Attachment 1
ASHTON DEVELOPMENT
Resource Agency Contacts

Organization	**Authorized Representatives**	**Contact Information**
U.S. Fish and Wildlife Service	Ty Matthews	11103 East Montgomery Drive Spokane, WA 99206 *Phone*: 509-893-8038 *Email*: ty_Matthews@fws.gov
U.S. Forest Service	Adrianne Keller, District Ranger	P.O. Box 858 Ashton, Idaho 83420 *Phone*: 208-652-7442 *Email*: akeller@fs.fed.us
U.S. Army Corps of Engineers	James Joyner	900 N. Skyline Dr., Suite A Idaho Falls, Idaho 83402-1718 *Phone*: 208-522-1676 *Email*: james.m.joyner@usace.army.mil
Idaho Department of Environmental Quality	Troy Saffle, Regional Water Quality Manager	900 N. Skyline, Suite B Idaho Falls, Idaho 83402 *Phone*: 208-528-2650 *Email*: troy.saffle@deq.idaho.gov
Idaho Department of Fish and Game	Dan Garren, Regional Fisheries Manager	4279 Commerce Circle Idaho Falls, ID 83401 *Phone*: 208-525-7290 *Email*: dgarren@idfg.idaho.gov
Idaho Department of Water Resources	Tom Bassista	900 North Skyline Drive, Suite A Idaho Falls, ID 83402 *Phone*: 208-525-7161 *Email*: tom.bassista@idwr.idaho.gov

Attachment 2
ASHTON DEVELOPMENT
Overview of the Henry's Fork Basin and Project Facilities

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2.0 OVERVIEW OF THE HENRY'S FORK BASIN

The Henry's Fork watershed in eastern Idaho and western Wyoming encompasses 1.7 million acres and over 3,000 miles of rivers, streams and canals. The river originates from the outlet of Henry's Lake, located in the Continental Divide Mountains. The Upper Henry's Fork subbasin, located in eastern Idaho, encompasses 1,068 square miles, including 30 square miles in Wyoming and 60 square miles in Yellowstone National Park. The northern extent of the subbasin is bounded by the continental divide, which also delineates the boundary between Idaho and Montana. The subbasin is located within the Greater Yellowstone Ecosystem and possesses many of the unique geological, scenic, recreational, and wildlife attributes for which Yellowstone National Park is valued. The majority of the subbasin is managed by the U.S. Forest Service (DEQ, 1998).

The Ashton dam, located at river mile 45 of the Henry's Fork of the Snake River (Henry's Fork), forms the southern boundary of the Upper Henry's Fork subbasin. After exiting the subbasin, the Henry's Fork continues in a southwesterly direction for 79 miles through the Lower Henry's Fork subbasin before reaching its confluence with the South Fork of the Snake River. The Ashton dam and powerhouse are situated in a sparsely populated, semi-arid area in which the dominant land uses are irrigated agriculture and outdoor recreation, particularly trout angling and hunting. The Idaho Department of Fish and Game lists the Henry's Fork as Value Class I, the highest class possible for fishery resources. The area's topography is flat to gently rolling, and its climate is characterized by warm, dry summers and cold, snowy winters.

2.1 PROJECT DESCRIPTION

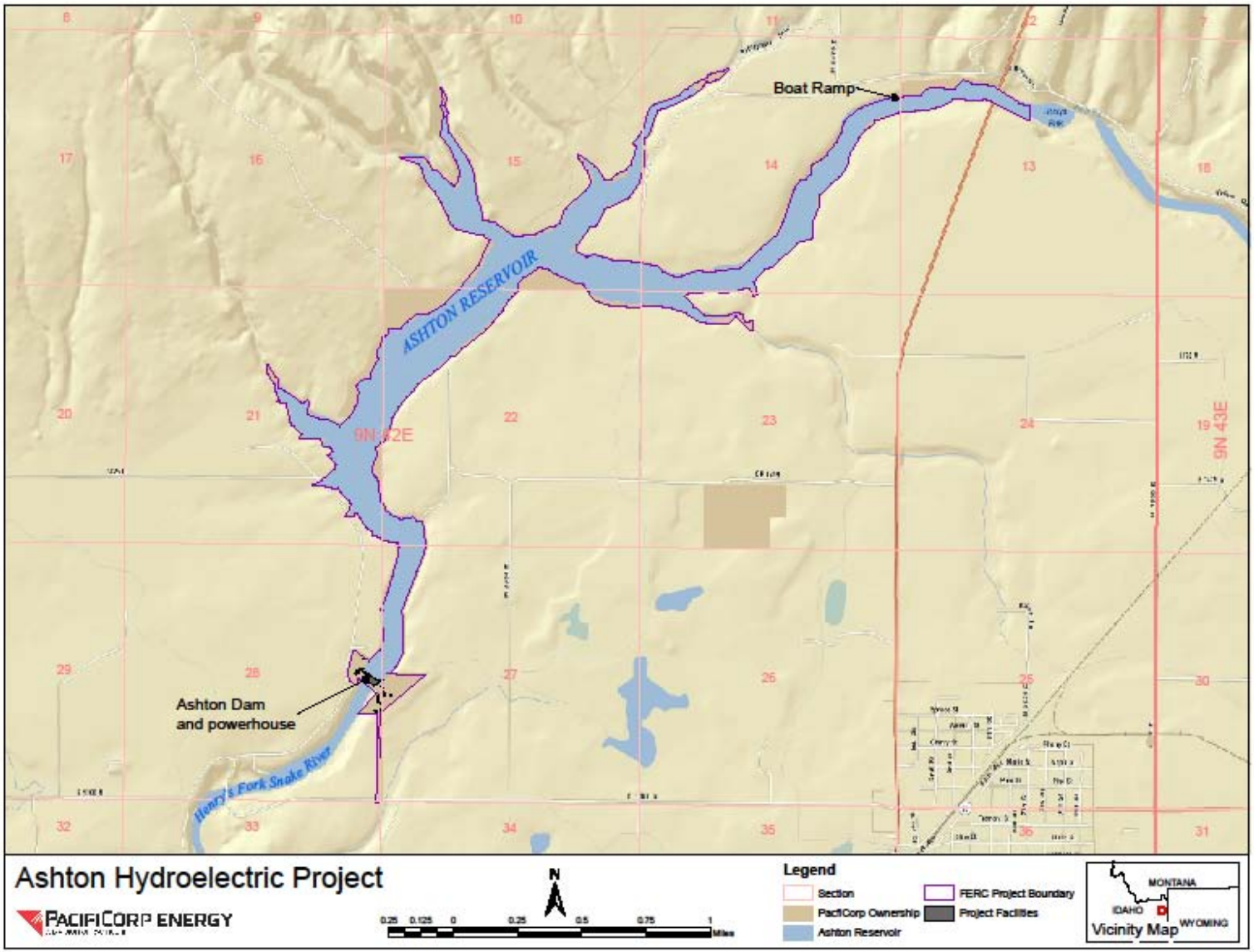
PacifiCorp owns two hydroelectric developments on the Henry's Fork: Ashton and St. Anthony. Both projects are licensed by FERC as Project No. 2381. This application for Low Impact Hydropower Certification pertains to the Ashton development. The St. Anthony development is not currently operational due to an outage of the generating unit in 2003. PacifiCorp is exploring decommission or sale of the St. Anthony's development in consultation with FERC.

The Ashton development is comprised of a 56.6-foot-high, 226-foot-long, earth and rock-filled dam that has a downstream slope covered with roller compacted concrete and an upstream slope stabilized by additional rock fill. The crest elevation of the dam is 5156.6 msl. There are two-foot-high flashboards on the dam crest to prevent spillage from reservoir wave action and an 82-foot-long reinforced concrete spillway surmounted by six 10-foot-high radial gates. The reservoir has a surface area of 404 acres, with a gross storage capacity of 9,800 acre-feet and a usable storage capacity of 3,988 acre-feet at normal water surface elevation (5156.6 feet msl). The development features a reinforced-concrete powerhouse located at the right bank, with integral intakes controlled by vertical slide gates and containing two generating units, each with a nameplate rating at 2,000 kW, and one generating unit rated at 2,850 kW.

In consultation with FERC, PacifiCorp plans to rehabilitate Ashton Dam in 2010-2011 to mitigate seepage and piping (i.e., internal erosion) risks posed by a deteriorating upstream silt core within the dam. The rehabilitation will involve excavating and reconstructing a portion of the upstream embankment. Other features of the project include replacing the headrace retaining

wall, replacing the concrete crest structure, and adding a concrete overlay to an unprotected portion of rockfill between the spillway and the powerhouse (see figure 2.2-1).

Figure 2.1-1 Map of the Ashton development



2.2 PROJECT PHOTOGRAPHS

Figure 2.2-1 Ashton dam and powerhouse

Figure 2.2-2 Upstream view of Ashton spillway

Figure 2.2-3 Ashton powerhouse and substation

2.3 PROJECT OPERATIONS

PacifiCorp operates the Ashton development in an instantaneous run-of-river mode for the protection of fish and wildlife resources in the Henry's Fork. The average annual generation of the facility is 36,916 Mwh. The facility has a 46/2.3-kV step-up transformer and electricity is conveyed to the substation via a 133-foot-long, 46-kV transmission line. Run-of river operations will be maintained during the planned rehabilitation of Ashton Dam except during drawdown and refill periods. A low-level outlet tunnel will be installed to provide river diversion during construction. The outlet tunnel will be constructed through the right abutment bedrock and will include a vertical shaft housing slide gates for flow control.

Attachment 3
ASHTON DEVELOPMENT
FERC License with Subsequent Amendments Incorporated

PacifiCorp Ashton-St. Anthony Hydroelectric License
FERC Project No. 2381

Current License, with Subsequent Amendments Incorporated

Links
Director_orders

Please Note: This document does not reflect Amendments to License Exhibits.
It treats only Amendments to the text of the license articles, citing the FERC Orders issuing them.
Amendments appear in *italics*. Deleted text has actually been deleted. "[]" denote Editor's Notes.

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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Martha 0. Hesse, Chairman; Anthony G. Sousa, Charles G. Stalon, Charles A. Trabandt and C. M. Naeve.

Utah Power & Light Company Project No. 2381-001

ORDER ISSUING NEW LICENSE
(Major Project - Existing Dam)
(Issued August 3, 1987)

Utah Power & Light Company (UP&L) has filed an application for new license under Section 15 of the Federal Power Act (FPA), 16 U.S.C. § 807, to continue to operate and maintain the Ashton—St. Anthony Project No. 2381, located in Fremont County, Idaho, on the Henry's Fork of the Snake River. The project, which occupies 0.39 acres of federal land administered by the Bureau of Land Management, consists of two developments: the Ashton Development and the St. Anthony Development. The Ashton Development is located on the Henry's Fork of the Snake River. The St. Anthony Development is located on the Henry's Fork and on the Egin Irrigation Canal (EIC), a diversion of the Henry's Fork. The license for the project, which was issued on December 19, 1977, with an effective date of January 1, 1938, expires on December 31, 1987.[1] UP&L proposes to replace a turbine-generator unit within the Ashton Development powerhouse and to install a fish passage facility at the St. Anthony Development diversion dam.

Notice of the application has been published. The motions to intervene that have been granted and the comments filed by agencies and individuals have been fully considered in determining whether to issue this license, as discussed below.

The Idaho Department of Water Resources (IDWR) filed a timely motion to intervene on July 12, 1985, which was automatically granted pursuant to Commission regulations. IDWR requested that

[1] See 1 FERC ¶ 61,263 (1977).
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any new license issued to UP&L for the Ashton-St. Anthony Project include provisions making the license consistent with the Idaho State Water Plan. In addition, IDWR requested that UP&L be required to have filed an application for a water rights permit prior to issuance of the license. The issues raised by IDWR are addressed in the Comprehensive Plans portion of this order.

The Idaho Department of Fish and Game (IDFG) filed an untimely motion to intervene on July 22, 1985, and was granted late intervention on November 6, 1985. IDFG is concerned with the potential adverse impacts on the fish and wildlife resources related to entrainment and impingement, flow fluctuations during and after construction, and upstream migration of resident fish past the project diversion structure. The issues raised by IDFG are addressed in the Recommendations of Federal and State Fish and Wildlife Agencies portion of this order and in the Environmental Assessment (EA) attached to this order.

Although the original license for the project included as a project work the headworks structure from the power canal to the EIC at the St. Anthony Development, UP&L's application for new license excluded this structure. However, the irrigation canal headworks structure is being included in this license as a project facility, because operation of the structure could affect flows to the St. Anthony powerhouse. Pursuant to Standard Article 5 of the license, UP&L will be required to obtain all rights in the headgate structure necessary to operate and maintain the project. Article 304 requires that the irrigation canal headworks structure be included in the as-built exhibits.

Section 10 of the Federal Power Act

Section 3 of the Electric Consumers Protection Act of 1986 (ECPA), Pub. L. No. 99-495 (Oct. 16, 1986), amended Section 10 of the FPA, 16 U.S.C. § 803, with regard to various aspects of the Commission's hydroelectric program. Section 15(a)(2) of the FPA, as added by Section 4 of ECPA, provides that the requirements of Section 10 of the FPA are applicable to Commission consideration of applications for new license under Section 15 of the FPA. Following is a discussion of the relevant provisions of Section 10.

1. Recommendations of Federal and State Fish and Wildlife Agencies (Section 10(j))

Section 10(j) of the FPA requires the Commission to include license conditions based on recommendations of federal and state fish and wildlife agencies for the protection, mitigation, and enhancement of fish and wildlife. The EA for the Ashton-St. Anthony Project, which was prepared prior to the enactment of ECPA and which is attached to and made part of this license, addresses the concerns of the federal and state fish and wildlife agencies. For example, agencies requested that UP&L implement a wildlife enhancement plan, which UP&L agreed to do. Article 405 requires UP&L, in consultation with IDFG and the U.S. Fish and Wildlife Service (FWS), to file with the Commission for approval a wildlife report showing the final locations and design specifications of 15 goose nesting structures, 10 raptor perch structures, 10 osprey nesting platforms, a bald eagle nesting platform, and other facilities proposed in the wildlife enhancement plan. In addition, the article requires UP&L to monitor the effectiveness of the plan and to submit monitoring reports to the Commission, IDFG, and FWS. However, as discussed next, the EA did not recommend adoption of one of the recommendations contained in IDFG's motion to intervene.

For the protection of fish resources in the Henry's Fork River, IDFG recommended various measures that would minimize project effects on these resources. The EA generally concurred in IDFG's assessment of the project impacts, except for its recommended mitigation regarding fish entrainment. IDFG recommended screening at the St. Anthony Development to prevent mortality of wild trout and also as mitigation for the loss of predominantly hatchery trout at the upstream Ashton Development. However, review of the St. Anthony Development intake design and position relative to that of the EIC intake suggests that, if entrainment is occurring, the majority of fish would be entrained

to the EIC rather than to the St. Anthony Development intake. Because of this, the EA concluded that entrainment and turbine-related mortality of trout would be insignificant; however, to ensure that fish entrainment mortality would not be significant, the EA recommended a post-operational monitoring study at the St. Anthony Development.

Consistent with Section l0(j)(2) of the FPA, Commission staff negotiated with IDFG to resolve the intake screening issue. By letter dated April 2, 1987, the Director of the Division of Environmental Analysis (Director) advised IDFG of the difference between the EA's and IDFG's recommended mitigation for entrainment at the St. Anthony Development. By letter filed with the Commission on May 11, 1987, IDFG notified the Director that, while it continues to believe that screening at the St. Anthony Development is appropriate as a license condition, it would accept the EA's recommendation for requiring a post-operational monitoring study if entrainment and turbine-related losses of trout are quantified for both the St. Anthony Development and the Ashton Development and if the loss of wild trout is prevented or an equivalent off-site enhancement of wild trout populations is provided.

