Haislip
Chuck Blair

Idaho Department of Fish and Game

Tracy Trent
Justin Naderman
Ruth Gale
Ralph Pehrson
Lou Nelson

U.S. Fish and Wildlife Service

Signe Sather-Blair
Rich Howard
Walt Ray
Linda Thomasma
Jim Nee

U.S. Bureau of Land Management

Bob Jones

U.S. Forest Service

Mark Orme

Shoshone-Bannock Tribes

Jack Ross
Dan Christopherson
Dave Lundgren

2. Summary

Dates	Agency	Summary
6 June	All	Sent letters requesting contact person(s) for status report.
5 July	UPLC	Called requesting contact person.
6 July	UPLC	Mailed letter requesting contact person.
9 July	CH_2M Hill	Called for information.
9 July	USFWS	Meeting at endangered species office.
17, 18 July	IDFG	Meetings at Idaho Falls office.
18 July	Sho-Ban	Meeting at Fort Hall.
18 July	UPLC	Mailed letter requesting information.
24 July	USFWS	Meeting at ecological services office.
25 July	USPS	Called St. Anthony office.
25 July	Sho-Ban	Sent letter requesting statement of Tribal rights and interests.
27 July	Sho-Ban	Called Tribal lawyer.
14 August	USFS	Called St. Anthony office.
16 August	UPLC	Call from them permitting us to obtain information from CH_2M Hill.
27, 28 August	CH_2M Hill	Meetings at their office.
28 August	Sho-Ban	Called Tribal lawyer.
30 August	CH_2M Hill	Called for information.
4 September	USBLM	Called for information.
5 September	All	Mailed rough draft of status report for informal comment.

6 September	USBLM	Discussed comments regarding rough draft.
9 September	USFS	Received comments regarding rough draft.
17 September	USBLM	Received comments regarding rough draft.
17 September	USFWS	Received comments regarding rough draft.
17 September	Sho-Ban	Called Tribal lawyer.
21 September	CH_2M Hill	Toured Ashton Reservoir.
21 September	UPLC	Met with plant superintendant.
27 September	UPLC	Called plant superintendant.

APPENDIX C

FORMAL COMMENTS ON OCTOBER 1984 DRAFT REPORT

State Agency:	IDFG
Federal Agencies:	USFWS USFS (no formal comments received)
Tribes:	Shoshone-Bannock (no formal comments received)
Project Operator:	UPLC (no formal comments received)

IDAHO DEPARTMENT OF FISH AND **GAME**
600 South Walnut • Box 25
Boise • Idaho • 83707

December 4, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

Thank you for the opportunity to review the Wildlife Mitigation Status Report for the Ashton Hydroelectric Project. The Idaho Department of Fish and Game looks forward to seeing fulfillment of the Northwest Power Act's and the Columbia River Basin Fish and Wildlife Program's goal "to protect, mitigate, and enhance . . . wildlife to the extent affected by the development and operation of any hydroelectric project of the Columbia River and its tributaries...."

This goal has not yet been achieved at the Ashton Project. The status report demonstrates that no appreciable mitigation for wildlife habitat losses was accomplished. This is understandable, considering that legal mandates and concerns for wildlife resources have changed since the project was built.

Although net impacts have not been determined, it is obvious that some negative impacts to wildlife occurred as a result of the project inundating four miles of free-flowing river and 404 acres of wildlife habitat. As the status report indicated, the Utah Power and Light Company has contracted CH_2M Hill to prepare their application for relicensing. A wildlife mitigation plan is being prepared in the hope of satisfying wildlife interests, both during the relicensing process and under the Fish and Wildlife Program. We have reviewed a draft of the mitigation plan and are aware of the current status of the negotiations for procurement of wetland preservation easements. We commend the Utah Power and Light Company and CH_2M Hill on their efforts, and we look forward to reviewing a final draft of the mitigation plan.

Sincerely,

Jerry M. Conley
Director

JMC:BM:db

J-15

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

In Reply Refer To: Your Reference:

December 11, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter we have reviewed the Wildlife Mitigation Status Report for the Ashton Project in eastern Idaho. We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project.

We have only one general comment. The description for post-construction conditions identifies several mammal and many bird species as being present in the project vicinity. We believe it is appropriate to note in the pre-construction discussion that similar species composition likely existed prior to the project and probably in greater abundance.

Sincerely yours,

James W. Teeter
Assistant Regional Director
Habitat Resources

J.14

Wildlife Mitigation
Status Report

C. J. STRIKE DAM AND RESERVOIR

Final Report

Prepared by:

L. A. Mehrhoff
S. Sather-Blair

U.S. Fish and Wildlife Service
Ecological Services Office
John P. Wolflin, Field Supervisor

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
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Northwest Power Planning Council
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
January 1985

TABLE OF CONTENTS

I. PROJECT NAME

C. J. Strike Hydroelectric Development

II. PROJECT OPERATOR

Idaho Power Company (IPC)

III. PROJECT DESCRIPTION

a. Location, Size and Physical Features

The C. J. Strike Dam and Reservoir are located in Elmore and Owyhee Counties in south, central Idaho. The project was developed on the main stem of the Snake River, approximately 20 miles south of Mountain Home, Idaho. Access to the area is by State Highway 51.

The dam is earthen with an impervious rolled core and rock surface. It is approximately 120 feet in height, 30 feet in width at the top elevation and 675 feet in width at its base. Reinforced concrete flood control gates are located on the north side of the river and consist of eight tainter gates, each 22 by 34 feet. These combined gates are capable of handling 100,000 cubic feet per second of water. They are designed to maintain a pool elevation of 2,455 feet at the dam. The reservoir extends approximately 32 miles on the main stem of the Snake River, and 12 miles up the Bruneau River. It covers an estimated 7,500 acres (IPC 1950).

The powerhouse, adjacent to the dam, on the south bank of the river, consists of reinforced concrete substructures supporting three semi-outdoor type 27,600 kilowatt generators. The generators are connected to three 38,000 horsepower turbines. Step-up transformers, switch structures, and two steel transmission takeoff towers are erected on the downstream slope of the dam, immediately adjacent to the face of the powerhouse (IPC 1950).

b. Authorized Purposes

The Federal Power Commission (FPC) upon granting approval of the project stated that the project was best adapted to a comprehensive plan for improvement and utilization of water power development and for other beneficial public uses, including recreational purposes. Further, the FPC reserved the right to impose requirements in the interest of fish and wildlife at a later date (FPC 1951).

c. Brief History

The IPC filed the application with the noted purpose of hydroelectric development. It was designated by the FPC as Project Number 2055. The project boundaries were defined as lands necessary for the purposes of the project, and included lands owned by the applicant and the Bureau of Land Management (BLM) (FPC 1951).

The IPC on February 6, 1951 was given the authority to construct the dam approximately one mile downstream from the mouth of the Bruneau River. Construction began in 1951 and was completed in 1952. Water storage was initiated in 1952. The license issued to IPC was for the construction, operation, and maintenance of the project and was subject to the terms and conditions of the Federal Power Act. This license was for a period of 50 years, effective December 1, 1950, (FPC 1951).

d. Other Pertinent Data

(1) Water Level Fluctuation and Timing.

The IPC controls the water levels for the project and the method of operation is "run of the river." Although the dam impounds a rather large body of water, two reservoir elevation constraints limit the project to a daily load shaping operation. In order to accomodate fish spawning in the reservoir above C.J. Strike Dam, Idaho Power Company, in response to the State of Idaho Department of Fish and Game, is currently limiting the forebay fluctuations to not more than one foot during the period of April 15 to June 15 of each year. During the balance of the vear, the fluctuations are limited to not more than five feet due to the project design. The use of water for short periods for peaking may reach a maximum of 12,750 cubic feet per second. Minimum flows, released during periods of low water or normal minimum plant operations, are approximately 3,000 cubic feet per second (USFWS 1950),

This mode of operation precludes a wide unvegetated shoreline band seen in other hydroelectric operations. The impoundment is relatively narrow and it is estimated that during a 24-hour period, the maximum the reservoir fluctuates is approximately 11 inches.

(2) Land Ownership

Land ownership adjacent to the project includes state, federal and private lands. The largest owners are the federal agencies with the BLM holding 57% and the Department of Defense holding 8%. Private lands are scattered but total 30% and State lands make up the balance of 8%.

(3) Indian Rights

The project is within the ancestral hunting and fishing area of the Shoshone-Bannock Tribe. Tribal offices were contacted for comments; no responses were received.

IV. WILDLIFE SPECIES AND HABITAT ASSESSMENTS

a. Pre-construction

The area surrounding the project site along the north and east sides of the canyon rim was shrub-steppe. The vegetative cover was predominately winterfat, sagebrush, grass, and saltbush. In other locations,

sagebrush, grass, and greasewood were the dominant plants. Four principal grass species were most common: cheatgrass, squirreltail, needle-and-thread, and Indian rice grass. The area inundated by the project totalled 7,500 acres and included considerable streamside cover. About 54 islands were located within the project boundary. Along the river banks and the numerous islands, willows, cottonwood, hawthorn, rabbitbrush, greasewood, and rose were common (USDI 1950). Grasses and sagebrush were common on these islands in the drier spots.

Prior to filling, the reservoir site contained valuable nesting, resting, and feeding habitat for waterfowl. The waterfowl included Canada geese, mallards, American wigeon, gadwall, Northern pintail, teal, redhead, and American coot. The islands that were to be inundated were of particular importance for Canada goose nesting (USFWS 1950). It was estimated that the habitat lost would result in the immediate loss of 400 Canada geese, 1,600 d,icks, 3,000 pheasants, 500 Hungarian partridges, 250 valley quail and 100 doves (IDFG 1950).

The principal upland game species that utilized the site were ring-necked pheasant,valley and mountain quail, Hungarian partridge, and mourning doves (USFWS 1950). Habitat along the Bruneau River that was flooded was considered among the best in the Pacific Northwest for ring-necked pheasant. Furbearing animals were an important resource both above and below the dam site.

b. Post-construction

C. J. Strike Reservoir is currently a major wintering area for waterfowl and a good goose production area. Winter waterfowl counts average from 90,000 to 120,000. Canada geese make up approximately 8,000 to 10,000 of the birds. The largest numbers of waterfowl usually arrive in November and leave in January (IDFG 1980). Habitat for big game, upland game, and some furbearers has been limited by the project. Significant impacts were incurred by upland game birds and waterfowl populations when 3,000 acres of excellent habitat were lost in the Bruneau River area. However, in the wildlife management area, crops have been planted to benefit upland game birds, as well as waterfowl. No plantings or habitat manipulations have occurred for big game and populations seem to have remained stable since completion of the -project. Impacts on furbearers are unknown although there is currently a stable population in the reservoir area (IDFG, 1980).

The impacts from farming and grazing practices were not addressed in the early stages of development. IDFG recognized a need for fencing the wildlife management area to protect the habitat but this was partially rejected by IPC, FPC, BLM and the livestock operators (IPC 1951). Immediately after construction, and when the cooperative agreements were being drawn, it was concluded that certain areas would not be fenced (USDI 1955). This action permitted access to the Snake River for livestock watering purposes on the management areas. Domestic livestock access to the C. J. Strike management area has caused deterioration of wildlife habitat along the shoreline and certain marsh areas (G. DeReus, IDFG, pers. comm.).

At the time of licensing of the C. J. Strike project, there were no lists of rare or endangered species. The bald eagle does winter in the vicinity of the project and utilizes large cottonwoods that are along the shoreline. Peregrine falcons occurred at one time in the project area but none have been reported in the past several years. There are approximately ten nesting sites for golden eagles and numerous sites for prairie falcons (G. Harris, IDFG, pers. comm.). There was no documented assessment of impacts to other nongame species. However, the loss of riparian vegetation as well as the shrub-steppe community resulted in the loss of habitat for many migratory and resident nongame species.

V. WILDLIFE MITIGATION HISTORY

The guarantees now recognized in Federal water projects, relative to wildlife impact assessment, were not required at the time of licensing for the C. J, Strike project in 1952. The only law in effect was the 1934 Fish and Wildlife Coordination Act (FWCA), and it did not require project consideration, of fish and wildlife resources.

a. Mitigation Requested or Proposed

IPC applied to the FPC on August 16, 1950 for a license to build the C. J. Strike hydroelectric project. As noted above, preliminary investigation showed that considerable wildlife habitat would be lost. On September 8, 1950, IDFG requested the FPC to include as part of the license the following five-point plan to be accomplished by IPC as restitution for loss of wildlife lands.

(1) Acquire fee simple title to all private lands free of reservations, including all water rights for lands on all least subdivisions touching the proposed reservoir.

(2) Request withdrawal of all federal lands either for power or wildlife uses on all least subdivisions touching the proposed reservoir.

(3) Acquire 160 acres outside the project boundaries for use by IDFG for wildlife purposes.

(4) Purchase by fee simple title, free of reservations, all privately owned islands in the Snake River between Bliss Dam and the Oregon line, as restitution for the inundated islands. (Seven islands were involved, a total of 444.8 acres.)

(5) Fence the perimeter of acquired lands and federal withdrawal lands in the Bruneau River valley to exclude domestic sheep and livestock. Grant full administration of all acquired lands to IDFG for wildlife management (IDFG 1950).

The IDFG request was followed by a report from the U.S. Department of Interior on November 3, 1950 which outlined similar requirements for wildlife mitigation. Interior's report also recommended that:

(1) Islands below the dam for ten miles be protected from erosion.

(2) Lands be administered by the IDFG for wildlife management purposes and that means of increasing productivity of the area and furthering public uses for recreational enjoyment be developed in cooperation with IDFG and USFWS (USDI 1950).

Several meetings were held by IPC, IDFG, and USFWS on changes to the requests. On August 23, 1951, IPC responded to all the requests as follows:

(1) IPC will acquire, in most cases, fee simple title to all lands in project boundary . In most cases, a full 40 acre subdivision will be acquired.

(2) Withdrawal of public lands rests with the Federal Government.

(3) Lands outside the project boundaries should not be purchased as part of the project.

(4) Fencing of the entire Bruneau River valley would cause considerable local opposition from ranchers who need access to water, but agreed to fence portions of the valley.

(5) Some islands immediately below the dam site would be acquired and could be used for wildlife purposes. All islands below the dam, however, would not be purchased since the project would have little effect on the islands and some were quite large with farming operations.

(6) Precautions would be taken to prevent downstream erosion (IPC 1951) .

b. Mitigation Agreements or Requirements

After much discussion and negotiation, a signed agreement resulted among IPC, IDFG, and USFWS on the management of lands associated with the C. J. Strike project. Provisions of the agreement are:

(1) IDFG will manage for fish, wildlife and recreational use all C. J. Strike project lands owned or controlled by IPC that are not required by the company for use.

(2) IDFG will be assigned sufficient water for wildlife management purposes.

(3) IDFG may construct and maintain roads, buildings and make other capital improvements as needed to administer for wildlife,

(4) IPC will attempt to purchase Dilley and Stevens Islands before January 1, 1954. In case of failure to purchase, IPC will pay $1,000 to USFWS and $500 to IDFG so they may purchase the islands.

(5) Bank protection will be constructed on any islands ten miles downstream if serious erosion occurs (MOA 1953).

c. Mitigation Implemented

The mitigation agreement created the C.J. Strike Wildlife Management Area and allowed IDFG to start a wildlife program. The management area consists of 8,400 acres. It serves as a winter and spring area for migrating and wintering waterfowl. Goose nesting platforms were constructed and islands were created by cutting through sand bars and peninsulas (IDFG 1980).

Dilley Island was purchased and is currently part of the Deer Flat refuge system managed by the USFWS (pers. comm. IPC).

VI. CURRENT STUDIES AND PLANNING

No studies are underway or pending; nor is further planning being considered.

VII. REFERENCES CITED

Federal Power Commission. 1951. Order dismissing preliminary permit and issuing license. February 6, 1951.

Idaho Department of Fish and Game. 1950. Letter to FPC concerning wildlife resources in the C. J. Strike area. September 8, 1950.

_____. 1980. Policy plan for C. J. Strike Management Area (draft).

Idaho Power Company. 1950. Application for license, Project No. 2055. August 16, 1950.

_____. 1951. Letter to FPC concerning wildlife resources in C. J. Strike area. August 23, 1951.

Memorandum of Agreement. Eetween the Idaho Power Company, Idaho Dept. of Fish and Game, and U.S. Fish and Wildlife Service. Signed July 24, 1953.

U.S. Department of Interior. 1950. Report on fish and wildlife resources in relation to Project No. 2055. November 3, 1950.

_____ 1955. Publication of withdrawal and reservations of lands. BLM Document No. 25, Published in Federal Register February 16, 1955.

APPENDIX A

Study Team

Arch Mehrhoff
Signe Sather-Blair

APPENDIX B

Consultation/Coordination

A. Project Contacts

1. Bureau of Land Management

Bill Ireland

2. Idaho Department of Fish and Game

Ralph Pehrson
Gene deReus
Guy Harris
Lloyd Oldenburg
Richard Orcut
Walt Bodie

3. Idaho Power Company

Larry Wimer

4. U. S. Fish and Wildlife Service

John Wolflin

B. Summary

Dates	Agency	Summary
October 1 - November 15, 1983	Bureau of Land Management	Obtained information on their involvement during project planning and current management practices,
October 1 - November 15, 1983	Idaho Dept. Fish and Game	Obtained information on past and current wildlife use in C. J. Strike area.
October 1 - November 15, 1983	Idaho Power Company	Obtained information on past and current project operations and past wildlife mitigation efforts.
October 1 - November 15, 1983	U.S. Fish and Wildlife Service	Discussed waterfowl resources in the project area.

APPENDIX C

Comments

(1) State Agency (IDFG)

(2) Federal Agencies (BLM and USFWS)

(3) Indian Tribes

No formal comments were received

(4) Facility Operator (IPC)

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

December 4, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

Ihank you for the opportunity to review the Wildlife Mitigation Status Report for the C. J. Strike Hydroelectric Project.The Idaho Department of Fish and Game supports the goal of the Northwest Power Act and the Columbia River Basin Fish and Wildlife Program "to protect, mitigate, and enhance . . . wildlife to the extent affected by the development and operation of any hydroelectric project of the Columbia River and its tributaries...."

This goal may or may not have been achieved at the C. J. Strike Project; however, the status report demonstrates that considerable mitigation for wildlife habitat losses was accomplished.

Any additional measures to enhance this project's values for wildlife could be accomplished under the 1953 agreement among the Idaho Power Company, the U. S. Fish and Wildlife Service, and the Idaho Department of Fish and Game.

Sincerely,

Jerry M. Conley
Director

JMC:BM:db

NOV 2 1 1984

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Boise District
3948 Development Avenue
Boise, Idaho 83705

IN REPLY
REFER TO

6520

NOV 16 1984

Mr. John Palensky, Director
Attn: Mr. James Meyer
Division of Fish and Wildlife
Department of Energy
Bonneville Power Administration
Portland, OR 97208

Dear Mr. Palensky:

This letter is in response to your request for our review of the report entitled "Wildlife Migration Status Review" for C. J. Strike.