On May 26, 1987, UP&L filed with the Commission additional information regarding mitigation and enhancement of the fish resources at the St. Anthony Development. In light of IDFG's recommendation for screening at the St. Anthony Development, UP&L proposed therein to create additional off-site fish habitat as mitigation for any fish losses by providing a 35-cubic-feet-per-second minimum flow to the EIC during the 7-month non-irrigation season. At times when the canal is dewatered for maintenance, UP&L proposes to conduct fish salvage operations if deemed necessary by IDFG. Further, UP&L proposes to evaluate other non-screening alternatives, such as behavioral barriers, to minimize the potential for fish entrainment to the St. Anthony Development intake.

IDFG has reviewed UP&L's proposed alternative mitigation measures and has stated that it would consider these alternative measures to screening the St. Anthony Development intake pending results of the post-operational monitoring study and further evaluation of non-screening alternatives.[2] IDFG also states that its consideration of these alternatives does not preclude the potential for requiring screening if the results of the post-operational monitoring studies show screening is necessary.

Continued operation of the Ashton-St. Anthony Project could result in some entrainment and turbine-related mortality of fish. However, based on available information, we conclude that project operation would not result in significant entrainment and subsequent turbine-related mortality and that screening of the St. Anthony intake is not necessary at this time. To ensure that entrainment mortality is low, UP&L should conduct monitoring studies to fully assess fish entrainment mortality at the St. Anthony Development. Further, because this license does not require immediate screening at the St. Anthony Development, which IDFG says would mitigate for the turbine-related loss of trout at the Ashton Development as well, UP&L should quantify the losses of trout at both developments through post-operational monitoring studies. Accordingly, Article 404 of the license requires UP&L to conduct such studies in consultation with IDFG and FWS and to submit the study results to the Commission after receiving the comments of IDFG and FWS. In the event that the monitoring studies show that turbine-related fish mortality is significant, UP&L must submit to the Commission its recommendations for mitigation measures, together with comments from the above agencies on its recommendations; and the Commission, through the authority reserved in Article 404, will require UP&L to implement appropriate mitigative measures such as screening the intake, providing an equivalent off-site enhancement of a wild trout population, providing supplemental stocking of upstream reservoirs, and providing other non-screening alternatives such as behavioral barriers, to minimize and compensate for any fish losses. Further, IDFG could petition the Commission under Standard Article 15 for further mitigation measures if evidence of mortality warrants additional mitigation.

[2] Personal communication, Al Van Voren, Staff Biologist, Idaho Department of Fish and Game, Boise, Idaho, June 1, 1987.

2. Comprehensive Plans (Section l0(a)(2)(A))

Section l0(a)(2)(A) of the FPA, as amended by ECPA, requires the Commission to consider the extent to which a project is consistent with comprehensive plans (where they exist) for improving, developing, or conserving a waterway or waterways affected by the project that are prepared by an agency established pursuant to federal law that has the authority to prepare such a plan or by the state in which the facility is or will be located. The Commission considers plans to be within the scope of Section 10(a)(2)(A) only if such plans reflect the preparers' own balancing of competing uses of a waterway, based on their data and applicable policy considerations (i.e., consider and balance all relevant public use considerations). With regard to plans prepared at the state level, such plans are within the scope of Section 10(a)(2)(A) only if they are prepared and adopted pursuant to a specific act of the state legislature and developed, implemented, and managed by an appropriate state agency. [3]

The Commission has identified the Northwest Power Planning Council's (Council) Northwest Conservation and Electric Power Plan (Plan) and Columbia River Basin Fish and Wildlife Program (Program) as falling within the scope of Section l0(a)(2)(A). UP&L's application is consistent with the goals and policies of the Program, since, as required therein, fish and wildlife agencies, Indian tribes and the Council have been consulted with regard to the project, and the license is being conditioned to mitigate fish and wildlife impacts. Furthermore, Article 203 of the license reserves to the Commission the authority to order alterations of project structures and operations to take into account to the fullest extent practicable the Program. With regard to the Council's Plan, the project is in a part of UP&L's service area that lies within the Council's geographic area of planning responsibility. However, since UP&L's load within the Council's geographic planning area is served by generation of UP&L from outside that area, it does not represent load for which the Council must plan resources. Therefore, we considered the power development plans and feasibility of the capacity addition based upon UP&L's data. However, if the project were evaluated as a project within the Council's resource planning responsibilities, the proposed capacity at the project would be feasible based upon the Council's economic yardstick, since it is less expensive than coal-fueled steam generation. Based on the above, the project is not inconsistent with the Council's Plan.

In its intervention request filed July 12, 1985, IDWR stated that the Idaho State Water Plan provides a comprehensive plan for the development of the water resources of the State of Idaho and requested that the new license for Project No. 2381 include provisions making the license consistent with the Idaho State Water Plan. The Idaho State Water Plan is a self-described statement of objectives and policies that will be followed by the state in allocating water rights. The allocations are made on a case-by-case basis upon application by the user based on consideration of the flows required to satisfy existing and potential users of the water. However, the Idaho State Water Plan does not provide information on the uses, or combination of uses, that could be developed to utilize the flows in any particular river section to the extent that it reflects an explicit balancing of the competing uses of a waterway in the public interest. We do not need to decide whether the Idaho State Water Plan is a comprehensive plan under Section l0(a)(2)(A), as we believe the license as conditioned herein is consistent with the Idaho State Water Plan, since the use of water by the additional generating capacity to be licensed herein is not in conflict with the water uses prescribed in the Idaho State Water Plan for the reach of the river where the project would be located. Therefore, no further conditions are necessary to achieve such consistency. [4]

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[3] Fieldcrest Mills, Inc., 37 FERC 1 61,264 (1986).

[4] IDWR also requested that UP&L apply for an additional state water rights permit prior to the issuance of the new license for Project No. 2381. UP&L subsequently applied for such a permit, which was approved by IDWR on January 20, 1986. Thus, IDWR's request has been met. However, the permit contains a condition purporting to subordinate UP&L's water rights for hydroelectric use to other water rights and uses. As we explained in Boise Cascade Corporation, 36 FERC ¶ 61,135 (1986), we do not believe that general subordination clauses unsupported by factual record evidence are in the public interest. Since we have not been provided with factual justification for the subordination clause included in

Three resources plans[5] that touch on various aspects of waterway management were brought to our attention and have been reviewed in relation to the proposed project as part of our broad public interest examination under Section l0(a)(l) of the FPA. No conflicts were found.

3. Recommendations of Other Agencies (Section l0(a)(2)(B))

Section l0(a)(2)(B) of the FPA requires the Commission to consider the recommendations of relevant federal and state agencies exercising administration over flood control, navigation, irrigation, recreation, cultural and other relevant resources, and the recommendations of Indian tribes affected by the project.

Other than the recommendations submitted by IDWR discussed previously, no specific state and federal agency comments or recommendations were made addressing flood control, navigation, or irrigation requirements in the basin. The Idaho State Historic Preservation Officer indicated that procedures should be implemented to preserve the historic turbine that will be removed from the Ashton Development. Article 408 of the license requires UP&L to implement a cultural resources management plan to mitigate any impacts to the historic turbine. The Idaho Department of Parks and Recreation and the National Park Service recommended a variety of measures to improve recreational facilities at the Ashton Reservoir, which UP&L incorporated into its Recreation Area Improvement Plan. Article 406 of the license requires UP&L. to implement the plan within one year from the effective date of this license.

4. Consumption Efficiency Improvement Program (Section 10(a)(2) (C))

Section l0(a)(2)(C) of the FPA, added by ECPA, requires the Commission to consider the consumption efficiency improvement programs of, inter alia, utility applicants. Under covering letter dated February 27, 1987, UP&L submitted to the Commission a supplemental filing which included a comprehensive document entitled "Conservation Report". The report addresses UP&L's efforts to cooperate with the regulatory agencies in three states (Utah, Idaho and Wyoming) on issues regarding conservation and demand control. For the most part, the regulatory agencies have solicited voluntary cooperation in pilot programs designed to assess the effectiveness and associated costs of programs which may, at a later date, be mandated by state regulatory agency rulemaking. The orders issued by the three states' regulatory agencies cited in Section IV of UP&L's report deal principally with regulations which UP&L must comply with in order to recover its costs for implementing voluntary pilot programs through adjustments in approved rate schedules. The matters addressed in the report include improvement of the energy efficiency of UP&L's power system, residential weatherization, education of customers on energy conservation, conservation practices which can be implemented by crop irrigation customers, thermal insulation of domestic electric water heaters, solar water heaters, time-of-day (TOD) reduced rates for irrigation, air conditioning, electric heating of inhabited space, and direct load control combined with TOD.

Based upon our review of the foregoing, we conclude that UP&L has made, and is continuing to make, a successful good-faith effort to promote cost-effective energy conservation and to

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UP&L's water rights permit, we cannot determine if the clause is appropriate. Accordingly, our issuance of this license should not be interpreted as an affirmation of the appropriateness of the clause. Furthermore, operation of the subordination clause will not excuse UP&L from fulfilling its obligation during the term of the license to acquire and retain all rights, including water rights, necessary for project purposes.

[5] US Department of Agriculture~ Forest Service, Targhee National Forest, Land Management Plan, 1985; Idaho Department of Fish and Game, Fisheries Management Plan, 1986 — 1990, January 1986; and Idaho Department of Parks and Recreation, Idaho Outdoor Recreation Plan, 1983.

educate end-use customers as to the financial rewards accruing from conservation. Commission staff's contact with pertinent regulatory authorities substantiated UP&L's assertion that the ongoing energy consumption efficiency improvement programs are in compliance with the relevant state agency recommendations in these matters. Section 15(a) of the Federal Power Act Section 4 of ECPA amended Section 15 of the FPA to specify a number of factors the Commission is required to consider in acting on applications for new license following the expiration of existing licenses.

1. The plans and abilities of the applicant to comply with the articles, terms, and conditions of any license issued to it and other applicable provisions of Part I of the FPA (Section 15(a)(2)(A))

UP&L states that, since obtaining the existing license, it has been committed to meeting the requirements of all the articles, terms, and conditions of the existing license. UP&L maintains that its past performances in conjunction with its future operation and maintenance plans, and its record of compliance with the requirements of the jurisdictional agencies, demonstrate that it is committed to meeting the future requirements for the continued operation of the project.

Our review of the compliance record of UP&L substantiates that UP&L has complied in a good faith manner with all articles, terms, and conditions of its existing license. Also, it appears that UP&L has the financial and personnel resources necessary to fulfill its obligations under the license and Part I of the FPA. Based on the above, and in consideration of the requirements of the new license, we conclude that UP&L will be able to comply with the terms and conditions of the new license and other provisions of Part I of the FPA.

2. The plans of the applicant to manage, operate and maintain the project safely (Section 15(a)(2)(B))

UP&L states that it is operating the generating facilities with a foremost concern for the safety of its employees and the public. Records indicate that there has never been an employee fatality, and the only lost-time employee injury occurred in 1956. Also, there has been no injury or death to any member of the public within the project boundary. UP&L has adopted an official safety code based on its operating experience, and this code is continually updated. The project is, and will continue to be, operated run—of— river, which causes no extreme fluctuations, thus posing no project-caused hazard for fishermen and boaters. UP&L has prepared an emergency action plan with a notification procedure to the public in case of a potential threat to life or property downstream.

Based upon our review of the specific information provided by UP&L on various aspects of the project that affect public safety, inspection reports by the Commission's Regional Director, and independent consultant reports filed under Part 12 of our regulations, 18 C.F.R. Part 12 (1987), we conclude that UP&L's plans to manage, operate, and maintain the project safely are adequate. However, as discussed in detail in the Dam Safety section of the Safety and Adequacy Assessment attached to this order, unresolved dam safety concerns exist with the Ashton dam. In order to assure continued safe operation of the project during all conditions, including floods up to the probable maximum, UP&L was directed by letter dated May 14, 1987, to perform remedial measures. Completion of these remedial measures and compliance with the provisions of this license and any future dam safety requirements imposed pursuant to Part 12 will assure a safe and adequate project.

3. The plans and abilities of the applicant to operate and maintain the project in a manner most likely to provide efficient and reliable electric service (Section 15(a)(2)(C))

UP&L states that it acquired the St. Anthony plant in 1913 and immediately replaced the existing unit with the present 500—kW unit. The plant is operated in a semi—automatic mode in a manner that maximizes generating efficiency. Maintenance upkeep has included upgrading electrical systems and repairs to the project works.

UP&L acquired the Ashton plant in 1924 with an l,800-kW unit installed in a powerhouse constructed for three units. It proceeded to install two additional 2,000-kW units in the powerhouse. The plant is operated at a constant head to maximize efficiency and generating capacity. Electrical systems and the project facilities are continually maintained. Unit Nos. 2 and 3 have been semi-automated, and Unit No. 1 would be semi-automated and upgraded from 1,800 kW to 3,400 kW installed capacity under the new license. The increase in hydraulic capacity of Unit No. 1 would reduce the flows currently being spilled and utilize these flows for more efficient generation. Other efficiency and reliability measures-include preventative maintenance programs, training of hydro plant operators, and closer coordination on upstream releases from the Island Park Reservoir with the U.S. Bureau of Reclamation.

Operation of the Ashton and St. Anthony plants enables UP&L to reduce the loading of its transmission lines and the substation, which are approaching limits of their thermal capacity. The hydroelectric plants provide low-cost generation in UP&L's system, and these benefits are expected to increase in the future because of the escalation of fuel costs.

Based on the above considerations and our review of the operation inspection reports by the Regional Director and UP&L's past performance and future plans to operate the project, we believe that the project is, and under the new license will continue to be, operated and maintained in an efficient and reliable manner.

4. The need of the applicant over the short and long term for the electricity generated by the project to serve its customers (Section 15(a)(2)(D))

The proposed modifications to the project would increase its capacity from 6.3 MW to 7.9 MW and would provide an estimated average of 10,000,000 kilowatt hours (kWh) of additional electrical energy and 49,922,000 kWh of total energy per year from the project. The project is part of UP&L's existing electric generating resource base and is currently used to meet part of UP&Ls electric system load requirements. Being small in comparison to current total system power capability requirements (2600 megawatts), the project has a negligible effect on UP&L's need for power status. UP&L's projections show surplus generating capacity through 1995, and loss of the project capacity would not change these projections. However, the project is an inexpensive source of energy that does, and would continue to, provide benefits through the displacement of more expensive thermal generation.

UP&L's proposal to upgrade the project is made in accordance with a letter of agreement between UP&L, the United States, the City of Idaho Falls, and the Fremont—Madison Irrigation District relating to the operation of the U.S. Bureau of Reclamation's Island Park reservoir. Among other things, the agreement requires that water spills past the Ashton plant be minimized to the greatest extent possible. The increased hydraulic capacity of the project would use the available head more effectively and capture capability that is currently lost. The upgrading would provide additional economic benefits through increased thermal displacement. This displacement of thermal generation also conserves fossil fuel and reduces the emissions that are a product of the combustion of fossil fuels. Finally, the project is located in the northeast corner of UP&L's Idaho service area, and its continued generation would defer the need to reinforce transmission and transformer facilities that provide a second power source for the area.

If a new license is not issued for Project No. 2381, UP&L would have to cease operating the project. In the short term, replacement power would have to be provided from existing operating capacity, installed reserve capacity, deactivated but available capacity, or from purchased power.

UP&L does not have capacity which is in a deactivated status, but could use existing operating capacity and installed reserves for replacement power in the short term. However, each was found to be less desirable on an economic and environmental basis than continued project generation. Also,

because of the current surplus of generating capacity on UP&L's power system, purchased power was not viewed as an appropriate alternative for replacement power in the short term.