Generally, we found the report to be quite informative and provides background which will be useful to us in our management of the public lands in this area. We only have two specific points we would like to address. The first point is in regard to pre and post project wildlife population estimates. Pre-project estimates of certain wildlife species provided by the Idaho Department of Fish and Game should be followed by post-project estimates of the same species. It was also not stated-whether the pre-project populations of ducks and geese represented nesting or wintering birds. The post-project estimates are specific to wintering waterfowl with only a qualitative remark on goose production. In other words the following questions remain unanswered: 1) How was waterfowl production affected by the project; 2) How were wintering waterfowl populations affected by the project; 3) To what extend (quantified) were the other species affected by the project.

The second point relates to bald eagles and riparian habitat. We would like to encourage a more complete analysis of the pre and post conditions affecting these two important resources. The report relates to significant losses of riparian habitat. Quantification of this loss should be possible from pre-project aerial photography. Data on bald eagles may be available from

knowledgeable persons familiar with this area prior to the project. Thank you for the opportunity to comment on this report. We look forward to reviewing similar reports on the other projects aajoining Boise District public lands. We are also interested in subsequent reports on loss statements and recommended mitigation on these projects.

Sincerely yours,

J. David Brunner
Associate District Manager

cc: U.S. Fish & Wildlife Service
4620 Overland Road, Room 209
Boise, ID 83705

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

in Reply Refer To: Your Reference

December 11, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter, we have reviewed the Wildlife Mitigation Status Report for the C. J. Strike Project in south central Idaho. The following comments are being provided for inclusion in the final report.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. Based on the report's content it is evident that the construction and operation of the project resulted in adverse impacts to wildlife resources which have not been adequately identified. Therefore, the Service recommends that the Bonneville Power Administration provide funds to conduct an evaluation of the impacts of the project on wild1ife resources.

An evaluation of the project's impact on wildlife resources should be conducted by a lead resource agency which would then be responsible for coordinating the study with other appropriate agencies. Agencies that should be involved in such an evaluation include the Idaho Department of Fish and Game, Bureau of Land Management, and the Fish and wildlife Service as well as the Idaho Power Company. The evaluation should include an analysis of 1) immediate land post-construction losses, 2) mitigation actions which have been implemented, 3) current project area conditions. We recommend that the evaluation be habitat-based and supported by existing wildlife population data when available. We suggest that collection of new population data be limited and applied only to species of special interest, i.e. bald eagle.

In conclusion, we believe that the analysis of losses and mitigation needs should be done as quickly as possible. However, we also recognize that the mitigation recommendations should be based on a technical assessment of losses.

Sincerely yours,

James W. Teeter
Acting Assistant Regional Director
Habitat Resources

SNAKE RIVER

HYDRO POWER

IDAHO POWER COMPANY

BOX 70 • BOISE, IDAHO 83707

October 23, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P O Box 3621
Portland, OR 97208

Re: PJS

Attn: Mr. James Meyer

Dear Mr. Meyer:

Herewith are the comments of Idaho Power Company regarding the Project Reports on the "Wildlife Mitigation Status Reviews" for American Falls Dam and C.J. Strike Dam.

Respectfully,

Larry R. Wimer
Fisheries Program
Coordinator

LRW:lf

American Falls

Section III. A. paragraph 2, last sentence;

The power plant has a total installed (nameplate) capacity of ~~106~~ 92.4 megawatts (Idaho Power Company License for FERC Project 2736).

Section III. C. paragraph 5, last sentence;

It has a ~~maximum~~ total installed (nameplate) capacity of ~~106~~ 92.4 megawatts...

Section III. D. 3. general comment;

The Order issuing the License for Project 2736, issued March 31, 1975, contained the following language regarding the concern of Indian Rights: ...the proposed hydroelectric project includes only clearly defined areas downstream of the Replacement Dam, and does not include the dam or the reservoir. (FERC) records further indicate that no tribal lands are included within the boundaries of the proposed hydroelectric project.

"Additionally,... the Applicant has no control over the water releases at the Replacement Dam, nor can it affect tribes' storage rights in the reservoir. In short, it is our (FERC) opinion that Project No, 2736 will not affect tribal lands by its operation under the terms of the License herein." {Idaho Power Company License for FERC Project 2736).

Section V. 3. paragraph 1, second sentence;

Article 17 makes Idaho Power Company responsible for constructing, maintaining, and operating reasonable facilities,,..

C.J..Strike

Section III, a. paragraph 2, second sentence;

It is approximately 120 feet in height, ~~20~~ 30 feet in width at the top elevation and ~~740~~ 675 feet in width at the base

Section III. a. paragraph 3, first sentence;

The powerhouse, adjacent to the dam, on the south side of the river, consists of reinforced concrete substructures supporting three semi-outdoor type ~~27,500~~ 27,600 kilowatt generators.

Section III. d. (1). paragraph 1, second sentence;

~~The reservoir created by the dam is not used for live storage purposes, except in the upper two feet of the reservoir.~~ Although the dam im-

oounds a rather large body of water, two reservoir elevation constraints limit the project to a daily load shaping operation. In order to accommodate fish spawning in the reservoir above C.J. Strike Dam, Idaho Power Company in response to the State of Idaho Department of Fish and Game, is currently limiting the forebay fluctuations to not more than one foot during the period of April 15 to June 15 of each year. During the balance of the year, the fluctuatins are limited to not more than 5 feet due to the project design.

Section III, d. (1). paragraph 1, third sentence;

The use of water for short periods for peaking may reach a maximum of ~~16,000~~ 12,750 cubic feet per second.

APPENDIX D

Mitigation Instruments

(1) MOA between IPC, IDFG, and USFWS creating C. J. Strike Wildlife Management Area.

AGREEMENT

1 THIS AGREEMENT, Made and entered into this 24th day of July 1953 by and between IDAHO POWER COMPANY, a corporation organized and existing under and by virtue of the laws of the State of Maine duly qualified and doing business in the State of Idaho, hereinafter referred to as "Company" and the U S FISH AND WILDLIFE SERVICE, of the United States Department of the Interior by and through its Director, hereinafter referred to as "Service" and the IDAHO FISH AND GAME DEPARTMENT, a department of the State of Idaho, by and through its Director, hereinafter referred to as "Department";

W I T N E S S E T H:

2. WHEREAS, the Company, pursuant to license issued by the Federal Power Commission under the Federal Power Act, has constructed and owns and operates a hydroelectric project on the Snake River known as the C J Strike Hydroelectric Development with a dam across the Snake River in the West Half of Section 34 Township 7 South, Range 4 East, Boise Meridian forming a reservoir extending upriver approximately 32 miles on the Snake River and 7½ miles on the Bruneau River for which reservoir the Company purchased and presently owns, in addition to the lands lying below the pond elevation of 2475 feet, lands lying above the pond level and bordering the reservoir which lands, by virtue of their location with respect to the reservoir, form an ideal habitat for upland game birds and water fowl, and for the raising of food for said birdlife as well as sites for fish rearing ponds; and

3 WHEREAS, the Federal Power Commission in issuing the license to the Company for the construction of the C J Strike Hydroelectric project provided that the Company should and the Company desires to, co-operate with the Service and the Department in order to develop the fish and wildlife in the Snake River in and adjacent to the dam and reservoir, and to make the lands and waters herein referred to available for the propagation, feeding and conservation of fish and wildlife, and for hunting, fishing and other recreational uses and purposes by the public, subject to the Company's requirements in the operation of the project;

4. NOW, THEREFORE, in consideration of the covenants and agreements of the parties herein contained, the said parties have contracted and agreed, and do hereby

contract and agree, as follows:

5. THE COMPANY AGREES:

(a) To permit the Department, subject to the primary purpose of the project, to use all of the lands now owned or controlled by the Company, and not otherwise required for conflicting use by the Company, acquired for reservoir purposes or in connection with the C J Strike Project, including that portion of the Northwest quarter of the Southeast quarter (NW¼SE¼) of Section 16, Township 1 South, Range 7 East, Boise Meridian, effective as of the termination of the presently existing life easement; said permission shall be limited by the terms of those permanent farming and grazing easements now of record affecting any lands between the 2645 and 2660 contour, and any farming and grazing leases for the year 1953 on those lands of the Company located in the Bruneau Valley, and also exclusive of that certain parcel of land on the south bank of the Snake River at or near the Loveridge (or Bruneau) Bridge used by lessees of the Company as a small boat moorage and for related recreational uses; said lands to be used and managed by the Department for the propagation, feeding and conservation of fish, waterfowl and wildlife, and for hunting, fishing and other general recreational uses by the public;

(b) To assign to the Department, for use on the aforesaid land in raising crops, maintaining fish ponds, and other related purposes, sufficient water from the decreed or appropriated water rights for lands owned by the Company in Bruneau Valley to meet the Department's requirements, provided, however, that the Department shall pay the assessments and operation and maintenance charges for all water so assigned or used, and shall use the water and water rights so as to prevent their loss by abandonment, lapse, or otherwise, and shall inform the Company as soon as practicable of the amount of water desired in order that the Company may, if it desires, make other arrangements for the water not required;

(c) The Department may, at its own risk, construct and maintain on the lands covered under this agreement, any roads, buildings, fences, canals, dikes or other structures necessary for the proper administration of the fish, wildlife and recreational resources of the area, with the title to those improvements capable of being removed remaining in the State of Idaho.

(d) To attempt to purchase Dilley and Stevens Islands on or before January 1, 1954, and in the event of failure to complete such purchase, to provide, upon request, funds to the United States in the maximum amount of $1,000.00 for

Dilley Island in Sections 2, 11 and 36, Township 2 North, Range 4 West, Boise Meridian, and to the State of Idaho in the maximum amount of $[illegible].00 for Stevens Island in Section 34, Township 1 South, Range 7 East, Boise Meridian, for use in making the purchases of said islands:

(e) After notice and hearing, and upon order of the Federal Power Commission, to construct bank protection facilities upon any Federal or State owned islands, within a distance of 10 miles downstream from the C J Strike Dam that show signs of serious erosion damage resulting from fluctuating water levels caused by operation of said dam.