Long term, UP&L's resource acquisition strategy is to purchase power under contract as long as surplus market conditions exist, installing its own generating capacity only when necessary. UP&L viewed cogeneration and small power producer generation as potential replacement power in both the short and long term, but, because of the questionable availability and reliability experienced in past relationships with cogeneration and some small power producers, such resources were deemed inadequate replacements for project generation. Similarly, since load management measures were already treated in the development of load projections and involve considerable uncertainty, additional conservation and other load management techniques were considered inappropriate to replace the project generation on a firm, long-term basis. The purchase of firm power and the construction of additional coal-fired generating capacity were deemed the most likely long-term alternatives, and both were found to be less desirable than continued project generation. Continued operation of the project would save UP&L's customers approximately $1,862,000 per year over the estimated most likely replacement energy cost. This would equate to $3.67 per year per customer.

With the exception of load management measures, none of the above alternatives would affect the load characteristics of UP&L's system, and only purchased power would affect the system operation or customers of the supplier of the purchased power. Any effect of purchased power on the supplier of that power and its customers would have to be viewed as positive by the supplier of the power, or it would not be made available to UP&L on a long-term firm basis.

The overall effect of the cessation of the operation of the project on the customers of, and communities served by, UP&L or the supplier of purchased power would be minimal because of the small size of the project, but continued project generation would be more beneficial than the alternative means of replacing project power. Accordingly, despite the existence of capacity surpluses on UP&L's system, Project No. 2381 as proposed to be modified by UP&L would provide system benefits that would be lost if a new license were not issued for the project and that justify a new license for the project from a need-for-power perspective.

5. The applicant's existing and planned transmission services (Section 15(a)(2)(E))

Review of the license application and UP&L's supplemental filing of December 30, 1986, indicates that UP&L's existing project transmission service would not change if a new license were granted. If a non-power license were issued, a requirement for additional system transmission capacity to the area would occur sooner than it would with the project in operation. Specifically, the project provides power to the Rigby-St. Anthony 69-kV transmission network on the northeast corner of the UP&L's Idaho service area. Additional power is supplied to the 69-kV network via the 161-kV to 69-kV step-down transformer at the Rigby substation and the 161-kV transmission line to the Rigby substation. Project generation defers the cost of reinforcing the 161-kV transmission network and the Rigby step-down transformer by reducing the power requirement at the Rigby substation.

UP&L has commenced plans to rebuild the 65-year-old Rigby-St. Anthony 69-kV line and has long range plans to rebuild the 60-year-old Ashton-St. Anthony 46-kV line. Rebuilding the Rigby-St. Anthony and the Ashton-St. Anthony lines should improve the reliability of the existing project transmission service by reducing the number of transmission line outages.

From the above, we conclude that, although loss of the project would have minimal affect on UP&L's system reliability, issuance of a non-power license for the project would reduce reliability in the Rigby area and would impose additional costs on UP&L's customers sooner than with the project in operation.

6. Whether the plans of the applicant will be achieved, to the greatest extent possible, in a cost effective manner (Section 15(a)(2)(F))

With regard to the Ashton Development, UP&L plans to semi-automate the plant, upgrade and modernize the equipment, and reduce the overall operating expenses. Semi-automation will result in a 35 percent reduction in work force. Unit No. 1, being the oldest, is the least efficient and would be replaced by the upgraded unit proposed in the application for new license. Since the present unit is experiencing increased down-time, the flow utilization is not being optimized. UP&L has implemented its advanced project management planning program to achieve the above objectives for the selection of the most cost-effective alternative.

As to the total project, UP&L plans to improve recreational facilities and their operation and maintenance to enhance day-use recreation in the project area. UP&L plans to acquire additional lands, upgrade a boating ramp and fishing-observation pier, add new picnic facilities, improve vehicular and pedestrian traffic, assume greater responsibility for recreational facility operation and maintenance, and reevaluate the need for additional recreational facilities in the near future.

We have reviewed UP&L's plans and have determined that the measures proposed would be cost-effective. The upgrading of Unit No. 1 would result in the hydraulic capacity of the Ashton plant being increased and would optimize the utilization of flows at the project. Upgrading of the unit would involve minimal amount of incidental work and additional costs. Improvement of the recreational facilities would enhance day-use recreation at reasonable costs.

7. Such other factors as the Commission deems relevant (Section 15(a)(2)(G))

As discussed elsewhere in this order and in the attached EA, the issuance of a new license for the project would not result in any major, long-term adverse environmental impacts. Moreover, the issuance of a new license will permit the implementation of UP&L's proposed fish and wildlife mitigation and recreational improvements, which would benefit the environmental resources of the project area.

8. The applicant's record of compliance with the terms and conditions of the existing license (Section 15(a)(3)(A))

Based on a review of Regional Director and other Commission records, we conclude that UP&L has complied with the terms and conditions of its existing license. Specifically, UP&L, as required by the existing license, satisfactorily installed signs and public safety devices at the Ashton dam, and filed an amended Exhibit R and provided the facilities described therein. Also, pursuant to Part 12 of our regulations, UP&L has filed an emergency action plan and periodic updates, all of which were found acceptable. Also, in accordance with Part 12, UP&L has submitted an initial independent consultants report that was found satisfactory. The second report submitted by UP&L has been reviewed and, as a result, UP&L has been directed to undertake remedial measures. UP&L has adequately complied with Commission requirements regarding this second report. Thus, UP&L's compliance record indicates that it can be expected to fully comply with the terms and conditions of any new license issued for Project No. 2381.

9. The actions of the applicant related to the project which affect the public (Section 15(a)(3)(B))

The record indicates that UP&L has an excellent record of providing recreation facilities at the project. Also, UP&L's regard for public safety is demonstrated by the installation of a boating safety barrier, transformer yard fencing, warning signs and lifesaving devices at Ashton dam. Thus, the actions affecting the public taken by UP&L in relation to Project No. 2381 support the issuance of a new license.

Summary of Findings

Background information, analysis of impacts, support for related license articles, and the basis for a finding of no significant impact on the environment are contained in the EA[6] attached to this order. Issuance of this license is not a major federal action significantly affecting the quality of the human environment.

Pursuant to Section 15(a)(2) of the FPA, as amended by ECPA, the Commission considers UP&L's plans and abilities to be adequate in regard to compliance with the articles, terms, and conditions of the license and in managing, operating, and maintaining the project safely and in a manner that would provide efficient and reliable electric service.

UP&L has demonstrated its need for project power, taking into consideration system reliability and reasonable costs and availability of alternative sources of power and their effect on the provider of the alternative power sources, its customers, and UP&L's operating and load characteristics.

The project will be safe if operated and maintained in accordance with the requirements of this license and Part 12 of the Commission's regulations. Analysis of dam safety issues is provided in the Safety and Design Assessment attached to this order.

Pursuant to Section 15(a)(3) of the FPA, we conclude that UP&L has also demonstrated an adequate record of compliance with the terms and conditions of the existing license, and has taken appropriate actions related to the project which affect the public. Maintenance of the project has been adequate. No significant environmental problems are apparent. The primary dam safety concern is the ability of the spillway to pass the probable maximum flood, which is being addressed pursuant to Part 12 of our regulations.

Conclusion

As amended by ECPA, Section 15(a)(2) of the FPA requires the Commission to issue new licenses "to the applicant having the final proposal which the Commission determines is best adapted to serve the public interest." As explained previously, the provisions of Section 10 of the FPA are applicable to applications for new license under Section 15. Consequently, Section 10(a)(1) of the FPA, as amended by ECPA, governs Commission consideration of applications for new license, and the Commission may issue a new license only if the proposal "will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water power development, for the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses, including irrigation, flood control, water supply, and recreational and other purposes referred to in [Section 4(e) of the FPA]." [7]

[6] Section II of the EA, entitled Resource Development", is superseded by the portion of the attached Safety and Design Assessment entitled "Economic Feasibility" and by the analysis of Section 15(a)(2)(D) of the FPA contained in this order.

[7] Section 4(e) of the FPA authorizes the Commission to issue licenses for project works "necessary or convenient for the development and improvement of navigation and for the development, transmission, and utilization of power... ." Also, Section 4(e) provides, in a provision added by Section 3(a) of ECPA, that:

> "In deciding whether to issue any license under this Part for any project, the Commission, in addition to the power and development purposes for which licenses are issued, shall give equal consideration to the purposes of energy conservation, the protection mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities and the preservation of other aspects of environmental quality."

Based upon our review of the agency and public comments filed in this proceeding, and our independent analysis of the requirements of Sections 4(e), 10, and 15 of the FPA as discussed herein, we conclude that the Ashton-St. Anthony Project would not conflict with any planned or authorized development and is best adapted to a comprehensive plan for the Henry's Fork of the Snake River, taking into consideration the equal consideration requirements of Section 4(e) of the FPA and the beneficial public uses described in Section l0(a)(l) of the FPA.

Section 15(e) of the Federal Power Act

Section 5 of ECPA added a new subsection (e) to Section 15 of the FPA specifying that any license issued under Section 15 shall be for a term which the Commission determines to be in the public interest, but not less than 30 years, nor more than 50 years. This new provision is consistent with pre-ECPA Commission policy, which was to establish 30-year terms for those projects which proposed no or less than moderate new construction or capacity, 40-year terms for those projects that proposed a moderate amount of new development, and 50-year terms for those projects that proposed a substantial amount of new development.[8]

UP&L proposes to replace an existing l,800-kW generator unit at the Ashton Development with a new 3,400-kW unit and to install a fish passage facility at the St. Anthony diversion dam. This work constitutes a moderate amount of new development that warrants a 40- year license. Accordingly, the new license for the project will be for a term of 40 years.

The Commission orders:

(A) This license is issued to Utah Power & Light Company (licensee) for a period of 40 years, effective January 1, 1988, to operate and maintain the Ashton-St. Anthony Project. This license is subject to the terms and conditions of the Federal Power Act (Act), which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, enclosed by the project boundary shown by Exhibit G:

Exhibit	FERC Drawing	Development	Title
G-1	2381-33	Ashton	General Location Map
G-2	2381-34	Ashton	Project Boundary Map
G-3	2381-35	Ashton	Project Boundary Map
G-4	2381-36	Ashton	Project Boundary Map
G-5	2381-37	Ashton	Project Boundary Map
G-6	2381-38	Ashton	Plant Facilities Map
G-1	2381-46	St. Anthony	Location and Boundary Map

(2) Project works consisting of two developments. The Ashton Development is comprised of: [Order Amending License, Approving As-Built Exhibits, and Revising Annual Charges, Ashton-St. Anthony Project FERC No. 2381 (11/16/1993)]: (a) a 56-.6-foot-high, 226-foot-long, earth and

[8] See Montana Power Company, 56 F.P.C. 2008 (1976).

rock-filled dam having its downstream slope covered with roller compacted concrete, upstream slope stabilized by additional rock fill, and crest elevation at 5156.6 MSL; (b) two-foot-high flashboards on the dam crest to prevent spillage from reservoir wave-section; (c) an 82-foot-long reinforced concrete spillway surmounted by six 10-foot-high radial gates; (d) a reservoir having a surface area of 404 acres, a gross storage capacity of 9,800 acre-feet and a usable storage capacity of 3,988 acre-feet at normal water surface elevation 5156.6 feel MSL; (e) a reinforced-concrete powerhouse located at the right bank, having integral intakes controlled by vertical slide gates and containing two generating units, each rated at 2,000 kW, and one generating unit rated at 2,850 kW; (f) a tailrace; (g) a 46/2.3-kV step-up transformer; (g)[sic] a 133-foot-long, 46-kV transmission line; (h) a 2,160-foot-long access road; and (i) appurtenant facilities. [Order Amending License, Approving As-Built Exhibits, and Revising Annual Charges, Ashton-St. Anthony Project FERC No. 2381 (11/16/1993)]

The St. Anthony Development is comprised of: (a) a 9.5-foot-high, 863-foot-long concrete diversion dam having a 206-foot-long spillway with crest elevation 4,949.0 feet MSL surmounted by 2.5-foot-high flashboards, an 81.5-foot-long wasteway with crest elevation 4,947.0 feet MSL surmounted by 4.5-foot-high flashboards and a fishway; (b)a 41-foot-wide reinforced-concrete canal intake structure; (c) a 35-foot-wide, 1,350-foot-long power and irrigation canal; (d) an irrigation canal headworks structure; (e) a 16-foot-wide, 145-foot-long screened and rubber-lined wooden-box flume having an overflow spillway and an ice chute; (f) a reinforced concrete powerhouse containing a generating unit rated at 500-kW; (g) a tailrace; (h) the 2.3-kV generator leads; and (i) appurtenant facilities.

The project works generally described above are more specifically shown and described by those portions of Exhibits A and F recommended for approval in the attached Safety and Design Assessment.

(3) All of the structures, fixtures, equipment or facilities used to operate or maintain the project and located within the project boundary, all portable property that may be employed in connection with the project and located within or outside the project boundary, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) The portions of the Exhibit G described above and those sections of Exhibits A and F recommended for approval in the attached Safety and Design Assessment are approved and made part of the license.

(D) This license is subject to the articles set forth in Form L-1 (October 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Lands of the United States". The license is also subject to the following additional articles:

Article 201. The licensee shall pay the United States the following annual charge, effective January 1, 1988:

a. For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is *9,600* horsepower. [Order Amending License & Revision Annual Charges, Ashton-St. Anthony Project FERC No. 2381, 50 FERC¶62,070. (02/02/1990)]; Order Amending License & Revision Annual Charges, Ashton-St. Anthony Project FERC No. 2381 (01/17/1992). [**NOTE**: Order Approving Revised Project Description and Exhibits F and G; Ashton-St. Anthony Hydroelectric Project, FERC No. 2381; 66FERC¶62,198: March 31, 1994 officially changed installed capacity from 7,200-kW to 7,350-kW.]

b. For the purpose of recompensing the United States for the use, occupancy and enjoyment of 0.39 acres of its lands, a reasonable annual charge as determined by the Commission in accordance with its regulations, in effect from time to time.

Article 202. Pursuant to Section 10(d) of the Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. One-half of the project surplus earnings, if any, accumulated under the license, in excess of the specified rate of return per annum on the net investment, shall be set aside in a project amortization reserve account at the end of each fiscal year. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year under the license, the amount of that deficiency shall be deducted from the amount of any surplus earnings subsequently accumulated, until absorbed. One-half of the remaining surplus earnings, if any, cumulatively computed, shall be set aside in the project amortization reserve account. The amounts established in the project amortization reserved account shall be maintained until in the project amortization reserved account shall be maintained until further order of the Commission.

The annual specified reasonable rate of return shall be the sum of the annual weighted costs of long-term debt, preferred stock, and common equity, as defined below. The annual weighted cost for each component of the reasonable rate of return is the product of its capital ratio and cost rate. The annual capital ratio for each component of the rate of return shall be calculated based on an average of 13 monthly balances of amounts properly includable in the licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rates for long-term debt and preferred stock shall be their respective weighted average costs for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10-year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 203. The Commission reserves the authority to order upon its own motion or upon the recommendation of federal or state fish and wildlife agencies or affected Indian Tribes, alterations of project structures and operations to take into account to the fullest extent practicable the regional fish and wildlife program developed pursuant to the Pacific Northwest Electric Power Planning and Conservation Act.

Article 301. The licensee shall commence construction of the modifications to the project within two years from the effective date of the license and shall complete construction of the project within four years from the effective date of the license.

Article 302. The licensee shall, at least 60 days prior to start of construction, submit one copy to the Commission's Regional Director and two copies to the Director, Division of Inspections, of the final contract drawings and specifications for pertinent features of the modifications to the project, such as water retention structures, powerhouse, and water conveyance structures. The Director, Division of Inspections, may require changes in the plans and specifications to assure a safe and adequate project.