6. THE DEPARTMENT AGREES:

(a) That in the operation, control and management of the project lands turned over to it by the Company, it will operate said lands so as to provide at all times the maximum amount of benefit, enjoyment and use by the general public, and will allow a substantial portion of said lands and adjacent reservoir to be available to the public as a hunting and fishing area during the general open seasons;

(b) That it will comply with all federal, state and local laws, rules and regulations with respect to the lands covered by this agreement, including noxious weed control;

(c) To maintain and use the cultivated lands in the Bruneau Valley in accordance with good farming practices, preventing erosion, and rotating and fertilizing the lands as required;

(d) To release the Company from any and all claims or liability for any damage to buildings, fences, canals, dikes or other structures, constructed on the lands which it is permitted to use, occurring as a result of flooding, wave action, seepage, or sub-irrigating, or otherwise as a result of the existence, operation or use of the reservoir.

7. THE SERVICE AGREES:

(a) That it will co-operate with the Department in the control and use of the backwater lands, in order that the area shall be developed to the maximum advantage for hunting, fishing, and recreation.

8. THE SERVICE AND THE DEPARTMENT AGREE:

(a) That any permissions granted in connection with this agreement and

the use of said lands, shall be subject to all the conditions and terms of the License for the Project, and they specifically reserve to the licensee, its successors or assigns, the right to use said lands and waters at all times and for any and all purposes as may be by the Company deemed necessary or desirable for the Company's full use and operation of the Project.

9. THE COMPANY, THE SERVICE, AND THE DEPARTMENT AGREE:

(a) The Company shall have and it hereby reserves, the right to grant permits to cross lands of the Company bordering on or adjacent to said reservoir for limited ways or approaches for stock watering purposes, subject to approval of the Department as to number, location and size, and for canals or pipelines for irrigation use, and to install pumping plants and to pump and convey water from the reservoir for said purposes;

(b) That this agreement shall be subject to the approval and concurrence of the Federal Power Commission.

IN WITNESS WHEREOF, the Idaho Power Company has hereunto caused its corporate name to be subscribed and its corporate seal to be affixed by its officers, the Director of the U S Fish and Wildlife Service has subscribed his name for and on behalf of the Service, and the Director of the Idaho Fish and Game Department has subscribed his name for and on behalf of the Department.

IDAHO POWER COMPANY

(CORPORATE SEAL)

By _____
President

ATTEST:

_____
Secretary

U S FISH AND WILDLIFE SERVICE

By _____
Director

IDAHO FISH AND GAME DEPARTMENT

By _____ 7/28/53
Director

Wildlife Mitigation Status Report

CABINET GORGE HYDROELECTRIC PROJECT

Final Report

Prepared by:

R. C. Martin
L. A. Mehrhoff

Idaho Department of Fish and Game
Jerry M. Conley, Director

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number 83-478D
in compliance with
Northwest Power Planning Council's
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
December 1984

TABLE OF CONTENTS

This report addresses only the Idaho portion of the Cabinet Gorge Project. About 99% of the reservoir is in Montana; that portion was addressed by the Montana Department of Fish, Wildlife, and Parks (MDFWP 1984).

I. PROJECT NAME

Cabinet Gorge Fiydroelectric Project

II. PROJECT OPERATOR

Washington Water Power Company (WWPC)

III, PROJECT DESCRIPTION

A. Location and Size

Cabinet Gorge Dam is on the Clark Fork River, 26 miles southeast of Sandpoint, Idaho. It is about 10 river miles upstream from Pend Oreille Lake, and l/2 mile downstream from the Montana border.

The dam is a reinforced concrete arch structure 140 feet high and 375 feet long (MDFWP 1984). The spillway is a concrete overflow section on the dam; it has a capacity of 230,000 cubic feet per second (cfs), although the highest flow ever recorded was 195,000 cfs (U.S. Fish and Wildlife Service (USFWS) 1966). The 4 generators, located in the power plant 300 feet downstream from the dam, have a capacity of 200 megawatts (Federal Power Commission (FPC) 1951).

The total length of the reservoir is 20 miles. Its total area is 3,200 acres at a full pool elevation of 2,175 feet. About l/2 mile of the reservoir is in Idaho. The surface area in Idaho is about 30 acres.

B. Authorized Purposes

The project was built and licensed for power production (FPC 1951).

C. Brief History

In 1950, WWPC applied for a license to construct the project (WWPC 1950). License was granted in 1951; construction began that year. In 1952, the reservoir began filling, and the first power was produced (USFWS 1960).

D. Other Pertinent Data

1. Water Level Fluctuation and Timing

Operation of the plant is virtually run-of-the-river (WWPC 1950). When power is produced at full capacity, 35,700 cfs are released through the turbines. During spring flooding, flows often exceed 90,000 cfs. Project operation causes daily fluctuations of 6 to 7 feet downstream (USFWS 1966). Daily and weekly reservoir fluctuations may be up to 2 and 4 feet, respectively, depending on seasonal flows and power demands. Maximum possible drawdown is about 10 feet. This drawdown is conducted infrequently to allow dam inspections and maintenance of a downstream fish spawning channel. Since 1973, WWPC has voluntarily maintained a minimum flow of 3,000 cfs. This flow is maintained except during inspections or maintenance. (R. Woodworth, WWPC, pers. commun.).

2. Land Ownership

About 1 mile of reservoir shoreline is in Idaho. WC has ownership or control of the entire shoreline. Their project lands also extend a short distance along the shoreline downstream from the dam. In some locations, WWPC's reservoir shoreline ownership extends well above the high-water line. Surrounding lands adjacent to WWPC's lands are owned by other private concerns. The nearest public land is the Kaniksu National Forest to the north and south; it is within 1.5 miles of the dam.

3, Indian Rights

The Indian rights issue in northern Idaho is complex and unresolved at this time. Tribes and Bands that probably historically hunted and fished on the lower Clark Fork River include the Coeur d'Alene Tribe, the Bonners Ferry Band of the Kootenai Tribe, the Spokane Tribe, the Kalispell Tribe, and the Confederated Salish-Kootenai Tribes of the Flathead reservation. Specific tribal rights are unknown at this time. The Upper Columbia United Tribes (Bonners Ferry Band of Kootenai, Coeur d'Alene Spokane, and Kalispell Tribes) began a study in early October, 1984, to delineate traditional fishing areas and areas of concern for each tribe. A draft of the study report is expected in December (J. LeBret, BIA, pers. commun.).

IV. WILDLIFE SPECIES AND HABITAT ASSESSMENTS

A. Pre-construction

The MDFWP researched wildlife in the area of Cabinet Gorge and Noxon Rapids Reservoirs. They documented the pre-construction existence of white-tailed and mule deer, elk, black and grizzly bears, mountain lions, bobcats, river otters, beavers, bald eagles, ospreys, ruffed grouse, Canada geese, and other waterfowl. Many other wildlife species were also present (MDFWP 1984).

Although project lands in Idaho differ from lands considered in Montana, geographic proximity and the similar existence of river, riparian, and coniferous forest habitats support the inference that those species occurred in the Idaho portion of the inundated area. However, habitats in the Idaho portion probably supported lower densities of most species than the densities supported by habitats in the Montana portion.

B. Post-construction

The dam was constructed in a narrow, deep canyon. In Idaho, the project inundated about 30 acres of free-flowing river, riparian, and upland habitats. About 1 mile of shoreline was flooded.

About l/6 mile of the north shore above the dam is rock cliffs. Most of the remainder of the reservoir shoreline slopes steeply into the water. Shoreline vegetation is dominated by a mixed-coniferous forest comprised mostly of hemlock, Douglas fir, larch, and ponderosa pine. Some poplars are present. A portion of the south shore is adjacent to a railroad, lacks trees, and is vegetated by grasses and weeds.

No studies or surveys were found that assessed wildlife popuiations directly on, or adjacent to, the Idaho portion of the reservoir. However, studies are available for the lakes downstream and upstream. Downstream, Pend Oreille Lake wildlife was discussed by the USFWS (1984).

The USFWS (1959) and the MDFWP (1984) assessed wildlife of the Cabinet Gorge and Noxon Rapids reservoirs area. The MDFWP study area is immediately upstream from the Idaho portion of Cabinet Gorge Reservoir. However, differences in habitat quality and types affect the applicability of their study to Idaho.

The most common game species by Cabinet Gorge Reservoir in Idaho are white-tailed deer and ruffed grouse (P. Hanna, IDFG, pers. commun.). Bald eagles concentrate on Pend Oreille Lake during winter. Numerous

bald eagles migrate and feed along the Clark Fork River (R. Howard, USFWS, pers. commun.). Several active osprey nests are downstream from the dam; no nests exist along the Idaho portion of the reservoir.

V. WILDLIFE MITIGATION HISTORY

A. Mitigation Requested or Proposed

None.

B. Mitigation Agreements or Requirements

In the project license, the FPC (1951) stated that "the Commission reserves the right to impose such reasonable rules and conditions in the interest of conservation of fish and wildlife as may be hereafter prescribed by the Commission."

C. Mitigation Implemented

None .

VI. CURRENT STUDIES AND PLANNING

MDFWP is developing and proposing a long-term habitat management plan for WWPC's lands along the Montana portion of Cabinet Gorge Reservoir.

The Bonneville Power Administration, WWPC, and IDFG are entering into a cooperative agreement for a kokanee hatchery about l/2 mile below Cabinet Gorge Dam. IDFG (1984) predicts the increased kokanee fishery will increase bald eagle populations wintering on Pend Oreille Lake and the lower Clark Fork River.

VII. REFERENCES CITE3

Federal Power Commission (FERC). 1951. Order issuing license (major); Cabinet Gorge Hydroelectric Project no. 2058.

Idaho Department of Fish and Game. 1984. Draft: biological evaluation of the effects of the proposed Cabinet Gorge Fish Hatchery on bald eagles. Unpubl. report, Coeur d'Alene.

Montana Department of Fish, Wildlife, and Parks. 1984. Wildlife impact assessment and summary of previous mitigation related to hydroelectric projects in Montana; vol. 2(b): Clark Fork River projects -- Cabinet Gorge and Noxon Rapids Dams.

U. S. Fish and Wildlife Service. 1959 Clark Fork River Basin, Montana: a survey of fish and wildlife resources in relation to Federal water development projects.

_____. 1960. Initial follow-up report for Cabinet Gorge, FERC no. 2058, Idaho - Montana.

_____. 1966. Supplementary follow-up report for Cabinet Gorge Project, FERC no. 2058, Clark Fork River, Idaho - Montana.

_____. 1984. Wildlife mitigation status review for Albeni Falls Dam.

Washington Water Power Company. 1950. Application for license for hydroelectric development at Cabinet Gorge, Idaho.

A P P E N D I C E S

APPENDIX A

STUDY TEAM

Idaho Department of Fish and Game

Bob Martin
Arch Mehrhoff

APPENDIX B

CONSULTATION/COORDINATION

1. Project Contacts

Washington Water Power Company

Roger Woodworth

Idaho Department of Fish and Game

Kris Moser
Paul Hanna
Jerry Neufeld
Ralph Pehrson
Lou Nelson

U.S. Forest Service

Bob Rainville
Al Kristerson

U.S. Fish and Wildlife Service

Signe Sather-Blair
Rich Howard

Coeur d'Alene Tribe

Norris Booth
Richard Mullan

Bonners Ferry Band, Kootenai Tribe

Ken Keller

Spokane Tribe

Jim LeBret

Kalispell Tribe

Larry Goodrow

Confederated Salish-Kootenai Tribes

Bill Mathews

Montana Department of Fish, Wildlife, and Parks

Chris Yde
Marilyn Wood
John Mundinger
Joe Huston

2. Summary

Dates	Agency	Summary
6 June	WWPC, USFWS	Sent letters requesting contact person.
27 June	USFS	Contacted Panhandle and Kootenai offices.
9 July	USFWS	Meetings at endangered species and ecological services offices.
5 August	WWPC	Sent letter requesting information from biologist.
9 August	Coeur d'Alene Tribe	Called their office.
20 August	WWPC	Received information from biologist.
7 September	WWPC, Coeur d'Alene Tribe	Mailed rough draft of status report.
19 September	WWPC	Received comments regarding rough draft.
28 September	WWPC	Met with biologist; toured the project.
3 October	Coeur d'ALene Tribe	Called their office.
3 October	Kootenai Tribe	Called their Bonners Ferry office.
3 October	Conf. Salish-Kootenai Tribes	Called their office.

4 October	Kalispell Tribe	Called their office.
4 October	Conf . Salish-Kootenai Tribes	Received call from their office.
4 October	Kootenai Tribe	Received call from their Bonners Ferry Office.
5 October	Spokane Tribe	Called their office.
5 October	WWPC	Mailed second rough draft to biologist.
10 October	WWPC	Received comments regarding second rough draft.

APPENDIX C

FORMAL COMMENTS ON OCTOBER 1984 DRAFT REPORT

State Agency: IDFG

Federal Agencies: USFWS
USFS (no formal comments received)

Tribes: Coeur d'Alene
Kootenai, Bonners Ferry Band (no formal comments received)
Spokane (no formal comments received)
Kalispell (no formal comments received)
Conf. Salish-Kootenai (no formal comments received>

Project Operator: WWPC

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

December 4, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, Oregon 97288

Dear Mr. Palensky:

Thank you for the opportunity to review the Wildlife Mitigation Status Report for the Idaho portion of the Cabinet Gorge Hydroelectric Project. The Idaho Department of Fish and Game looks forward to seeing fulfillment of the Northwest Power Act's and the Columbia River Basin Fish and Wildlife Program's goal "to protect, mitigate, and enhance . . . wildlife to the extent affed by the development and operation of any hydroelectric project of the Columbia River and its tributaries.,.."

This goal has not yet been achieved at the Idaho portion of the Cabinet Gorge Project. The status report demonstrates that no mitigation for wildlife habitat losses was accomplished. This is understandable, considering that legal mandates and concerns for wildlife resources have changed since the project was built.

Although net impacts have not been determined it is probable that small impacts to wildlife occurred as a result of the project inundating l/2 mile of free-flowing river and 30 acres of wildlife habitat. In order to "protect, mitigate, and enhance" wildlife resources affected by the project, we recommend that the appropriate parties discuss enhancement measures to improve this project's values for wildlife. The Idaho Department of Fish and Game commends the environmental consciousness of the Washington Water Power Company and looks forward to working with the Company on this project.

Sincerely,

Jerry M. Conley
Director

JMC:BM:db

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

In Reply Refer To:

Your Reference:

December 11, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter, we have reviewed the Wildlife Mitigation Status Report for the Cabinet Gorge Project in northern Idaho. We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project.

Sincerely yours,

James W. Teeter
Assistant Regional Director
Habitat Resources

NOV 0 9 1984

Division of Planning and Natural Resources
COEUR d'ALENE TRIBE OF IDAHO
Coeur d'Alene Tribal Headquarters
PLUMMER, IDAHO 83851

M E M O T O :

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Attn: Mr. James R. Meyer

Concerning:

Wildlife Mitigation Status Reivew for Cabinet George Dam

III. D.3. Indian Rights

The Cabinet George Dam lies within the Coeur d'Alene Tribe's traditional hunting and fishing area, the former of which extended well beyond Clark Fork, the latter to include Clark Fork. Tribal members still hunt and fish in this area, and to the extent, if any, that the dam has impacted these resources the Tribe's rights to take fish and wildlife have been impacted as well.

VI. CURRENT STUDIES AND PLANNING

Apparently the mentioned planning is going ahead without reference to Indian hunting rights, without any investigation into those rights and their implications, and without any consultation with interested tribes. These oversights should be corrected.

There is no indication, either, that the implications to the resources have been adequately investigated. The lack of any mitigation history or previous studies suggests that such are needed before rather random "mitigation" is undertaken. Whether kokanee and/or other fish and wildlife introductions constitute "mitigation" is open to question, for example. Idaho Fish and Game seems to introduce and hope. I hope mitigation of wildlife is undertaken with more preliminary study and planning than seems to be the custom.

James C. Albrecht

James C. Albrecht
Natural Resources
Coeur d'Alene Tribe

NOV 0 6 1984

FRED A. SHIOSAKI
Manager
Environmental Affairs

THE WASHINGTON WATER POWER COMPANY

Electric and Natural Gas Service

P.O. BOX 3727 • SPOKANE, WASHINGTON 99220 • (509) 489-0500

October 31, 1984

Mr. John Palensky, Director
Division of Fish & Wildlife
Bonneville Power Administration
P. O. Box 3621
Portland, OR 97208
ATTN: Mr. James Meyer

Re: "Wildlife Mitigation Status Review - Cabinet Gorge Hydroelectric Project, Idaho"

Dear Mr. Palensky:

As per Mr. Meyer's letter of request dated October 19, 1984, my staff has reviewed the above-referenced document. The information presented in this status review appears to be correct, as written. The Washington Water Power Company has no substantive comments on the content of this report.

As always, WWP is willing to discuss any present-day environmental issues and work with responsible agencies, organizations, and individuals to further the environmental values of this project, consistent with its established purpose.

Sincerely,

Fred A. Shiosaki

RDW:kmc
cc: M. Montgomery (NPPC)

L-15

Wildlife Mitigation-Status Report

IDAHO FALLS HYDROELECTRIC PROJECT

Final Report

Prepared by:

R. C. Martin
L. A. Mehrhoff

Idaho Department of Fish and Game
Jerry M. Conley, Director

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number 83-478D
in compliance with
Northwest Power Planning Council's
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
December 1984

TABLE OF CONTENTS

I. PROJECT NAME

Idaho Falls Hydroelectric Project

11. PROJECT OPERATOR

City of Idaho Falls (City)

III. PROJECT DESCRIPTION

A. Location and Size

The project consists of 3 power plants on a 7-mile reach of the Snake River. The City plant is in downtown Idaho Falls, Idaho. The Upper plant is 5 miles upstream from the City plant. The Lower plant is 2 miles downstream from the City plant.

The Upper site has 2 dams. Dam no. 1 is a concrete and earthfill structure 23 feet high and 600 feet long. It is across the east channel of the river. It has one 30-inch-square sluice gate and two 150-foot by 10-foot pelican gates. The maximum capacity of flood flow is 61,000 cubic feet per second (cfs). Dam no. 2 is a concrete and earth-fill structure 33 feet high and 470 feet long. It is across the west channel of the river, about 1,800 feet downstream from dam no. 1. It has one 40-foot by ll-foot pelican gate (Federal Energy Regulatory Commission (FERC) 1979). The powerhouse is an integral part of the dam, and contains an 8,000 kilowatt generator.

The Upper dams, at elevation 4,734.7 feet, impound a reservoir 2 miles long, with a normal surface area of about 100 acres (FERC 1979).

The City dam is a concrete diversion dam 30 feet high and 1,970 feet long. It contains a 40-foot by 5-foot Bascule gate by a trashrack and a 20-foot by 5-foot Bascule gate adjacent to the powerhouse. The maximum flood discharge capacity over the dam is 75,000 cfs. The powerhouse is about 500 feet downstream from the dam, but adjacent to an island which effectively increases the length of the dam (FERC 1979). It contains an 8,000 kilowatt generator.

The City dam, at elevation 4,694.7 feet, impounds a reservoir about 1 mile long, with a normal surface area of about 50 acres (FERC 1979).