Article 303. The licensee shall review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction of the modifications to the project and shall ensure that construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days prior to start of construction of the cofferdam, the licensee shall submit to the Commission's Regional Director and Director, Division of Inspections, one copy each of the approved cofferdam construction drawings and specifications and the letter(s) of approval.

Article 304. The licensee shall within 90 days of completion of construction of the modifications to the project file, for approval by the Commission, revised Exhibits A, F, and G to describe and show

the project as built and to include the irrigation canal headworks structure at the St. Anthony Development.

Article 305. The Licensee shall, within 5 years, from the effective date of this amendment of license, prepare and submit to the Director, Office of Hydropower Licensing, a detailed economic feasibility study for the installation of additional generating capacity at the Ashton-St. Anthony Project. If the study shows that the installation of additional capacity is economically feasible, the Licensee shall, simultaneously, file an amendment of license application to install that additional capacity. [Order Amending License & Revision Annual Charges, Ashton-St. Anthony Project FERC No. 2381, 50 FERC¶62,070. (02/02/1990)].

Article 401. The licensee shall operate the Ashton Development in an instantaneous run-of-river mode for the protection of fish and wildlife resources in the Henry's Fork. The licensee, in operating the development in an instantaneous run-of-river mode, shall at all times act to minimize the fluctuation of the reservoir surface elevation, i.e., maintain a discharge from the development so that flow in the Henry's Fork, as measured immediately downstream from the powerhouse tailrace, approximates the instantaneous sum of inflow to the project reservoir. Instantaneous run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods upon mutual agreement between the licensee and the Idaho Department of Fish and Game.

Article 402. The following part of the Report on Fish, Wildlife and Botanical Resources, filed on December 31, 1984, as Section 3 of Exhibit E (the Environmental Report), is approved: pages E-26 to E-37 pertaining to the fishery mitigative plan for the Ashton Reservoir.

Article 403. The licensee shall consult with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service and, within six months from the effective date of this license, file with the Commission, for approval, functional design drawings of fish passage facilities for the Egin Irrigation Canal diversion dam at the St. Anthony Development, and a plan to monitor the operation of the fish passage facilities. The filing shall include documentation of agency consultation and any agency comments on the drawings and monitoring plan. The Commission reserves the right to require changes in the design of the fish passage facilities and in the monitoring plan. The licensee shall file as-built drawings with the Commission within three months after completion of the construction of the fish passage facilities.

Article 404. The licensee, after consultation with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service, shall develop a monitoring plan to evaluate turbine—induced injury and mortality to fish resources at the St. Anthony Development and at the Ashton Development. Within six months from the effective date of this license, the licensee shall file a copy of the monitoring plan, along with any comments from the above agencies on the plan, and a schedule for filing the results of the monitoring program. The Commission reserves the right to require modifications to the plan and the schedule.

The results of the monitoring shall be submitted to the Commission according to the approved schedule, along with any comments from the consulted agencies. If the results of the monitoring indicate that measures are necessary to minimize adverse effects to fish resources, the licensee also shall provide, for Commission approval, its recommendations for mitigation measures and a schedule for implementing the measures, along with comments from the above agencies on the recommended measures. Measures to be considered by the licensee shall include, but need not be limited to, screening the intakes, providing an equivalent off-site enhancement of a wild trout population, providing supplemental stocking, and providing other non-screening alternatives, such as behavior barriers, to minimize and compensate for any fish losses. At the same time, copies of the schedule shall be served upon the agencies consulted. The Commission reserves the right to require the licensee to

undertake measures different than those recommended by the licensee and to make changes in the implementation schedule.

Article 405. The licensee shall, after consultation with the U.S. Fish and Wildlife Service (FWS) and the Idaho Department of Fish and Game (IDFG), within 18 months from the effective date of the license, file, for Commission approval, a wildlife report that includes a series of maps and drawings indicating the final locations and design specifications of the 15 goose nesting structures, 10 raptor perch structures, 10 osprey nesting platforms, the bald eagle nesting platform, the cattle exclusion fence, the wetlands protected by preservation easements, and the restored grassland habitat. The report also shall include a plan for monitoring the effectiveness of the various enhancement measures and maintaining the aforementioned facilities, a schedule for filing annual monitoring reports with the Commission, FWS, and IDFG, and an implementation schedule. Agency comments on the adequacy of the wildlife report shall be included with the wildlife report. The Commission reserves the right to order changes in the final designs and in the monitoring program.

Article 406. The licensee, within one year from the effective date of this license, shall implement the plan described in the Report on Recreational Resources, filed December 31, 1984, as Section 5 of the Exhibit E (Environmental Report), pages E-49 through E-59, which provides for improved recreational facilities and operation and maintenance of a boat ramp and dock area at the Ashton Development.

Article 407. The licensee, after consultation with the City of St. Anthony, and within one year from the effective date of this license, shall repair or replace those portions of the diversion structure and retaining wall at the St. Anthony Development necessary to prevent flooding conditions at Keefer Park. Further, the licensee shall continue to maintain the above facilities during the license period.

Article 408. The licensee shall implement its cultural resources management plan to mitigate any impacts to the historic Unit No. 1 turbine, as described in the licensee's filing with the Commission dated July 22, 1985. Within 4 years of the effective date of this license, the licensee shall file with the Commission a report that includes: (a) documentation of the turbine's historical significance in terms of eligibility criteria for inclusion in the National Register of Historic Places; (b) a detailed plan for documenting or preserving the turbine to mitigate its removal, if it is determined that the turbine is eligible; (c) copies of letters from the Idaho State Historic Preservation Officer (SHPO) and the Historic American Engineering Record (HAER) of the National Park Service commenting on (a) and (b), or, if comments are not provided, copies of letters to the SHPO and the HAER indicating that these agencies have been afforded at least 60 days to comment. The Commission reserves the right to require changes in the report. Within six years of the effective date of this license, the license shall file with the Commission documentation that the turbine has been recorded or preserved in a manner consistent with the plan in the report, if required. This documentation shall include a copy of a letter from the SHPO indicating that the turbine has been protected as agreed upon or a copy of a letter indicating that the SHPO has been afforded at least 60 days to provide such a letter. The licensee shall make available funds in a reasonable amount for any required work.

If the licensee discovers any previously unidentified archeological or historic sites during the course of constructing or developing project works or other facilities at the project, the licensee shall stop all construction and development activities in the vicinity of the sites and shall consult a qualified cultural resources specialist and the SHPO concerning the eligibility of the sites for listing in the National Register of Historic Places and any measures .needed to avoid the sites or to mitigate effects on the sites. If the licensee and the SHPO cannot agree on the amount of money to be spent for project-specific archeological and historical purposes, the Commission reserves the right to require the licensee to conduct the necessary work at the licensee's own expense.

Article 409. The licensee, within one year from the effective date of this license, and after consultation with the U.S. Fish and Wildlife Service, the Idaho Department of Fish and Game, and the

Idaho Board of Water Resources, shall prepare and file with the Commission a detailed, site-specific plan to minimize the quantity of sediment or other potential water pollutants resulting from construction of fish passage facilities at the Egin Irrigation Canal diversion dam. The plan shall address, among other things, measures to contain sediment, to filter sediment-laden discharges, and to store and dispose of excess sediment and other spoil materials. The plan shall also include functional design drawings and map locations of control measures, an implementation schedule, monitoring and maintenance programs for construction of these facilities, provisions for periodic review of the plan and for making any necessary revisions to the plan.

Documentation of consultation with agencies during preparation of the plan, and a summary of agency comments and recommendations, must be included in the filing. In the event that the licensee does not concur with any agency recommendations, the licensee shall provide a discussion of the reasons for not concurring, based on actual site geological, soil, and groundwater conditions. The Commission reserves the right to require changes to the plan. Unless the Director, Office of Hydropower Licensing, within 90 days from the filing date instructs otherwise, the licensee may commence instream construction or spoil-producing activities associated with installation of fish passage facilities at the Egin Irrigation Canal diversion dam at the end of that period.

Article 410. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee shall also have continuing responsibility to supervise and control the uses and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) noncommercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single- family type dwellings; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges and roads for which all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric utility distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certificates or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Hydropower Licensing, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:

(1) Before conveying the interest, the licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, ,or otherwise be incompatible with overall project recreational use; and (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.

(4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be. excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.

(g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

(E) This order is final unless an application for rehearing is filed within 30 days from the date of its issuance, as provided in Section 313(a) of the Act. The filing of an application for rehearing does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically ordered by the Commission. The licensee's failure to file an application for rehearing shall constitute acceptance of this order.

By the Commission.

(SEAL)

Kenneth F. Plumb,
Secretary.

SAFETY AND DESIGN ASSESSMENT
ASHTON-ST. ANTHONY PROJECT
FERC NO. 2381-001--IDAHO

DAM SAFETY

The Ashton dam is an earth and rock-filled dam 65 feet high and 252 feet long. The gross storage capacity of the reservoir is 9,800 acre-feet. The dam is composed of an upstream earthen shell and a downstream rock-filled zone. The earthen shell has finer material on the upstream side and coarser material placed against the rock-filled zone. There is a concrete cut-off on the upstream side penetrating into the compact foundation gravels. The dam was constructed about 70 years ago with major rehabilitation work performed in 1958.

The Commission's San Francisco Regional Director's inspection report dated August 27, 1986, maintained the classification of the existing Ashton dam as high hazard and the existing St. Anthony dam as low hazard. The Ashton dam is classified high hazard because the Town of St. Anthony with a population of 3,000 is located about 10 miles downstream of the Ashton dam. The Regional Director reported that the project facilities appear to be structurally sound with no significant problems visible.

The project facilities are also inspected periodically by the applicant's in-house staff and the Idaho State dam safety engineers. In addition, the project is inspected in-depth every five years by an independent consultant in accordance with Part 12 of the Commission's regulations, 18 C.F.R. Part 12 (1987).

The latest five-year inspection was made on August 13, 1984, and the report was submitted in January 1985. The report shows that the probable maximum flood at the project site is estimated at 36,900 cfs. The spillway discharge capacity is 14,200 cfs. The dam would be overtopped by six feet during the probable maximum flood and, if the Ashton dam were to fail, there would be potential loss of life and substantial property damage.

The powerhouse which is integral with the dam impounds water and is also classified as high hazard. It is founded on bedrock and compact gravels. The actual uplift was measured and found to be considerably less than the assumed full uplift. Based on the actual uplift and the assumed foundation properties, the report states that the powerhouse would be stable. However, no supporting documentation was provided to justify the stability analysis. The stability would have to meet the Commission's standards for factors-of-safety for all credible loading conditions.

No stability analysis was performed for the spillway section of the dam. It is likely that the spillway section would be modified to increase its capacity to pass the floods up to the probable maximum. However, the alternative to modify the spillway is not finalized. The existing or the modified spillway section would have to meet the required factors-of-safety for all credible loading conditions.

The review of the report indicated a need for supplemental information from the applicant which was subsequently received and evaluated by the Commission staff. By letter dated May 14, 1987, the Regional Director directed the applicant to submit by August 1, l987, a plan and schedule for the design and construction of the necessary remedial measures to safely pass floods up to the probable maximum. The applicant was also directed to submit by August 1, 1987, a reanalysis of the stability of the project structures with modifications, if necessary, to meet the required stability criteria, along with the supporting documentation.

In contrast to the Ashton dam, the St. Anthony dam is a concrete structure only a few feet high used for diverting flows. Because of the negligible storage, any failure of the dam would not pose a threat to downstream life or property.

PROJECT DESIGN

The basic design of the operating project would remain unchanged. The only change would be the installation of additional capacity at the Ashton Development. This would be accomplished by replacing the 1,800 kW generating Unit No. 1 installed in 1917 by a newer 3,400 kW unit in the three-unit powerhouse. Most of the work related to replacing the unit would be confined to the existing powerhouse.

At the St. Anthony Development, the applicant would repair or replace portions of the diversion structure and the retaining wall to prevent flooding of the adjoining park.

The total installed capacity at Ashton Development would increase from 5,800 kW to 7,400 kW and for the total project from 6,300 kW to 7,900 kW. [NOTE: Order Approving Revised Project Description and Exhibits F and G; Ashton-St. Anthony Hydroelectric Project, FERC No. 2381; 66FERC¶62,198: March 31, 1994 officially changed installed capacity from 7,200-kW to 7,350-kW.]

ECONOMIC AND FINANCIAL FEASIBILITY

The proposed modifications to the Ashton-St. Anthony Project are economically feasible so long as the projected levelized cost of the energy to be produced by the modifications is less than the long—term levelized alternative energy cost of any utility in the region that can be served by the modified project. In this instance, the applicant intends to utilize the additional power generated by the project in its own system. Commission staff has estimated the projected levelized alternative energy costs for the applicant to be 58.0 mills/kWh. Since the levelized cost of energy from the modifications to the project is estimated to be 52.7 mills/kWh, the modifications are economically feasible. Also, it appears that this utilization of the project power is at a price sufficient to support the modifications to the project. Thus, the project modifications are financially feasible.

WATER RESOURCES PLANNING

The project is operated run-of-river. When the hydraulic capacity of the Ashton powerplant is increased it would reduce the average annual spill period from four months to one month.

The applicant entered into a contract in 1935 with the U.S. Bureau of Reclamation, Fremont-Madison Irrigation District, and the City of Idaho Falls, Idaho, that requires the applicant not to interrupt, interfere or otherwise fluctuate irrigation releases from the Island Park Reservoir during the irrigation season.

The existing hydraulic capacity at the project would be increased by replacing one of the units at the Ashton Development. This unit has a hydraulic capacity of 567 cubic-feet-per-second (cf s) which would be increased to 1,000 cfs. The total hydraulic capacity of the Ashton plant would increase from 2,079 cfs to 2,512 cfs which corresponds to the flow equaled or exceeded 25 percent and 12 percent of the time, respectively, on the f low-duration curve for Henry's Fork near Ashton. The new unit would generate an additional 10,000,000 kWh annually which would increase the average annual generation from 36,000,000 kWh to 46,000,000 kWh at the Ashton development and to 49,922,000 kWh at the project. The proposed capacity is reasonable based on the limited operation that would be possible at higher flows.

The flow-duration curve for Henry's Fork is based on the period 1961 to 1983 from U.S.G.S. Gage No. 13046023 near Ashton, Idaho, located 0.3 mile below the Ashton plant. The gage was

subsequently relocated. The period of flow is considered representative of future flows anticipated at the site. Based on this gaged record, the applicant's estimate of 10,000,000 kWh of additional average annual energy is reasonable. There are no minimum flow requirements imposed by the resource agencies that would cause reduction in generation.

No specific state and federal agency comments or recommendations were made addressing flood control, navigation, water supply, or irrigation requirements in the basin other than those raised by the Idaho Department of Water Resources discussed in the order to which this assessment is attached.

The Upper Snake River Basin Planning Status Report includes no projects, either proposed or constructed on the Snake River that this project would impact, and the project would not conflict with any pending applications for exemption, license or preliminary permit.

Based on the above, it is concluded that the modified Ashton-St. Anthony Project will adequately utilize the available flow and head at the site and will not be in conflict with any existing or planned water resource developments in the basin.

EXHIBITS

The following portions of Exhibits A and the following Exhibits F drawings conform to the Commission's rules and regulations and should be included in the license.

Exhibit A (Ashton). Section entitled "Equipment.
[Order Amending License, Approving As-Built Exhibits, and Revising Annual Charges, Ashton-St. Anthony Project FERC No. 2381 (11/16/1993) eliminates the below-struck Exhibits F as well as Exhibit G-6, replacing them with Licensee's "Exhibit A – Revised April 1993 – Description of the Project" filed July 8, 1993, approved in this Order.]

Exhibit A (St. Anthony). Item 1 (i) entitled Generator" and Item 1 (ii) entitled "Turbine".