The Lower site consists of a 930-foot-long concrete dam across the west channel of the river, and a spillway across the east channel containing eight 20-foot by 14-foot radial gates, a 42-foot by 12-foot pelican gate, an old powerhouse, and a new powerhouse. The old powerhouse contains two 1,500 kilowatt generators (FERC 1979). The new powerhouse contains one 8,000 kilowatt generator.

The Lower dam and spillway, at elevation 4,674.5, impound a reservoir about 2 miles long, with a normal surface area of about 100 acres (FERC 1979).

Collectively, the Upper, City, and Lower power plants have a capacity of 27 megawatts. The total length of the reservoirs is about 5 miles. The total surface area is about 250 acres.

B. Authorized Purposes

The project was authorized for power production (FERC 1979).

C. Brief History

The City plant and diversion dam were built in 1913. The Upper plant and dams were built during the 1930s. The Lower plant and dam were built in 1946. None of the plants were licensed in 1976 when the Teton Dam flood damaged 2 of the hydroelectric developments, rendering them inoperable.

In 1978, the City filed an application to reconstruct the 3 developments. License was granted in 1979. Construction was completed in 1982.

D. Other Pertinent Data

1. Water level fluctuation and timing

Operation of the 3 developments is run-of-the-river. From 1928 to 1972, low flows averaged 3,354 cfs during October. Peak flows averaged 11,337 cfs during May. Maximum flow through the turbines is 6,000 cfs (City 1978). Reservoir storage capacities for the Upper, City, and Lower dams are 800, 400, and 800 acre-feet, respectively (FERC 1979)'.

2. Land Ownership

The City owns or controls the shoreline of the reservoirs. Lands adjacent to City lands are privately owned, except for small parcels of Idaho Department of Highways land.

3. Indian Rights

The City hydroelectric developments are within the ancestral hunting area of the Shoshone-Bannock Tribes. To date, they have not claimed any rights or voiced any interest in wildlife associated with the project.

IV. WILDLIFE SPECIES AND HABITAT ASSESSMENTS

A. Pre-construction

There were no studies that quantified wildlife populations before the developments were built. Historically, the upper mainstem Snake River supported a diversity and abundance of riparian vegetation and wildlife. However, the habitats and wildlife populations in Idaho Falls were adversely impacted before the power plants and dams were built. In 1884, the first canal system was built to support irrigated agriculture by Idaho Falls. The City and Lower plants are within the current city limits. The Upper plant is 1.5 miles north of the city limits. When the City plant was built in 1913, the city population was more than 5,000 people. When the Lower plant was built in 1946, the population exceeded 17,000 people (Marker 1975).

B. Post-construction

The City assessed the existing vegetation and wildlife species at their 3 sites. Woody vegetation at the City and Lower plants is predominantly willows, cottonwoods, Utah juniper, blue spruce, elms, and Russian olive. The City plant's lawn grasses are dominated by bluegrass. Cheat grass and crested wheatgrass are common by the Lower plant (City 1978).

The more rural Upper plant area contains mainly native species and exhibits a distinct heterogeneity, with 5 distinct microhabitats. There is an extensive sagebrush-grassland dominated by big sagebrush and rabbitbrush over a ground cover of wheatgrasses, fescues, and grama. There are smaller areas of juniper woodland, and a riparian area of willows. The river-scoured basalts near the shoreline support sparse willows and lichens, and there is an area near the south end of the island at the Upper plant that supports a community dominated by elms and bluegrasses (City 1978).

Forty mammal species were reported as known or expected to inhabit or visit any of the 3 power plant areas. Species observed included the coyote, beaver, muskrat, and mountain cottontail (City 1978).

There were 217 bird species reported as known or expected to use one or more of the 3 power plant areas at some time during the year. During the study 54 species were observed. Nesting species included the Canada goose, mallard, American kestrel, rock dove, mourning dove, great horned owl, long-eared owl, black-billed magpie, sage thrasher, red-winged blackbird, northern oriole, and others. Most nesting activity was by the Upper plant (City 1978).

Bald eagles are present during winter, primarily along the Upper reservoir. This area could potentially support nesting ospreys (R. Jones, U. S. Bureau of Land Nanagement, pers. commun.).

V. WILDLIFE MITIGATION HISTORY

Planning and construction of the original Idaho Falls hydroelectric developments occurred prior to the time formal, comprehensive impact assessments were required by law.

A. Mitigation Requested or Proposed

None.

B. Mitigation Agreements or Requirement&

The 1979 license requires the City to be responsible for the construction, maintenance, and operation of such reasonable facilities and project modifications as may be ordered by the FERC for the conservation and development of fish and wildlife resources (FERC 1979: Article 15).

The 1979 license requires the city to permit the United States or its designated agency to construct or improve fish and wildlife facilities on City lands (FERC 1979: Article 16).

The 1979 license requires the City to consult and cooperate with the U.S. Fish and Wildlife *Service* and other appropriate federal, state, and local agencies for the protection and enhancement of the natural resources and values of the project area (FERC 1979: Article 48).

C. Nitigation Implemented

None.

VI. CURRENT STUDIES AND PLANNING

None.

VII. REFERENCES CITED

City of Idaho Falls. 1978. Idaho Falls hydroelectric project: application for license.

Federal Energy Regulatory Commission. 1979. Order issuing license (major): project no. 2842.

Marker, J.L. 1975. Idaho Falls. Idaho Bicentennial Review, Idaho Bicentennial Commission. McGinnis Publishing Company, Boise.

APPENDICES

APPENDIX A

STUDY TEAM

Idaho Department of Fish and Game

Bob Martin
Arch Mehrhoff

APPENDIX B

CONSULTATION/COORDINATION

1. Project Contacts

City of Idaho Falls

Steve Harrison
Jeff Paine

U.S. Bureau of Land Management

Bob Jones

U.S. Fish and Wildlife Service

Signe Sather-Blair
Rich Hovard

Shoshone-Bannock Tribes

Jack Ross
Dan Christopherson
Dave Lundgren

Idaho Department of Fish and Game

Tracy Trent
Justin Naderman
Ralph Pehrson
Lou Nelson

2. Summary

Dates	Agency	Summary
6 June	All	Sent letter requesting contact person(s).
9 July	USFWS	Meeting at endangered species office.
17 July	City	Meeting at Electric Light Division office.
17 July	IDFG	Meeting at regional office.

18 July	Sho-Ban Tribes	Meeting at Fort Hall.
25 July	Sho-Ban	Sent letter requesting statement of rights and interests.
11 October	City	Mailed rough draft of status report.
18 October	City	Received comments regarding rough draft.
22-25 Oct.	IDFG	Discussed project with region. Toured the project.
25 October	USBLM	Discussed project with biologist.

APPENDIX C

FORMAL COMMENTS ON NOVEMBER 1984 DRAFT REPORT

State Agency:	IDFG
Federal Agencies:	USFWS USBLM (no formal comments received)
Tribes:	Shoshone-Bannock (no formal comments received)
Project Operator:	City of Idaho Falls (no formal comments received)

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

December 4, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, Oregon 97288

Dear Mr. Palensky:

Thank you for the opportunity to review the Wildlife Mitigation Status Report for the Idaho Falls Hydroelectric Project. The Idaho Department of Fish and Game supports the goal of the Northwest Power Act and the Columbia River Basin Fish and Wildlife Program "to protect, mitigate, and enhance . . . wildlife to the extent affected by the development and operation of any hydroelectric project of the Columbia River and its tributaries...."

This project inundated five miles of free-flowing river, with three of the miles being in an urban setting. The net impacts on wildlife are unknown at this time, but they are probably small. Measures to enhance this project's values for wildlife could probably be accomplished under the City's existing Federal Energy Regulatory Commission license.

Sincerely,

Jerry M. Conley
Director

JMC:BM:db

United States
Department of the Interior

Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

In Reply Refer To: Your Reference:

December 11, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Port1 and Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter, we have reviewed the Wildlife Mitigation Status Report for the Idaho Falls Project in eastern Idaho.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. We have only one general comment. The description for post-construction conditions identifies several mammal species and many bird species as being present in the project vicinity. We believe it is appropriate to note in the pre-construction discussion that similar species composition likely existed prior to the project and probably in greater abundance.

Sincerely yours,

James W. Teeter
Acting Assistant Regional Director
Habitat Resources

M-12

Wildlife Mitigation
Status Report

POST FALLS HYDROELECTRIC PROJECT

Final Report

Prepared by:

E. Chaney
S. Sather-Blair

U.S. Fish and Wildlife Service
Ecological Services Office
John P. Wolflin, Field Supervisor

Funded by the Bonneville Power Administration
Division of Fish and Wildlife
under agreement number DE-AI79-84BPl2149
Northwest Power Planning Council
Columbia River Basin Fish and Wildlife Program

Boise, Idaho
January 1985

TABLE OF CONTENTS

I. PROJECT NAME

Post Falls Hydroelectric Project

II. PROJECT OPERATOR

The Washington Water Power Company

III. PROJECT DESCRIPTION

a. Location and Size

The Post Falls Hydroelectric Project consists of three dams and a powerhouse located on the Spokane River in Kootenai County, Idaho, five miles west of Coeur d'Alene Idaho, and 20 miles east of Spokane, Washington. It is nine miles downstream from the natural outlet of Coeur d'Alene Lake which is considered part of the project's reservoir. The entire lake upstream from the project covers approximately 48,000 surface acres.

The powerhouse dam on the middle channel is a concrete gravity dam 215 feet long and 64 feet high. It contains six gates and six steel penstocks, and forms the east wall of the powerhouse. The spillway dam across the south channel is also a concrete gravity structure. It is 127 feet long and 25 feet high and contains six 6'x 13' wooden sluice gates. The spillway dam across the north channel is an L-shaped structure of gates and piers, 431 feet long and up to 31 feet high. The piers are concrete and the gates are steel. There is a 100'x 14' rolling sector gate, seven 21'x 12' taintor gates and one 12'x 12' taintor gate.