Exhibit F	FERC Drawing	Development	Description
F-l	2381-40	St. Anthony	Dam—Profile, Plan and Sections
F-2	2381-41	St. Anthony	Canal Intake and Wasteway-Plans, Elevation and Sections
F-3	2381-42	St. Anthony	Flume-Elevation and Section
F-4	2381-43	St. Anthony	Powerhouse-Plan
F-5	2381-44	St. Anthony	Powerhouse-Sections
F-6	2381-45	St. Anthony	Powerhouse-Elevation

ENVIRONMENTAL ASSESSMENT [9]
Division of Environmental Analysis,
Office of Hydropower Licensing Federal Energy Regulatory Commission
Ashton-St. Anthony Hydroelectric Project
FERC No. 2381-001 Idaho
June 27, 1986

I. APPLICATION

Utah Power and Light Company (applicant or UP&L) filed on December 31, 1984, and supplemented on July 24, 1985, an application to relicense with additional capacity the existing Ashton-St. Anthony Hydroelectric Project. The project, which occupies 0.39 acres of U.S. land administered by the Bureau of Land Management (BLM), consists of two developments, the Ashton Development and the St. Anthony Development.

The Ashton Development is located on Henry's Fork of the Snake River, approximately 2.5 miles northwest of Ashton, in Fremont County, Idaho (figures 1 and 2). The St. Anthony Development is located on the Egin Irrigation Canal (EIC), a diversion of the Henry's Fork, in the City of St. Anthony, Fremont County, Idaho (figures 1 and 3).

On December 19, 1977, the Commission issued a major license to the Utah Power and Light Company for the continued operation of the constructed Ashton-St. Anthony Project. The license's expiration date is December 31, 1987.

II. RESOURCE DEVELOPMENT

A. Purpose

The proposed project would provide an estimated average of 10 million kilowatt hours (kWh) of additional electrical energy and 46 million KWh of total energy per year for Utah Power and Light Company, the owner utility.

B. Need for Power

Because of the small size of the proposed increase in the project capability in relation to the total generating capability of the applicant's system, the traditional approach of linking project development with a forecasted need for a specific project is inapplicable to assessing need for the proposed project upgrading.

The project is currently being used to meet load requirements on the applicant's electric power system. The additional power and energy that is made available through the proposed project upgrading would be useful in meeting load growth projected for the UP&L system and for adjacent areas. Use of the additional hydroelectric energy to displace fossil-fueled thermal generation would conserve nonrenewable fossil fuels and reduce the emission of noxious byproducts caused by the combustion of fossil fuels.

[9] Figures and attachments referenced in the text are omitted from this document due to reproduction requirements.

C. Economic Analysis

Additional power generated by the project would be utilized by UP&L in its system. The applicant based the economic feasibility of the project on its levelized avoided cost rates. The project's levelized cost would be 53.4 mills/kWh while the levelized avoided cost rate would be 54.5 mills/kWh.

D. Comprehensive Development

The existing hydraulic capacity at the project would be increased by replacing one of the units at the Ashton Development. This unit has a hydraulic capacity of 567 cubic feet per second (cfs), which would be increased to 1,000 cfs. The total hydraulic capacity of the Ashton plant would be increased from 2,079 cfs to 2,512 cfs, which corresponds to the flow equaled or exceeded 25 percent and 12 percent, respectively, on the flow—duration curve for Henry's Fork near Ashton. The new unit would generate an additional 10,000,000 kWh annually, which would increase the average annual generation from 36,000,000 kWh to 46,000,000 kWh at the project. The proposed capacity is reasonable, based on the limited operation that would be possible at higher flows.

The project is operated in a run-of-river mode. According to a current agreement, UP&L operations are secondary to irrigation releases for downstream farms. When the hydraulic capacity of the Ashton power plant is increased, it would reduce the average annual spill period from 4 months to 1 month.

The flow-duration curve for Henry's Fork is based on the period of 1961 to 1983 from USGS Gage No. 13046023 near Ashton, Idaho, located 0.3-mile below the plant. The gage was subsequently relocated. The period of flow is considered representative of future flows anticipated at the site. Based on this gaged record, the applicant's estimate of 10,000,000 kWh of additional average annual energy is reasonable. There .are no minimum flow requirements imposed by the resource agencies that would cause reduction in generation.

The Commission's Planning Status Report for the Upper Snake River Basin discusses the existing water resource developments and reconnaissance level plans of possible future development within the basin. The project does not conflict with any existing or planned development or any pending applications for exemption, license or preliminary permit. The intake and powerhouse are considered properly located, given the existing site conditions.

In summary, the staff's analysis shows that the proposed project is properly designed to develop comprehensively the hydropower potential of the Snake River.

D. Alternatives to the Proposed Action

The applicant's proposal to upgrade the project is made in conjunction with UP&L's application for relicensing the project and in compliance with a letter of agreement between the applicant, the United States, the City of Idaho Falls, and the Fremont-Madison Irrigation District, relating to operation of the Island Park reservoir. Among other things, the agreement requires that water spills past the Ashton plant be minimized to the greatest extent possible. The proposed project modification would address this requirement while other alternative generating facilities or load reduction measures would not.

III. EXISTING FACILITIES, PROPOSED ACTION, AND ALTERNATIVES

A. Existing Facilities

The Ashton Development currently includes: (a) a 65-foot-high, 252-foot-long, earth and rock-filled dam that impounds a reservoir having a surface area of 404 acres at a normal maximum water surface elevation (figure 2); (b) a reinforced concrete powerhouse containing three turbine-generator units with

a combined rated capacity of 5,800 kW; (c) a tailrace; (d) a 133-foot-long, 46-kilovolt (kV) transmission line; and (e) a 2,160-foot-long access road.

The St. Anthony Development currently includes: (a) a 9.5-foot-high, 863-foot-long, concrete diversion dam having a 206-foot-long spillway surmounted by 2.5-foot-high flashboards, and an 81.5-foot-long wasteway surmounted by 4.5-foot-high flashboards; (b) a 35-foot-wide, 1,350-foot-long power and irrigation canal; (c) a 16-foot-wide, 110-foot-long, screened and lined wooden flume; (d) a reinforced concrete powerhouse containing one turbine-generator unit with a rated capacity of 500 kW; (e) a tailrace; and (f) a 150-foot-long, 24-kV, underground transmission line.

B. Proposed Action

The applicant proposes to relicense and continue operation of the existing hydroelectric facilities at the Ashton and St. Anthony Developments. By replacing the existing l,800-kW turbine generator unit with a new 3,400-kW unit, the applicant would increase the generating capacity of the Ashton Development from 5,800 to 7,400 kW. The applicant also proposes to implement fish and wildlife mitigative plans at the Ashton Development, to upgrade existing day-use recreational facilities at Ashton Reservoir, and to construct an upstream fish facility at the St. Anthony Development.

C. Federal Land Management Conditions

BLM did not provide conditions for the project.

D. Alternative of No Action

No action would involve denial of the relicense and abandonment of the existing facilities or the issuance of an annual license until the facilities are taken over by another entity for a non-power use.

IV. CONSULTATION AND COMPLIANCE

A. Agency Consultation

Commission regulations require prospective applicants to consult with the appropriate resource agencies before filing an application for license. This consultation constitutes an initial step in compliance with the Fish and Wildlife Coordination Act, the Endangered Species Act, the National Historic Preservation Act, and other federal statues. Pre-filing consultation must be complete and documented in accordance with the Commission's regulations.

After the Commission accepts the application, formal comments may be submitted by concerned entities during the public notice period. In addition, organizations and individuals may petition to intervene and become a party to any subsequent proceedings. The comments provided by concerned entities are made part of the record and are considered during the review of the proposed project. The following entities commented on the application subsequent to the public notice, which was issued on May 15, 1985.

Commenting Entity	Date of Letter
Forest Service, Targhee National Forest	June 12, 1985
City of St. Anthony	July 12, 1985
Department of the Interior	July 29, 1985

The Idaho Department of Water Resources (IDWR) filed a timely Motion to Intervene on July 12, 1985. The Idaho Department of Fish and Game (IDFG) filed an untimely Motion to Intervene on July 19, 1985, but was granted late intervention on November 6, 1985.

B. Water Quality Certification

On May 10, 1985, the State of Idaho Department of Health and Welfare (IDHW) granted §401 water quality certification as required by the Clean Water Act.

C. Pacific Northwest Power Planning and Conservation Act

Under Section 4(h) of the Pacific Northwest Power Planning and Conservation Act, the Northwest Power Planning Council (Council) developed the Columbia River Basin Fish and Wildlife Program (Program) to protect, mitigate, and enhance fish and wildlife resources associated with the development of hydroelectric projects. The Program contains a framework for assessing the impacts of new hydroelectric development on fish and wildlife resources and lists a number of general mitigative measures that should be implemented for any new development.

The Program requires that fish and wildlife agencies, Indian tribes, and the Council be consulted during the study, design, construction, and operation of new hydroelectric projects. The Commission's regulations currently require applicants to initiate pre-filing consultation with these entities and to give these entities the post-filing opportunity to review and comment on the license application. This consultation process has occurred.

The Program states that authorization for new hydroelectric projects should include conditions of development that would mitigate the impacts of the project on fish and wildlife resources.

The applicant proposes to satisfy the intent of the Program by providing adequate mitigative measures. Moreover, the Commission has the authority to order, where practical, alterations of project structures and operations in order to take into accour$_1$t the Council's Program. Accordingly, the staff concludes that the Proposed project does not conflict with the applicable provisions of the Council's Program.

V. ENVIRONMENTAL ANALYSIS

A. Proposed Action

The removal of the existing 1,800-kW turbine-generator unit and the installation of the proposed new unit would require the alteration of the powerhouse interior, but would not involve any excavation or new construction at the Ashton Development, nor would the proposed action involve an increase in the normal maximum surface area of the Ashton Reservoir. Consequently, the proposed action would not affect the visual quality of the project area. Moreover, manufacturing of the new turbine-generator unit and other equipment would not occur in the Ashton-St. Anthony vicinity, and the replacement of the existing turbine at the Ashton powerhouse would require relatively few onsite workers. As a result, the proposed action would not generate any discernable socioeconomic impacts in Fremont County, Idaho.

1. General Description of the Locale

Ashton Dam and powerhouse are situated in northeast Idaho, a sparsely populated, semi-arid area in which the dominant land uses are irrigated agriculture and outdoor recreation, particularly trout angling and hunting. The area's topography is flat to gently rolling, and its climate is characterized by warm, dry summers and cold, snowy winters. The area's average annual precipitation is approximately 14 inches.

As of July 1, 1984, the City of Ashton, located approximately 2.5 miles southeast of the dam, had a total population of 1,226 persons, and the City of St. Anthony had 3,155 permanent residents (personal communication, Audrey Primas, Statistical Information Assistant, Bureau of the Census, Suitland, Maryland, April 16, 1986).

The area's dominant economic activities are irrigated farming, lumbering, and wood processing. In 1982, the 547 farms in Fremont County received $64,170,000 from the sale of potatoes, cattle and calves, barley, wheat, dairy products, and other agricultural products (personal communication, Douglas Miller, Statistician, Bureau of the Census, Suitland, Maryland, April 16, 1986). Data for 1984 indicate that 189 workers were employed by sawmills and other manufacturers of wood products in Fremont County (personal communication, Gerald Foyer, Statistician, Bureau of the Census, Suitland, Maryland, April 16, 1986).

2. Geology, Soils and Sedimentation

Affected Environment: The project area, located in the Eastern Snake River Plain Section of the Columbia Intermontane Physiographic Province, is in Seismic Zone 3, which has a potential for major damage. Nevertheless, geologic maps of Idaho do not show any faults in the immediate project vicinity.

Bedrock in the project area consists of massive basalt. Alluvial deposits at the Ashton Dam include loose cobbles and boulders, and compacted, cemented gravels. Finer sediments, such as sand and silt, become more abundant in the lower gradient reach at St. Anthony.

Environmental Impacts and Recommendations: Installation of a fish passage facility at the EIC diversion dam would cause temporary increases in turbidity, suspended sediment, and downstream sedimentation. The licensee should prepare and implement a detailed site-specific plan to contain disturbed sediments and minimize the quantity of sediment that would enter Henry's Fork as a result of these construction activities, including the filtering of any sediment-laden discharges and the disposal of any excess sediments or other spoil materials.

Unavoidable Adverse Impacts: Minor, temporary increases in turbidity and suspended sediment would be unavoidable during construction of the fish passage facility at the EIC diversion.

3. Water Resources

Affected Environment: Ashton Dam, located at river mile 45 of the Henry's Fork of the Snake River, drains approximately 1,040 square miles in eastern Idaho. Mean monthly flows of the Henry's Fork, as measured at the USGS gage located 0.8-mile below the dam, have ranged from 638 cfs in December 1962, to 4,372 cfs in May 1971. The average annual flow is 1,463 cfs. Inflow to the reservoir, which is regulated by releases from Henry's Lake and Island Park Reservoir, is greatest during periods of snowmelt and runoff. Ashton Reservoir extends approximately 4 miles upstream from the dam and has a normal maximum water surface area of 404 acres.

IDHW has classified the reach of the Henry's Fork in the project area as a special resource water. Designated uses of this river segment include primary and secondary contact recreation, maintenance of cold water biota, and salmonid spawning habitat.

The water quality of Henry's Fork below Ashton Dam is generally good. Water temperature ranges from 0 degrees Centigrade (°C) in February to 16.5°C in August, pH levels of 8.4 and 8.1 were recorded in summer and fall, respectively, and dissolved oxygen (DO) levels (measured about 35 miles downstream of Ashton Dam) vary between 6.5 and 13.2 milligrams per liter (mg/l) (Idaho Department of Health and Welfare, 1984).

Water sampling conducted by the applicant in the summer of 1984 indicates that in Ashton Reservoir values for both DO and water temperature decrease with reservoir depth. Water temperature ranged from 17.6°C at the surface to 15.2°C at the bottom in June, and from 20.1°C to 17.2°C in August; while DO levels ranged from 8.3 to 7.2 mg/l in June, and from 8.7 to 7.3 mg/l in August.

The St. Anthony Development is located on a diversion of the EIC. The EIC diversion dam, where there is no reservoir and only negligible storage capacity, diverts water directly into the EIC. Water is available for generation only when irrigation needs are being satisfied.. Flows not used for irrigation and generation spill over the EIC diversion dam. Diversion of water into the St. Anthony powerhouse from the EIC averages 406 cfs during the irrigation season and 432 cfs during the non-irrigation season. The average annual flow of water through the facility is 410 cfs. Water available for generation is subject to the Egin Irrigation Company's water requirements as well as available flows in the Henry's Fork. Mean monthly flows for the Henry's Fork, as measured at a USGS gage upstream of the diversion dam, have ranged from 668 cfs in October 1966, to 6,055 cfs in May 1976. The average annual flow is 2,950 cfs.

The water quality of the Henry's Fork above the EIC diversion dam is similar to that of the river below Ashton Dam. The water quality of the Henry's Fork below St. Anthony, however, is degraded by irrigation return flows and low flows related to irrigation diversion (Rohrer, 1981).

Environmental Impacts and Recommendations: Construction of a fish passage facility at the EIC diversion dam would cause temporary increases in sedimentation and turbidity. The implementation of a sediment control plan would minimize the amount of sediment introduced to the Henry's Fork.

After installation of the new turbine, operation of the Ashton powerhouse would result in the increased diversion of 433 cfs through the power-generating facility, and a reduction of the average spill period from 4 months to 1 month. As a result, DO concentration of the river below the project could be reduced somewhat. Consequently, the Bureau of Reclamation requested that DO concentration of the powerhouse discharge be assessed periodically. The applicant replied that monitoring of tailrace flows would not be necessary because DO concentration of the reservoir at the depth of water withdrawal is suitable for salmonids, and the presence of a healthy trout fishery downstream of the Ashton Dam suggests that DO levels are not detrimental to the fishery.

Reducing the magnitude and duration of spill at the Ashton Dam would not appreciably alter the existing DO concentration of the Henry's Fork downstream of the project. Although data that describe the DO concentration immediately downstream of the dam are unavailable, the aeration effect of the existing spill regime is most likely insignificant because the water at all depths in the reservoir has a DO saturation of at least 90 percent. The DO concentration of the powerhouse discharge would reflect that of the reservoir in the vicinity of the intake. Monitoring of the powerhouse discharge is unnecessary because DO concentration of the reservoir at the depth of water withdrawal would maintain state water quality standards for the Henry's Fork. The continued operation of the St. Anthony Development would not impact the existing water quality of the Henry's Fork.

Unavoidable Adverse Impacts: Minor, short-term increases in sedimentation and turbidity would occur during construction of a fish passage facility at the EIC diversion dam.

4. Fishery Resources

Affected Environment: The fishery resource of the Henry's Fork is comprised of coldwater species, including wild and hatchery rainbow trout (Salmo gairdneri), cutthroat trout (S. clarki), brown trout (S. trutta), brook trout (Salvelinus fontinalis), kokanee salmon (Oncorhynchus nerka), and mountain

whitefish (Prosopium williamsoni). The Henry's Fork provides habitat for a major resident trout fishery that is an extremely popular recreational resource in the vicinity of Ashton Dam and the St. Anthony Development. IDFG lists the Henry's Fork as Value Class I, the highest class possible for fishery resources.

IDFG studies indicate that the fishery within Ashton Reservoir is not as productive as the free-flowing river reaches downstream of the Ashton Dam and upstream of the Ashton Reservoir. Although little quantitative information exists on the fishery resource downstream of the EIC diversion dam at St. Anthony, reduced water quality could limit fish production. No federally listed threatened or endangered aquatic species are found in either area (letters from John Wolfin, Field Supervisor, U.S. Fish and Wildlife Service, Boise, Idaho, August 10, 1984, and September 18, 1984).

Environmental Impacts and Recommendations: Increased sedimentation and turbidity levels resulting from the installation and start-up of the turbine at Ashton Dam and during the construction of a fish passage facility at the EIC diversion dam would cause a short-term, adverse impact to the fishery resource by resulting in the avoidance of these areas by resident fish. The implementation of sediment control measures would protect the area's fishery resource.

Flow fluctuations during construction at or operation of the Ashton Development could adversely affect resident fish and fishing opportunities by drawing down the reservoir and stranding fish. The applicant, however, states that Ashton Reservoir's water levels would be unaffected by the installation of the new turbine.

IDFG recommends ramping rates and fishery resource maintenance flows at the Ashton Dam. The applicant states that these mitigative measures are not necessary because the Ashton Development would continue to be operated in a run-of-river mode.

Hydroelectric projects that operate in an instantaneous run-of-river mode and discharge flows at the dam do not require the establishment of either a ramping rate or a minimum flow. As proposed, the Ashton powerhouse would continue to discharge water immediately below the existing dam. Requiring the applicant to operate the project in a strict run-of-river mode would adequately protect the fishery resource of the Henry's Fork below Ashton Dam. The licensee, therefore, should operate the project in an instantaneous run-of- river mode.

IDFG indicates that fish population, fish harvest, and recreational fishery use of Ashton Reservoir are substantially less than the comparable values for adjacent upstream and downstream reaches of the Henry's Fork. IDFG believes that the production of fish in the river reach that was inundated by Ashton Reservoir was similar to that of surrounding free-flowing river reaches before constructing the Ashton Dam. To mitigate for this loss in production, IDFG recommends and the applicant concurs that the applicant must conduct a study to discover those measures that would increase the reservoir's fish populations, fish harvest, and recreational fishery use. Based on recent catch rates and sizes of fish caught, IDFG and the applicant agree on reservoir enhancement catch rate goals of 1 fish per angler hour and a mean size of 10 to 12 inches for creeled fish. Failure to achieve these goals would require the applicant to enhance the fishery at an offsite area.

The applicant's detailed fishery mitigative plan for the Ashton Reservoir, which includes a study to assess the productivity of the fishery and a fish stocking program, has been accepted by IDFG. The applicant's proposed fishery mitigative plan, included in the Report on Fish, Wildlife, and Botantical Resources, filed December 31, 1984, as Section 3 of the Exhibit E (Environmental Report), pages E-26 through E-37 (following), should provide for adequate mitigation of major project impacts to the fishery resource of the Henry's Fork in Ashton Reservoir.

Because the EIC diversion dam currently is a barrier to the upstream migration of resident trout, IDFG recommends that the applicant install and operate a fish passage facility at the diversion dam. The

applicant agrees to construct and operate a fish passage facility at the diversion dam. A fish passage facility would allow the fishery resource downstream of the development to have access to areas with superior water quality and spawning habitat. The licensee, therefore, should install and operate a fish passage facility at the EIC diversion dam.

Continued operation of the St. Anthony Development could result in the entrainment and turbine-related mortality of fish. IDFG recommends screening either the project intake or the headgate of the irrigation canal in order to minimize turbine-related mortality of fish. The applicant does not agree to screening the intake or canal headgate because of the high cost of installing, operating, and maintaining a fish screen, and because the amounts of entrainment and turbine-related mortality are unknown. The magnitude of entrainment mortality should be assessed by post-operational monitoring studies. The applicant, therefore, should conduct such monitoring studies to fully assess fish entrainment mortality and, if necessary, mitigate for fish entrainment mortality. The studies should include a determination of appropriate mitigative measures, such as supplemental stocking of upstream reservoirs to compensate for any fish losses.

Unavoidable Adverse Impacts: Increased sedimentation resulting from the installation and start-up of a new turbine at the Ashton powerhouse and the construction of a fish passage facility at the St. Anthony Development would temporarily impact the fishery resource. The continued operation of the St. Anthony powerhouse could cause some losses to the area's fishery as a result of entrainment-related mortality.

5. Terrestrial Resources

Affected Environment: The project is located within the sagebrush- wheatgrass province of the Intermountain Sagebrush Ecoregion (Bailey, 1980). Vegetation typical to this area includes big sagebrush (Artemsia tridentata), wheatgrass (.Agropyron spp.), and Rocky Mountain juniper (Juniperus scopulorum). Riparian vegetation around the Ashton Reservoir is dominated by willows (Salix spp.), black cottonwood (Populus trichocarpa), water birch (Betula occidentials), and bigtooth maple (Acer grandidentatum). Vegetation in the vicinity of the St. Anthony Development is scattered because of past disturbance from commercial and residential development (Utah Power and Light Company, 1984).

The project vicinity supports populations of elk (Cervus canadensis), mule deer (Odocoileus hemionus), beaver (Castor canadensis), mink (Mustela vison), river otter (Lutra canadensis), and bobcat (Lynx rufus). When unfrozen during fall and winter, the reservoir receives moderate use by waterfowl. Common waterfowl include Canada geese (Branta canadensis), mallard (Anas platyrhynchos), common goldeneye (Bucephalus clangula), and common merganser (Mergus merganser). The trumpeter swan (Cygnus Cygnus buccinator), a National Species of Special Emphasis, occasionally use the Ashton Reservoir (Utah Power and Light Company, 1984).

A small number of ospreys (Pandion haliaetus) and bald eagles (Haliaeetus leucocephalus) have been observed at Ashton Reservoir during midwinter surveys. There is evidence that eagles nested at the reservoir during 1982 and 1983 (Utah Power and Light Company 1984). The peregrine falcon (Falco peregrinus) is an occasional migrant in the project area during the fall and winter. The bald eagle and peregrine falcon are federally listed endangered species.

Environmental Impacts and Recommendations: Relicensing of the project would not result in any additional impacts to wildlife or their habitats. Original construction and reservoir filling disturbed at least 400 acres of wildlife habitat (Utah Power and Light, Company, 1984). The applicant proposes to mitigate for the project's original and continuing impacts by implementing a wildlife enhancement plan. The plan consists of: planting 31.8 acres of overgrazed habitat with beneficial plant species; constructing 5.7 miles of fencing that would exclude cattle from portions of the Ashton Reservoir shoreline; installing 15 goose nesting structures, 10 raptor perch structures, 10 osprey nesting

platforms, and 1 bald eagle nesting platform; acquiring preservation easements for 250 acres of nearby wetland habitat; and monitoring of the program.

The measures cited above would increase 'the potential value of the project area as habitat, thereby benefiting wildlife. The proposed mitigative plan, however, currently does not include the locations, design specifications, and other details of the proposed measures. The licensee, therefore, should consult with the U.S. Fish and Wildlife Service (FWS) and IDFG to develop a final mitigative plan that identifies the locations, and provides more detailed specifications of all the proposed measures.

The proposed action would not adversely affect bald eagles (letter from Bruce Blanchard, Director, Office of Environmental Project Review, Department of the Interior, Washington, D.C., July 29, 1985).

Unavoidable Adverse Impacts: None.

6. Cultural Resources

Affecting Environment: Ashton Dam and powerhouse, which were constructed and made operational between 1914 and 1918, may be eligible for inclusion in the National Register of Historic Places. However, only the unit no. 1 turbine, which would be replaced with a more efficient unit, would be affected by the proposed action. The significance of this turbine cannot be established until it is removed and inspected. No other components of the dam and powerhouse or other eligible historic or archeological sites would be affected by the proposed action (letters from Dr. Merle W. Wells, State Historic Preservation Officer, Idaho State Historical Society, Boise, Idaho, May 1984, and Dr. Thomas J. Green, State Archeologist, Idaho State Historical Society, Boise, Idaho, December 10, 1984).

Environmental Impacts and Recommendations: The Idaho State Historic Preservation Officer (SHPO) indicates that the removal of the turbine from its historic context would be mitigated by its historical documentation or preservation for public display or further study. The applicant has agreed to assess the historical significance of the turbine upon its removal, and to implement procedures to document or preserve the turbine. This work should be undertaken in a manner satisfactory to the SHPO and the National Park Service (letters from Dr. Thomas J. Green, State Archeologist, Idaho State Historical Society, Boise, Idaho, May 31, 1985, and Jody Williams, Attorney, Utah Power and Light Company, Salt Lake City, Utah, July 22, 1985).

Unavoidable Adverse Impacts: The unit no. 1 turbine would be removed from its historical context.

7. Recreation and Other Land Uses

Affected Environment: Henry's Fork in the vicinity of the Ashton Development provides a quality trout fishery, which is intensively used by anglers. In addition to fishing, Ashton Reservior provides opportunities for boating and waterfowl hunting. Public recreational facilities at the Ashton Development currently include a boat ramp and pier at the north end of the reservoir and 12 floating boat docks around the reservoir perimeter. The Targhee National Forest, located about 2 miles north of the reservoir, also provides various recreational opportunities, including fishing, hunting, boating, camping, skiing, hiking, and sight-seeing.

Recreational uses in the vicinity of the St. Anthony Development include picnicking, fishing, swimming, and team sports. There are two developed recreation areas in the vicinity of the development, both owned by the City of St. Anthony. They include a 1-acre playground, which is located west of the project, and Island Park, recently renamed Keefer Park, a 5-acre facility with picnic

tables, two barbeque grills, and an athletic field. A supervised swimming area is located across the river from the park.

Besides recreation, land use in the vicinity of the Ashton Development consists primarily of irrigated farming. In the vicinity of the St. Anthony Development, land use comprises commercial and industrial development.

Because of its outstanding sight-seeing qualities and recreational fishing opportunities, a 42-mile-long section of the Henry's Fork upstream of its confluence with the Warm River has been listed on the Nationwide Rivers Inventory. Legislation to convert this portion of the river to a study river has been introduced to Congress. The project site, however, is approximately 10 miles downstream of the boundary of this river segment.

Environmental Impacts and Recommendations: Because of the poor condition of the boat ramp and dock area at .Ashton Reservoir, upgrading and routine maintenance are needed. The Idaho Department of Parks and Recreation (IDPR) and the National Park Service (NPS) recommend measures to improve recreational facilities at the Ashton Reservoir. The applicant has incorporated these recommendations in its Recreation Area Improvement Plan, and included the plan in its Report on Recreational Resources (Report). The Report indicates that the applicant would implement the following measures: (1) acquire lands at the reservoir that are currently owned by other entities; (2) upgrade the existing concrete boat ramp and access to the fishing-observation pier; (3) add new facilities, including picnic tables, grills, trash receptacles, and a portable restroom; (4) improve traffic circulation patterns and separate vehicular movement from pedestrian activity; (5) negotiate an agreement with Fremont County that would shift the responsibility for facility operation and maintenance from the County to the applicant; and (6) reevaluate the need for additional recreational facilities at the reservoir within 5 years from the date of issuance of the license.

Applicant's proposed plan to improve recreational facilities and their operation and maintenance would enhance day-use recreation in the project area. Therefore, the Report on Recreational Resources, filed December 31, 1984, as Section 5 of the Exhibit E (Environmental Report), pages E-19 through E-59, should be implemented and all proposed recreational improvements should be completed within 1 year from the date of issuance of any license for the project.

The City of St. Anthony is concerned about the deteriorating condition of the diversion structure and the retaining wall that protects Keefer Park. Because of the poor condition of these two structures, flooding occasionally occurs in Keefer Park. The City recommends that these structures be replaced or rebuilt so that they protect the park from flooding. The applicant has agreed to repair and maintain the diversion structure and retaining wall at Keefer Park (personal communication, Jody Williams, Attorney, Utah Power and Light Company, Salt Lake City, Utah, May 9, 1986).

Maintenance of the diversion structure and retaining wall would protect the recreational resources at the development. The licensee, after consultation with the City of St. Anthony, should repair or replace those portions of the diversion structure and retaining wall needed to prevent flooding at Keefer Park.

Unavoidable Adverse Impacts: None.

B. Cumulative Impacts

Henry's Fork River Basin: The Henry's Fork of the Snake River drains 2,733 square miles in the eastern portion of Idaho. The stream originates from the outlet of Henry's Lake, located in the Continental Divide Mountains. The stream drains southwest and flows 124 miles to the Snake River. Major tributaries in the Henry's Fork Basin include the Buffalo River, Warm River, Falls River, and Teton River (figure 4).

Topography in the southwest and western portion of the basin is relatively smooth and formed by basalt flows; the northern and southeastern portions are more mountainous with heavy timber cover. Forested land comprises 39 percent of the basin area, rangeland: 26 percent, irrigated cropland: 15 percent, dryland agriculture: 13 percent, and other uses: 7 percent (Corps, 1979).

Henry's Fork is widely known as a major resident trout fishery, which is an extremely popular recreational resource. This fishery includes cuttroat trout, considered to be a National Species of Special Emphasis by FWS and a Species of Special Concern by IDFG. Henry's Fork also provides habitat for resident and non-resident bald eagles, a federally listed endangered species, and provides for a non-migratory population of trumpeter swans, considered to be a National Species of Special Emphasis by FWS and a Species of Special Concern by IDFG.

Diversions from Henry's Fork and its tributaries are substantial, primarily for irrigation. A total annual flow rate of 1,150 cfs is diverted from 42 diversions within the basin. Although most of this volume is diverted from April to September, substantial diversions occur year-round (Corps, 1979). Cross Cut Diversion Dam is part of BR's Minidoka Project, which provides irrigation to more than 1 million acres from five reservoirs. River flows are regulated by releases from Henry's Lake and Island Park Reservoir.

Proposed and Existing Hydroelectric Development: As of May 1986, there were only three proposed projects in the Henry's Fork Basin with license applications pending before the Commission. They are the Cross Cut Diversion Project, FERC No. 3991, the Island Park Project, FERC No. 2973, and this application for a relicense for the Ashton-St. Anthony Project (figure 4).