Power is produced by six generators, each driven by two Francis turbines. Five of the generators are rated at 2,250 kilowatts each and one is rated at 3,500 kilowatts. Dependable capacity is estimated at 10.5 megawatts (WWPC 1980).

b. Authorized Purposes

The project was built to produce hydroelectric energy before passage of the Federal Power Act of 1920, the Flood Control Act of 1950 or other pertinent legislation. The project was not licensed by the federal government until July 22, 1981, when it was included in a license previously granted the Washington Water Power Company (WWPC) under the Federal Power Act for four other projects on the Spokane River (pers. comm. WWPC).

c. Brief History

The first dam was constructed in the north channel during the 1870's. Three more dams were later constructed in each of the channels in 1886 and 1887. Reconstruction of these dams to produce hydroelectric power began in 1904. Three generators began producing power in 1906, a fourth in 1907, and a fifth in 1908. The powerhouse originally was built to take six generators, but the sixth wasn't installed until 1980 (WWPC 1983).

d. Other Pertinent Data

(1) Water Level Fluctuation and Timing

The pre-project surface elevation of Coeur d'Alene Lake during the summer period was about 2,120 feet above mean sea level. Lake surface area at this time was -an estimated 26,000 acres, After construction, the surface level was raised to 2,126.5 feet increasing surface area to about 33,000 acres during the summer. In 1941, it was raised again to the current summer level of 2,128 feet, creating about 48,000 surface acres of water. However, the natural high water elevation in the lake has not been affected by the project operations.

Spring runoff is stored in Coeur d'Alene Lake and drafted to provide winter peaking power. Since the 1940's the lake has been drawn down to 2,126.5 feet right after the peak of spring runoff to hasten the drying out of agricultural land near the lake (WWPC 1983). Recently WWPC has been trying to eliminate the spring drawdown to avoid adverse effects along the lake's shoreline. In 1984 the drawdown was only six inches instead of the historic drawdown of 18 inches. The WWPC plans to continue reducing the degree of drawdown (pers. comm. WWPC).

(2) Land Ownership

Lands surrounding Coeur d'Alene Lake are a complex maze of private, county, state, federal and tribal ownerships. In 1912 WWPC paid $7,800 ($1.25 an acre) to the Coeur d'Alene Tribe for permission to inundate reservation land, The permit was granted by the Secretary of the Interior. The Coeur d'Alene Tribe and the Department of the Interior contend that the tribe owns a portion of the lake bed and is thereby entitled, under a provision of the Federal Power Act, to a payment of rent from the company. The Federal Energy Regulatory Commission agreed to give the matter a full hearing (pers. comm. WWPC). According to recent correspondence from a tribal representative, the FERC hearing was held and ownership established (Appendix C). The shoreline is principally in private ownership.

(3) Indian Rights

According to a spokesperson from the Coeur d'Alene Tribe, it is doubtful the tribe was involved in project planning or implementation. The tribe does, however, have a great deal of interest in the effects of project construction and operation. The Indian tribal groups have asserted claims to portions of the lake bed and banks, and have retained a horizontal hunting, fishing, and gathering rights along with rights to habitat to support those resources (Appendix C),

IV. . WILDLIFE SPECIES AND HABITAT ASSESSMENTS

a. Pre-construction

The existence of studies which effectively document pre-construction conditions is questionable. Some sources indicate more are available (pers. comm. WWPC and IDFG). Others suggest substantial information might be researched

(pers. comm. James Albrecht). The utility of unresearched information must await additional study. No attempt was made to gauge the impact of the original construction or the subsequent raising of the lake water level.

b. Post-construction

According to Albrecht (Appendix C), the effect of the Post Falls Project was to submerge the lake's contiguous marshes and meadows for more extended periods or permanently, causing significant impacts to aquatic, marsh, and meadow areas. It is also possible that raising the level of Coeur d'Alene Lake in the 1940's had some positive effects on wildlife. The lands flooded might have served largely as hayfields, temporary wetlands, or both. According to IDFG, they may have supported little wildlife while the flooding created new riparian habitat that is used by waterfowl and other wildlife species.

The dominant vegetation around Coeur d'Alene Lake and the upper Spokane River is coniferous forest (WWPC 1980). Douglas-fir, western larch and ponderosa pine are abundant around the lake. Most of the land along the Spokane River has been deforested. What remains is primarily ponderosa pine and shrubs.

Elk, white-tailed deer, mule deer, and black bear are common. Cougar and moose are present but uncommon. Ospreys are common with many nesting around the lake. Adult birds start migrating to their wintering grounds in late September and start returning in mid-March. There are approximately 40-70 bald eagles present in late fall to early winter to feed on spawned-out kokanee in Wolf Lodge Bay. Most depart by the end of January. Waterfowl are abundant and upland game birds present in the area include forest grouse, quail, and pheasant.

V. WILDLIFE MITIGATION HISTORY

Planning and construction of the Post Falls Project occurred prior to the time formal, comprehensive assessments and mitigation were required by law.

a. Mitigation Requested or Proposed

No mitigation has been formally requested or proposed (pers. comm. WWPC and IDFG). However, in 1972 IDFG proposed installing dikes and water control gates to maintain water levels in tributary lakes (Thompson, Swan, Kilarhey, and Hidden Lakes) during the winter when Coeur d'Alene Lake is lowered for power generation.

b. Mitigation Agreements or Requirements

None (pers. comm. WWPC and IDFG).

c. Mitigation Implemented

No mitigation has been formally implemented. However, despite potential diminution of power production, WWPC in 1972 supported an IDFG proposal to stabilize water levels in shallow marshes and lakes tributary to Coeur d'Alene River (IDFG 1971, WWPC 1972). The IDFG received a formal appropriation

from the State Department of Water Resources for the water used; WWPC acquiesence to the proposed appropriation was considered significant support by IDFG (pers. comm. IDFG).

WWPC also leases to IDFG without charge 275 acres on Round Lake adjacent to the St. Joe River. This land is managed for waterfowl habitat and as a public hunting area. This lease has been in effect since May 1956. It has an indefinite term but may be cancelled by either party within six months notice (pers. comm. WWPC and IDFG).

VI. . CURRENT STUDIES AND PLANNING

The tribe has requested the Bureau of Indian Affairs transfer funds to University of Idaho Cooperative Wildlife Research Unit to provide the tribe technical assistance in responding to the wildlife provisions of the Power Council's Fish and Wildlife Program (pers. comm. Coeur d'Alene Tribe).

VII. REFERENCES CITED

Idaho Department of Fish and Game. 1971. Letter to Washington Water Power Company proposing water level stabilization on tributary lakes and marshes of the St. Joe River. January 19, 1972.

Washington Water Power Company. 1972. Letter to Idaho Department of Fish and Game - acquiesing to proposed stabilization of marsh and lake water levels. January 19, 1972.

_____. 1980. Application for Amendment to License No. 2545- to Include Post Falls, a Major Project - Existing Dam Kootenai, Benewah Counties - Idaho on Spokane River, February 1980.

_____ 1983. Letter to Study Team - wildlife mitigation status report. October 25, 1983.

APPENDIX A

Study Team

Ed Chaney
Signe Sather-Blair

APPENDIX B

Consultation/Coordination

A. Project Contacts

1. Coeur d'Alene Tribe

Ruth Ray

2. Idaho Department of Fish & Game

Paul Hanna
Jerry Neufeld

3. Washington Water Power Company

Allen O'Kelly
Roger Woodworth

4. U.S. Fish and Wildlife Service

Dan Herrig
John Wolflin
Signe Sather-Blair

B. Summary

Dates	Agency	Summary
October 1 - November 15, 1983	Coeur d'Alene Indian Tribe	Obtained information on their involvement during project planning
October 1 - November 15, 1983	Idaho Dept. Fish and Game - Region 1	Obtained information on past and current wildlife use on Coeur d'Alene Lake,
October 1 - November 15, 1983	Washington Water Power Company	Obtained information on past and current project operations and past wildlife mitigation efforts,
October 1 -November 15, 1983	U.S. Fish and Wildlife Service	Discussed waterfowl resources in the project area.

APPENDIX C

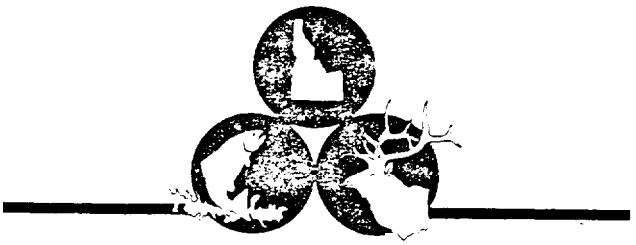
Comments

(1) State Agencies (IDFG)

(2) Federal Agencies (LJSFWS)

(3) Tribes (Coeur d'Alene Tribe)

(4) Facility Operator (WWPC)



IDAHO DEPARTMENT OF FISH AND GAME
600 South **Walnut • Box 25**
Boise • Idaho • 83707

October 5, 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Asministration
P. O. Box 3621
Portland, Oregon 97208

Attention: Mr. James Meyer

Dear John:

Thank you for the opportunity to review the "Wildlife Mitigation Status Review" for Post Falls Hydroelectric Project. The report appears to be an accurate description of the wildlife mitigation at the project.

The project inundated nine miles of the Spokane River and increased the summer pool surface area of Coeur d'Alene Lake by 22,000 acres. The net impacts on wildlife are unknown at this time,

Instead of a stuoy to assess the net impacts on wildlife, we recommend that the appropriate parties, including, but not limited to, Washington Water Power Company, Coeur d'Alene Tribe, U. S. Fish and Wildlife Service, and the Idaho Department of Fish and Game, confer and attempt to reach a concensus on wildlife mitigation objectives for the Post Falls Hydroelectric Project.