Existing hydroelectric development on the mainstem of Henry's Fork is limited to the Ashton-St. Anthony Project. The Ashton Development is located about 9 miles north of the Cross Cut Diversion, and the St. Anthony Development is located about 4 miles south of the Cross Cut Diversion (figure 4).

The only existing hydroelectric development in the northern portion of the basin is the Pond Lodge Project, FERC No. 1413, which is located on the Buffalo River near the confluence with Henry's Fork, just downstream of the Island Park Reservoir (figure 4). There are two existing projects located on the Teton River in the southern portion of the basin. They are the Felt Project, FERC No. 5089; and the Briggs Project, FERC No. 8083 (figure 4).

All of the proposed and existing projects, except the proposed Island Park Project and the existing Pond Lodge Project, are downstream of the portion of Henry's Fork listed on the Nationwide Inventory for inclusion in the Wild and Scenic Rivers System. This 41-mile stretch extends from Big Springs near River Mile (RM) 101 downstream to the confluence of Warm River, excluding the Island Park Dam and Reservoir (figure 4).

Target Resources: The staff has determined that the target resources in the Henry's Fork are resident trout, water quality, bald eagles, and trumpeter swans. The staff identified the target resources by reviewing documents related to existing hydropower projects, applications for proposed hydropower projects in the basin, and comments from federal and state natural resource agencies and the public concerning these projects.

Henry's Fork provides habitat for a major resident trout fishery, primarily rainbow and cutthroat trout. IDFG lists Henry's Fork from Big Springs to St. Anthony as Value Class I, the highest class possible for fishery resources. Fishing pressure is particularly heavy in the 10 miles upstream from the Island Park Reservoir, while the next most productive reach is from the Ashton Reservoir downstream to the Cross Cut Diversion (figure 4). Below the confluence with Falls River, the fishery is adversely affected by irrigation diversions and return flows (Corps, 1979).

The water quality of the Henry's Fork and its major tributaries is high when sampled upstream of irrigated agricultural areas (Corps, 1979). DO concentrations measured at the Henry's Fork near Rexburg, about 22 miles downstream of the St. Anthony Development, have varied between 6.5 and 13.2 mg/l over the past 15 years (Idaho Department of Health and Welfare, 1984). The state DO standard for water released from hydroelectric projects is 5 mg/l.

Bald eagles are known to nest along Henry's Fork, and may use both reservoir areas and the river for feeding. Since bald eagles feed on fish, any reduction in the fishery may also adversely affect bald eagles.

Henry's Fork is the winter habitat for 50 to 70 percent of the 1,000 birds that make up the mid-continental trumpeter swan population (letter from John P. Wolfin, Field Supervisor, U.S. Fish and Wildlife Service, Boise, Idaho, July 3, 1985). Swans feed on submerged vegetation in the slow-moving sections of the river. Low winter flows adversely affect bald eagle and trumpeter swan habitat by increasing the amount of ice on the river, and reducing the size of feeding areas.

Cumulative Impacts on Target Resources: All of the pending projects in the basin could affect resident trout by entrainment of juvenile fish and early life history stages, direct and delayed mortality from abrasion and mutilation, predation of disoriented fish returned to the river below the powerhouse, and impingement of adult fish on the trash racks.

Although impingement and entrainment mortality may continue at the Ashton and St. Anthony powerhouses, the license application includes provisions for long-term enhancement in Ashton Reservoir, and the construction of fish passage facilities is proposed at the EIC diversion.

Impacts to resident trout from impingement and entrainment from the Cross Cut Project would be minimized by placement of screens across the intake area. These screens would also enhance the fishery by preventing trout from escaping into the Cross Cut Canal, since annual dewatering of the canal causes stranding of fish and related mortality.

Impingement and entrainment impacts to resident trout at the proposed Island Park Project would be project-specific. Assuming that impacts to resident trout may occur at the Island Park Project, this hydropower development is more than 40 miles upstream from the proposed Ashton-St. Anthony Project; therefore, no interaction of the fishery impact would be expected.

While adverse impacts to the fishery below Island Park Reservoir could occur as a result of hydropower development, impacts from the Ashton-St. Anthony Project and the Cross Cut Project would be offset by enhancement measures proposed for these projects. Therefore, there is no potential for cumulative adverse impacts to resident trout.

Construction activities, which would introduce sediment into Henry's Fork, would occur at all of the pending projects. Although both the Cross Cut Project and the Island Park Project include construction of a powerhouse and related facilities, construction areas are limited to the vicinity of the existing dams. Construction at the Ashton Development is limited to placement of a larger turbine in the existing powerhouse and enlargement of the existing intake structure, while construction at the St. Anthony Development would be limited to a fish passage facility at the EIC diversion.

Disturbed areas resulting from construction activities, excluding the use of transmission lines, are estimated to be less than one-half of an acre for each of the proposed projects within the basin.

With proper erosion and sediment control measures, sediment input from construction activities at these projects would be minor and short-term. Since these pending projects are also separated by at least 4 miles to over 40 miles, impacts would also be localized. Therefore, there is no potential for

cumulative adverse impacts to water quality from increased sedimentation because of hydropower development.

Spillage over the dams, which contributes to aeration of river flows, is reduced when flows are diverted through hydroelectric turbines. Therefore, operation of all of the pending projects could contribute to some reduction of aeration in river flows, which would decrease DO in the river.

The larger turbine to be installed at the Ashton powerhouse would reduce the average number of months water would spill over the dam from 4 months to 1 month annually. Decreased spillage, however, is not expected to cause significant reductions in DO. Because operation of the St. Anthony powerhouse would remain unchanged, existing impacts to aeration of river flows would continue.

Hydropower development at the Cross Cut Diversion, would substantially decrease existing spillage. Nevertheless, the project includes provisions for a 100 cfs minimum spillage and DO monitoring during project operation to ensure compliance with state DO standards. The DO levels at Ashton and St. Anthony developments are expected to continue to comply with state standards, so there is no potential for cumulative adverse impacts on DO from simultaneous multiple project operations.

The proposed hydropower development at the Island Park Dam would have the greatest potential impacts on DO in the Henry's Fork. Island Park Reservoir stratifies during the summer, and profiles of DO measurements showed a minimum DO of 4.3 mg/l at a depth of 48 feet on July 7, 1985. Effects of decreased aeration would be attenuated in downstream reaches, as the Henry's Fork flows over a series of rapids in the 42 miles between Island Park Reservoir and the Ashton Reservoir. Accretion flows from the Warm River, located 12 miles upstream of Ashton Reservoir, would further reduce any downstream impacts resulting from the Island Park Project. Further, since the project would be required to meet state DO standards, there is no potential for cumulative impacts with projects in the downstream reaches.

All pending hydropower projects in the Henry's Fork Basin would be required to meet state standards for DO. This could be achieved by adding oxygen to turbine flows or ceasing project operations during summer low-flow periods. Monitoring of DO during project operations would also ensure that adequate DO is maintained. Therefore, cumulative adverse impacts to water quality would not be expected.

There is evidence that a pair of bald eagles nested near Ashton Reservoir during 1982 and 1983 (Utah Power and Light Company, 1984). Proposed enhancement for bald eagles includes construction of a nesting platform. No bald eagles are known to nest in the vicinity of St. Anthony, and no critical habitat for bald eagles has been identified.

While bald eagles occur along Henry's Fork, no nests are known to exist in the vicinity of the Cross Cut Project. FWS determined that the Cross Cut Project would not cause significant adverse effects to the bald eagle because transmission lines at that project would be constructed to minimize the potential for raptor electrocution.

Nesting bald eagle sites are known to occur in the vicinity of the Island Park Dam. Resident bald eagles use the river below the dam for year-round feeding, and they use the reservoir for feeding during the summer. Bald eagles could be affected by hydropower development at this site.

Since bald eagles would not be adversely affected by the Ashton-St. Anthony Project or the Cross Cut Project, any potential impacts at the Island Park Project would not be cumulative.

Trumpeter swans infrequently utilize the Ashton Reservoir. Construction activities, however, are limited to the dam site, winter flows would be unchanged, and submerged aquatic vegetation is not expected to be affected by construction activities and continued project operation. Therefore, there

would be no adverse effects to trumpeter swans in the vicinity of the Ashton Reservoir. Although trumpeter swans may occur in the vicinity of St. Anthony, no critical habitat has been identified.

Trumpeter swans may occur in the vicinity of the Cross Cut Diversion at various times of the year. However, no critical habitat has been identified in the project area, and project construction and operation would not affect submerged vegetation, which is a food source for the swans.

Winter populations of trumpeter swans at Island Park Reservoir area are reported to be in excess of 300 (Fall River Electric Cooperative, Inc., 1985). Potential impacts to trumpeter swans from hydropower development are related to freezing of the river during winter low-flow periods, which would make swan foods unavailable. If drawdown for installation of the intake structure results in a pool elevation below normal drawdown levels, this would result in reduced winter flows in order to refill the reservoir. The impacts, however, would be project-specific.

Since the trumpeter swan would not be adversely affected by the Ashton-St. Anthony Project or the Cross Cut Project, any potential impacts at the Island Park Project would not be cumulative.

In summary, construction and operation of the Ashton-St. Anthony Project would not contribute to cumulative adverse impacts to target resources in the Henry's Fork River Basin. Mitigative measures proposed for the fishery in Ashton Reservoir and provisions of fish passage facilities for the St. Anthony Development would result in enhancement of the resident fishery. With appropriate timing of multiple construction activities, careful construction practices, and use of proper sediment control measures, increased sedimentation in the Henry's Fork would be localized, minor, and short-term. During project operation, DO levels are expected to continue to comply with state standards. While bald eagles and trumpeter swans occur in the project vicinity, no cumulative impacts would be expected. For these reasons, the staff concludes that the construction and operation of the Ashton-St. Anthony Project, as conditioned, would not contribute to cumulative adverse impacts to resident trout, water quality, bald eagles, or trumpeter swans.

C. Alternative of No Action

Under the no-action alternative, there would be no new construction. Electrical power that is currently generated by existing hydroelectric facilities would have to be generated from other available energy sources or offset by conservation measures. Moreover, the no-action alternative would preclude: (1) the implementation of the fish and wildlife mitigative plans; (2) the construction of an upstream fish passage facility at the St. Anthony diverison dam; and (3) the implementation of the proposed recreation plan.

D. Recommended Alternative

The relicense of the Ashton-St. Anthony Project is recommended. The continued operation of the existing hydroelectric facilities and the replacement of one turbine-generator unit at the Ashton Development would not result in any major, long-term, adverse, environmental impacts. Moreover, relicensing the project would permit the implementation of the applicant's proposed fish and wildife mitigation and recreational improvements, which would benefit the environmental resources of the project area.

VI. FINDING OF NO SIGNIFICANT IMPACT

The Ashton and St. Anthony Developments have been in operation for over 60 years. The applicant would not alter the current operation of these facilities. The replacement of a turbine-generator unit at the existing Ashton powerhouse would involve only the modification of the powerhouse interior. The construction of a fish passage facility at the EIC diversion dam would produce some temporary, minor sedimentation and turbidity in the Henry's Fork downstream of the diversion. The continued operation

of the project could result in some minor turbine entrainment and resultant mortality of fish. In contrast, implementation of the applicant's proposed fish and wildlife mitigation and recreational improvements would benefit the existing environment. On the basis of this independent environmental analysis, issuance of a license for the project would not constitute a major federal action significantly affecting the quality of the human environment.

VII. LITERATURE CITED

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Form L-l (Revised October, 1975)

FEDERAL ENERGY REGULATORY COMMISSION

**TERMS AND CONDITIONS OF LICENSE
FOR CONSTRUCTED MAJOR PROJECT AFFECTING
LANDS OF THE UNITED STATES**

Article 1. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: provided, however, That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project area and project works shall be in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

Article 4. The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, of the Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall cooperate fully with said representative and shall furnish him such information as he may require concerning the operation and maintenance of the project, and any such alterations thereto, and shall notify him of the date upon which work with respect to any alteration will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall submit to said representative a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of any such alterations to the project. Construction of said alterations or any feature thereof shall not be initiated until the program of inspection for the alterations or any feature thereof has been approved by said representative. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The

Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

Article 5. The Licensee, within five years from the date of issuance of the License, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction, maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights of occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Article 6. In the event the project is taken over by the United States upon the termination of the license as provided in Section 14 of the Federal Power Act, or is transferred to a new licensee or to a non-power licensee under the provisions of Section 15 of said Act, the Licensee, its successors and assigns shall be responsible for, and shall make good any defect of title to, or of right of occupancy and use in, any of such project property that is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and shall pay and discharge, or shall assume responsibility for payment and discharge of, all liens or encumbrances upon the project or project property created by the Licensee or created or incurred after the issuance of the license: Provided, That the provisions of this article are not intended to require the Licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to, or right of occupancy and use in, any of such project property than was necessary to acquire for its own purposes as the Licensee.

Article 7. The actual legitimate original cost of the project, and of any addition thereto or betterment thereof, shall be determined by the Commission in accordance with the Federal Power Act and the Commission's Rules and Regulations thereunder.

Article 8. The Licensee shall install and thereafter maintain gages and stream-gaging stations for the purpose of determining the stage and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may be mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing

determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

Article 9. The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

Article 10. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 11. Whenever the Licensee is directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for such part of the annual charges for interest, maintenance, and depreciation thereof as the Commission shall determine to be equitable, and shall pay to the United States the cost of making such determination as fixed by the Commission. For benefits provided by a storage reservoir or other headwater improvement of the United States, the Licensee shall pay to the Commission the amounts for which it is billed from time to time for such headwater benefits and for the cost of making the determinations pursuant to the then current regulations of the Commission under the Federal Power Act.

Article 12. The operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Commission may prescribe for the purposes hereinbefore mentioned.

Article 13. On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

Article 14. In the construction or maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling or obstructing traffic or endangering life. None of the provisions of this article are

intended to relieve the Licensee from any responsibility or requirement which may be imposed by any other lawful authority for avoiding or eliminating inductive interference.

Article 15. 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 16. 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 Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests 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.

Article 17. The Licensee shall construct, maintain, and operate, or shall arrange for the construction, maintenance, and operation of such reasonable recreational facilities, including modifications thereto, such as access roads, wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during the term of this license upon its own motion or upon the recommendation of the Secretary of the Interior or other interested Federal or State agencies, after notice and opportunity for hearing.

Article 18. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

Article 19. In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Article 20. The Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 21. Timber on lands of the United States cut, used, or destroyed in the construction and maintenance of the project works, or in the clearing of said lands, shall be paid for, and the resulting

slash and debris disposed of, in accordance with the requirements of the agency of the United States having jurisdiction over said lands. Payment for merchantable timber shall be at current stumpaqe rates, and payment for young growth timber below merchantable size shall be at current damage appraisal values. However, the agency of the United States having jurisdiction may sell or dispose of the merchantable timber to others than the Licensee: Provided, That timber so sold or disposed of shall be cut and removed from the area prior to, or without undue interference with, clearing operations of the Licensee and in coordination with the Licensee's project construction schedules. Such sale or disposal to others shall not relieve the Licensee of responsibility for the clearing and disposal of all slash and debris from project lands.

Article 22. The Licensee shall do everything reasonably within its power, and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and to suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and shall pay the costs incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto under the license.

Article 23. The Licensee shall interpose no objection to, and shall in no way prevent, the use by the agency of the United States having jurisdiction over the lands of the United States affected, or by persons or corporations occupying lands of the United States under permit, of water for fire suppression from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license, or the use by said parties of water for sanitary and domestic purposes from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license.

Article 24. The Licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands, or other property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Arrangements to meet such liability, either by compensation for such injury or destruction, or by reconstruction or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United. States.