Sincerely,

Jerry M. Conley
Director

JMC:BRM:db

CPS	RT	EMP	INIT	DATE	FL
		John			
		AFS			
		ALL			
		Dar			
		Dave			
		Jim			
		Ros			
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January 21, 1985

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
Attention: James Meyer
P.O. Box 3621
Portland, Oregon 97208

Dear Mr. Palensky:

As requested in Mr. Meyer's letter, we have reviewed the Wildlife Mitigation Status Report for the Post Falls Dam Project in northern Idaho. The following comments are being provided for inclusion in the final report.

We believe the report is well written and adequately describes the status of past, present, and proposed wildlife mitigation for the project. Based on the report's content it is evident that the construction and operation of the project resulted in adverse impacts to wildlife resources which have not been adequately identified. Therefore, the Service recommends that the Bonneville Power Administration provide funds to conduct an evaluation of the impacts of the project on wildlife resources.

An evaluation of the project's impact on wildlife resources should be conducted by a lead resource agency which would then be responsible for coordinating the study with other appropriate agencies. Agencies that should be involved in such an evaluation include the Idaho Department of Fish and Game, Fish and Wildlife Service, the Nez Perce Indian Tribe, and the Washington Water and Power Company. The evaluation should include an evaluation of 1) pre-construction wildlife habitat conditions, 2) mitigation actions which have been implemented, and 3) current project area habitat conditions. We recommend that the evaluation be habitat-based and supported by existing wildlife population data when available. We suggest that collection of new population data be limited and applied only to species of special interest, i.e. bald eagle.

In conclusion, we believe that the analysis of losses and mitigation needs should be done as quickly as possible. However, we also recognize that the mitigation recommendations should be based on a technical assessment of losses.

Sincerely yours,

Original signed by
J. W. Teeter

James W. Teeter
Acting Assistant Regional Director
Habitat Resources

cc: ES Boise Field

BFO/R.Giger:plm

N-10

cc: ES Boise Field Office
Attn: Signe S. Blair

OCT 0 2 1984

28 September 1984

Mr. John Palensky, Director
Division of Fish and Wildlife
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Attnr Mr. James Meyer

Re: Project Report on the"Wildlife Mitigation Status Review" for Post Falls Dam, prepared by the U.S. Fish and Wildlife Service.

General Comments

While a number of criticisms of the "Project Report on the 'Wildlife Mitigation Status Review' for Post Falls Dam" are made below, I find it surprising that Bonneville has submitted Ed Chaney's report unchanged as its Status Review. In a long discussion with Ed Chaney I gathered that the BPA's backing and shifting on the purposes to be served by the Review, and on the definition of tasks to be performed, made competent execution so unlikely that he (Ed Chaney) withdrew entirely from further work on the project. My comments thus in no way are intended to reflect adversely on Mr. Chaney's work or competence.

Sections not commented *on* below are not subject to evaluation by me at this time, so that lack of comment does not in any way mean agreement as to their correctness.

Specific Comments

III d. (1) Water level fluctuation and timing

There is a significant omission in this section. While the natural high water elevation in the Lake may not have been affected by the Post Falls Dam Project and its operations, the effect of the dam is to retain water, and thereby submerge the contiguous marshes and meadows, over several months rather than only during the spring and early summer runoff period, and to permanently submerge the area lying below 226.5 feet. Both of these effects have had significant direct impacts on the aquatic, marsh, and meadow habitat for fish and wildlife throughout the submerged area,

and significant indirect effects on both fish and wildlife throughout the Lake-River system and the adjacent lands.

III. d. (2) Land ownership

The FERC hearing referred to has been held, and a determination was made that the Coeur D'lene Tribe owns the beds and banks of Lake Coeur d'Alene and the St. Joe River within the Coeur d'Alene Indian Reservation--about one-third of the present Lake and 5-10 miles of the River. Within this area, the Tribe has sued to regain Heyburn State Park, which includes much of the Lake's southern shoreline, because land therein has been leased to private interests, in violation of the deed, and because the conveyance was made without the consent of the Tribe (by the Dept. of the Interior) in violation of the treaty with the Tribe, and without just compensation.

III. d. (3) Indian rights

The statement that the Tribe has " . . . not asserted claims that involve wildlife *or* wildlife habitat." is absolutely untrue. The Tribe has retained its aboriginal hunting, fishing, and gathering rights throughout its 4,000,000 acre aboriginal area; in the northern portion of the original reservation {containing all of Lake Coeur d'Alene and half the Spokane River to the Idaho State line) ceded in 1889; and of course within the present Reservation boundaries. These rights of course include rights to habitat to support such fish and wildlife (Boldt II), and they have been very significantly impacted by the construction and operation of Fost Falls Dam.

IV. Wildlife Species Habitat Assessment

a. Pre-construction

The statement that: "No studies are available which document pre-construction conditions (pers. cam. WWPC IDFG)." is not correct. There is:"A Report by J. C. Stevens of the Geological Survey Regarding the Physical Effects on Lake Coeur d'Alene of the Operation of the Washington Water Power Dam at Post Falls, Dec. 24, 1909.", copies of which were f iled in the FERC hearing an Past Falls Dam referred to above. That report refers to a map, presumably in WWPC files and apparently including considerable detail, which along with the report itself would provide an excellent basis for ascertaining pre-construction conditions.

John Varley, long with the USFWS in this area, estimates that there is a wealth of information available as to pre-construction conditions that could be turned up by a competent archivist for about $25,000. I, myself, incidental to other work, have in only nine months with the Tribe compiled a long, promising list of sources and references to be searched and checked--should funding ever become available for such work. WWPC's and IDFG's unawareness constitutes self-serving, and culpable, ignorance, if true.

b. Post-construction

While the statement "Raising the level of Coeur d'Alene Lake in the 1940's may have had some positive effects on wildlife." could be true for some limited areas, it cannot possibly be true in total. Some 22,000 acres of primarily marsh and meadow now submerged and mostly lying within the southern one-third of the Lake, which in turn lies within the Coeur d'Alene Reservation, have been affected. The marshes and meadows were significant hunting and gathering areas for the Tribe. The report of J. C. Stevens, cited above, specifically covered these areas and found them too wet and poorly drained to be useful for hayfields—in exact refutation of the statement: "The lands flooded probably were primarily hayfields, . . ." in the Status Report. There has, of course, been a growing recognition since the time of Stevens" report that marshlands and riparian meadows are among the richest of habitats for wildlife and are generally more productive than agricultural lands.

James C. Albrecht
Natural Resources
Coeur d'Alene Tribe

cc:
J. Chrisman, Northwest Power Planning Council
M. Montgomery, Northwest Power Planning Council (Idaho)

SEP - 1 1984

THE WASHINGTON WATER POWER COMPANY

Electric and Natural Gas Service

E[illegible] SPOKANE WASHINGTON 9922[illegible] [illegible]

FRED A. SHIOSAKI
Manager
Environmental Affairs

September 18, 1984

Mr. John Palensky, Manager
Division of Fish and Wildlife
Bonneville Power Administration
P. 0. Box 3621
Portland, OR 97208
Attn: Mr. James Meyer

Re: "Wildlife Mitigation Status Review - Post Falls Dam"

Dear Mr. Palensky:

As per Mr. Meyer's letter of request dated September 14, 1984, my staff has reviewed the above-referenced document. This letter expresses The Washington Water Power Company's few comments concerning the report.

As is noted at the page 2, Item III-d-(2) discussion of contentions over land ownership and rent entitlements, the Federal Energy Regulatory Commission agreed to give the matter full hearing. This issue has advanced through regulatory and judicial processes since the text of this report was first prepared in 1983. The matter has recently been returned to FERC for reconsideration,

The discussion of Indian rights at page 2, Item III-d-(3) generally states the interests of the Coeur d'Alene Tribe and notes that no claims involving wildlife have been asserted. The usefulness of this section of the report would be improved by clearly stating whether or not the Tribe has any legally established treaty rights pertinent to wildlife and, if so, explaining and documenting the extent of such rights.

The statement at page 3, Item V concerning legal requirements at the time of project construction is essentially correct, However, the opportunity to fully address environmental issues associated with the Post Falls Project was provided during the recent federal licensing of the Project. Concern for some wildlife (specifically nesting waterfowl and shorebirds) was among the few environmental issues expressed during that process. WWP is addressing this concern by reducing the degree of spring season drawdown as is discussed at page 2, Item III-d-(1) of the report.

There have been recent telephone contacts and written correspondence on the report which are not yet cited in the reference section or listed under Appendix B. Consultation/Coordination. Also, at least three persons were involved in the research and authorship of this document. In addition to identifying the study team by names, the completeness of the document would be enhanced with concise summaries of each researcher's affiliation and background.

Finally, the statement concerning a proposed fishery study presented on page 4, Item VI is inappropriate. This area of discussion is not pertinent to the subject of this report and is incomplete insofar as the numerous fishery studies conducted, ongoing, or planned for Coeur d'Alene Lake are not identified. This section would be more useful if a brief summary of wildlife-related studies andmanagementcompleted, in progress, or planned for the general project area had been provided.

As you are aware from WWP's comments on similar reports, we are convinced century-old impacts cannot realistically be assessed. Therefore, we do not support continued expenditure of ratepayer dollars in efforts to develop retroactive wildlife mitigation programs. Nonetheless, WWP is always willing to discuss any present-day environmental issues and work with responsible agencies, organizations, and individuals to further the environmental values of this project, consistent with its established purpose.

Sincerely,

Fred A. Shiosaki

Manager
Environmental Affairs

RDW:kmc

cc: M. Montgomery (NPPC)

APPENDIX D

Mitigation Instruments

No mitigation has been implemented for this project.