Article 25. The Licensee shall allow any agency of the United States, without charge, to construct or permit to be constructed on, through, and across those project lands which are lands of the United States such conduits, chutes, ditches, railroads, roads, trails, telephone and power lines, and other routes or means of transportation and communication as are not inconsistent with the enjoyment of said lands by the Licensee for the purposes of the license. This license shall not be construed as conferring upon the Licensee any right of use, occupancy, or enjoyment of the lands of the United States other than for the construction, operation, and maintenance of the project as stated in the license.

Article 26. In the construction and maintenance of the project, the location and standards of roads and trails on lands of the United States and other uses of lands of the United. States, including the location and condition of quarries, borrow pits, and spoil disposal areas, shall be subject to the approval of the department or agency of the United States having supervision over the lands involved.

Article 27. The Licensee shall make provision, or shall bear the reasonable cost, as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation, telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction.

Article 28. The Licensee shall make use of the Commission's guidelines and other recognized guidelines for treatment of transmission line rights-of-way, and shall clear such portions of transmission line rights-of-way across lands of the United States as are designated by the officer of the United States in charge of the lands; shall keep the areas so designated clear of new growth, all refuse, and inflammable material to the satisfaction of such officer; shall trim all branches of trees in contact with or liable to contact the transmission lines; shall cut and remove all dead or leaning trees which might fall in contact. with the transmission lines; and shall take such other precautions against fire as may be required by such officer. No fires for the burning of waste material shall be set except with the prior written consent of the officer of the United States in charge of the lands as to time and place.

Article 29. The Licensee shall cooperate with the United States in the disposal by the United States, under the Act of July 31, 1947, 61 Stat. 681, as amended (30 U.S.C. sec. 601, et seq.), of mineral and vegetative materials from lands of the United States occupied by the project or any part thereof: Provided, That such disposal has been authorized by the Commission and that it does not unreasonably interfere with the occupancy of such lands by the Licensee for the purposes of the license: Provided further, That in the event of disagreement, any question of unreasonable interference shall be determined by the Commission after notice and opportunity for hearing.

Article 30. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of non-power facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

Article 31. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

Article 32. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.

Exhibit E, Section 3: E-26 through E37

(Ref: License Article 402; and "Environmental Assessment", V. 4. Fishery Resources: "Report on Fish, Wildlife, and Botanical Resources", filed December 31, 1984, as Section 3 of the Exhibit E (Environmental Report), pages E-26 through E-37.]

ENHANCEMENT PLANS [See Article 402]

Plans to enhance the fish and wildlife resources in the project area are described below. Enhancement of botanical resources is restricted to improved or additional wildlife habitat and is discussed under wildlife resources. The enhancement plans were designed based on agency comments and subsequent meetings (discussed previously under Agency Recommendations). Final agency comments on the enhancement plans are contained in Appendix A.

Fish Resources

Elements of the fish resources enhancement plan are described below.

Introduction: The objective of the plan is to enhance the fishery in Ashton Reservoir. If field studies indicate enhancement of the reservoir fishery- is not feasible, enhancement actions will be implemented at a suitable off-site location.

The IDFG assumes that production in the river reach prior to inundation by Ashton Reservoir was similar to that in surrounding free-flowing river reach (Conley, 1984). Because of this, the IDFG has proposed that enhancement values be based on differences in. recreational fishery use levels in the reservoir as compared to upstream and downstream values. Catch and effort data from Rohrer's (1981) investigations on the Henry's Fork upstream, within, and downstream of Ashton Reservoir are compared in Table E-7. Given recent catch rates in the adjacent upstream fishery, as well as the sizes of fish caught, the reservoir enhancement catch rate goal of 1.00 fish per hour with a mean size of 10 to 12 inches recommended by IDFG biologists appears reasonable. If future catch rates upstream of the reservoir vary, then the corresponding catch rate goal for the reservoir will be adjusted accordingly.

Table E-7

COMPARISON OF EFFORT AND CATCH DATA FOR ASHTON REVERSOIR AMD RIVER SECTIONS IMMEDIATELY UPSTREAM AND DOWNSTREAM

(Date from Rohrer, 1981)

Parameter	Downstream			
Effort:	2B	2A	Reservoir	Upstream
Angler effort (hours)	13,939	5,226	4,685	5,128
Section length (miles)	3.6	2.7	4.2	6.7
Effort per mile	3,872	1,936	1,115	765
Census Interval (fishing season-days)	365	191	365	191
Average daily angler effort (hours/mile/day)	10.6	10.1	3.1	4.0
Catch:				
Total game fish caught	17,126	8,328	1,935	4,889
Catch per hour	1.23	1.59	0.41	0.95
Catch per hour per mile	0.34	0.59	0.10	0.14

Note: Section 2B = Chester Dam to Fritz Bridge
Section 2A = Fritz Bridge to Ashton Dam
Section 3 = Ashton Dam to Wendell Bridge
Section 4 = Wendell Bridge to Warm River

BOT401/016

Approach: The enhancement plan will consist of the following activities:

1. Collect reservoir baseline data to determine reasons for limitations in fish populations, fish harvest, and recreational fishery use, especially as related to past, generally unsuccessful stockings of hatchery rainbow trout.

2. Introduce new varieties of cutthroat trout (and possibly better-adapted varieties of rainbow trout) to Ashton Reservoir and intensively evaluate their success over a short-term period.

3. Inventory populations in the Henry's Fork upstream and downstream of Ashton Reservoir for marked fish which may have moved out of the reservoir.

4. Predict the long-term success of the introduced species based on existing reservoir conditions and the status evaluation of the stocking program. Conduct an angler opinion survey of management alternatives. Decide whether enhancement in the form of stocking/managing the introduced species should continue and determine costs. If not, determine what enhancement options of similar potential benefit are available off-site and determine costs.

5. Continue enhancement on-site or at a suitable off-site location.

Past fisheries studies provide information on some of the enhancement activities, as well as precautions, and reasons for the often limited success of stocking hatchery trout. These are discussed briefly below.

Stocking new varieties of cutthroat trout in Ashton Reservoir --in this instance, possibly Bear Lake, fine-spot, Henry's Lake, and west slope -- has been recommended by IDFG biologists. The Bear Lake variety, for example, has been introduced into Blackfoot Reservoir in southeast Idaho and reportedly done well. IDFG biologists feel it may also do well in Ashton Reservoir where stockings of hatchery rainbow trout have generally provided relatively low percentage returns to the creel. Bear Lake cutthroat trout have been suggested because of their greater dependence on forage fish than on benthos or zooplankton as a food resource. Limited availability of macro-invertebrates has been theorized as the reason for low fish productivity and fishing success in Ashton Reservoir.

The three other varieties of cutthroat trout could also potentially be well-adapted to conditions in Ashton Reservoir. TDFG has suggested the possible evaluation of different varieties of rainbow trout than have been stocked in the reservoir in the past.

In introducing a species, Wydoski and Bennett (1981) discussed the need to understand the ecological requirements of both the introduced and native species in order to intelligently manage western lakes and reservoirs. Li and Moyle (1981) cautioned that a long-term perspective be taken when introducing a new species. They felt an introduced species should meet the following criteria:

- Be co-adapted with some members of the new system
- Have a narrow niche breadth
- Be easily controlled if it escapes (and has undesirable effects)
- Be free of exotic diseases and parasites

Prior to any stocking, it will be determined that the criteria listed above can be satisfied.

Methods: Various tasks of the fish resources enhancement plan are described below.

- Describe Existing Environment

  The objective of this task will be to gather baseline data with which to describe basic physical-chemical, invertebrate, and fisheries characteristics of Ashton Reservoir. The following activities will be accomplished:

  Physical-Chemical. Determine temperature, dissolved oxygen, and conductivity profiles at 3-foot intervals from surface to bottom. Determine profiles at mid-channel locations just upstream of the dam, just downstream of the reservoir headwaters, and at a point intermediate to these two sampling locations. Conduct sampling monthly from April through October during 1985 and 1986. Calculate dissolved oxygen saturation values for each sampling location and period and determine corresponding Secchi disc values. Measure pH at near surface, mid-, and near bottom depths at each location during each sampling period. At these

same locations and times, measure total dissolved solids concentrations for potentially calculating the morphodaephic index and possibly assessing/predicting Ashton Reservoir fish productivity.

During the same sampling periods and at three adjacent near-shore locations (near dam, near headwaters, mid-point), determine (at representative single depths) temperature, dissolved oxygen, oxygen saturation, conductivity, pH, total dissolved solids, and Secchi disc values.

During the 1985 and 1986 sampling periods, record any variation in reservoir surface water levels, surface area, mean depth, and water retention time. Categorize general reservoir substrate types. Evaluate any variation in these parameters for possible effects on food producing and fish habitat (cover, nursery) areas and significant changes in the littoral/limnetic zone proportion.

Invertebrates. Kinds and numbers of potential open-water (zooplankton) and bottom (benthos) fish food organisms will be determined. Sampling will occur bi-monthly from April through October during 1985 and 1986. Results will be compared to literature values for determining general reservoir productivity and to findings of fish food habit analyses (described further below).

Zooplankton samples will be collected at the three open-water (mid-channel) reservoir stations. The net will consist of approximately 153 u mesh and will be metered for calculating volume sampled. Replicate (three) tows will be made at each station at a depth of approximately 5 feet. Tow duration will be approximately 5 minutes. Organisms will be preserved, then identified to appropriate taxonomic levels (genus where feasible). Taxa densities will be expressed as number of individuals per cubic meter of water sampled; special note will be made of numbers and kinds of ichthyoplankton present.

Benthic invertebrate samples will be collected at the three open-water and three near-shore stations. Three replicate bottom samples will be collected at each station during each sampling period using an Ekman dredge (or suitable alternative). Samples will be strained, then organisms identified to genus where

feasible. Taxa densities will be expressed as number of individuals per square meter of bottom sampled.

Fisheries. The reservoir fisheries investigation will consist of a series of activities. The first will be sampling with a variety of gears (e.g., variable mesh gill nets, fyke nets, boat electro-shocking, possibly small beach seines) to describe species composition and relative abundance in open-water and near-shore habitats. Sampling will occur monthly from April through October during both 1985 and 1986, and possibly during 1987 if additional data are necessary to determine trout growth rates and densities. These additional data may be especially useful in evaluating fingerling growth rates. The same level of effort will be expended each month to allow monthly and yearly catch comparisons and determine changes in abundance and distribution patterns. The numbers of each species or hybrid present in a catch will be recorded; distinctions will be made between wild and hatchery rainbow trout whenever possible. Lengths and weights from a subsample of each species will be determined for subsequent calculations of fish condition factors. The number of each species within 100-mm length intervals will be recorded to determine length-frequency distributions. Parasitized or diseased fish present in the catch will be noted.

A second fisheries activity will consist of growth and food habit studies on two target species. Wild rainbow trout and kokanee are proposed as target species. Scale samples and stomach contents will be taken from a minimum of ten randomly selected individuals within 100-mm length intervals for each species. Length and weight of each individual will be recorded. It is proposed that stomach contents be sampled bi-monthly from April through October during 1985 and 1986. Food items will be identified to the same taxonomic levels as described for zooplankton and benthos studies and the numbers of each recorded, together with total food volume. Results will be compared to findings of zooplankton and benthos studies. It is proposed that scale samples be collected during mid to late summer following annulus formation in 1985, 1986, and possibly 1987 if additional data are needed to determine growth rates. It is also recommended that scales be collected (as available) from other game fish present in the catch (e.g., brown trout, rainbow and cutthroat hybrids, mountain whitefish). Age-length

relationships and growth rates will be determined and compared to literature values and to known upstream and downstream values.

The final fisheries activity will be a creel census to be conducted concurrent with fish stocking. This is discussed below under the stocking program.

o Stocking Program

No more than four varieties of trout will be stocked in Ashton Reservoir during 1985 and 1986 to potentially provide anglers an attractive sport fishery. Possible varieties which may be stocked include the four cutthroat trout mentioned previously and rainbow trout, which have not been stocked in Ashton Reservoir in the past. It is recommended that catchable-size trout be stocked throughout the primary fishing season at standard stocking rates used by IDFG, and that stocking times b&~ publicized to make anglers aware of the fishing opportunity. It is also recommended that fingerling trout of each variety be stocked (if available) to evaluate their potential to grow to adult sizes at survival rates which would sustain the recreational fishery. The IDFG also recommended stocking catchable rainbow trout to serve as a control group. Stocked fish will be fin-clipped with a mark specific to year stocked (1985 or 1986) and size stocked (catchable or fingerling) to allow a long-term assessment of survival. Condition factors will be determined from length and weight measurements of a subsample of fish prior to stocking.

o Inventory

Two activities will occur concurrent with stocking. The first is a reservoir creel census during both 1985 and 1986 according to the design used by Rohrer (1981). Data will be gathered on reservoir catch and harvest rates for game fish and for each variety of stocked trout, and compared to the catch rate goal of 1.0 fish per hour. Data will also be gathered on percent return to the creel of stocked trout at different intervals during the fishing season. Lengths and weights of creeled stocked fish will be measured and compared to the size goal of 10 to 12 inches. Condition factors will be calculated and compared to pre-stocking values. When possible, stomachs will be removed from creeled stocked fish to determine food

habits, degree of fullness, and utilization of available food items. Results during 1985, and in 1986 for fish stocked in 1986, will provide information on the short-term success of the stocking program. Information in 1986 on fish stocked in 1985 will provide somewhat more long-term data on growth, survival, and catchability of fingerling and catchable cutthroat trout. A decision will be made following the 1986 sampling season on whether additional creel census data should be collected during 1987.

Creel censuses and inventories of fish populations will be conducted upstream and downstream of Ashton Reservoir concurrent with the reservoir creel census. Study results will provide information on the degree and rate of movement of stocked, marked fish out of the reservoir to upstream and downstream river sections. During censuses on both the river and reservoir, anglers will be surveyed to gather their opinions on fishery management alternatives regarding enhancement of Ashton Reservoir.

The final part of the stocking program is actually an integral part of the baseline fisheries investigations described above. Stocked trout will become additional target species. Information on growth, condition, and food habits of each variety will be gathered to assess their chances for providing a valuable recreational fishery in Ashton Reservoir. Presence of young-of-the-year cutthroat trout in samples, for example, will be monitored to determine the possibility of natural reproduction near reservoir headwaters.

o Predict Long-~Term Success

The long-term success of the enhancement plan will be evaluated based on results of the program describing existing conditions and the stocking program. Examination of existing conditions will provide data on whether there are inherent reservoir characteristics which would limit the long-term success of an introduced species. This could be reflected in basic physical-chemical characteristics, the available food supply, or the abundance and health of fish species currently present. Projected long-term success of the stocking program should be

relatively: clear given .current reservoir characteristics and the evaluation period during which both catchable and fingerling trout are introduced.

The reservoir enhancement plan will be considered a success if catch rates of 1.0 fish per hour (at a mean size of 10 to 12 inches) can be forecast on a long-term basis. The possibility of successful natural reproduction and a largely self-sustaining population would make the program especially attractive from both a fisheries management and cost! benefit perspective. The possibility may also exist (perhaps through special catch/release regulations) to develop a trophy fishery for wild rainbow trout and brown trout present in Ashton Reservoir.

If studies indicate desired reservoir catch rates and sizes cannot be achieved on a long-term basis, then suitable alternative off-site enhancement measures will be identified. Off-site enhancement values will be approximately equivalent to the additional recreational fishery use that would occur between the present reservoir catch rate (0.41 fish per hour) and the reservoir catch rate goal (1.0 fish per hour).

o Long-Term Enhancement

The enhancement plan for Ashton Reservoir will continue, using appropriate varieties of cutthroat and possibly rainbow trout, or an appropriate enhancement plan will be implemented at an off-site location. The level of benefits resulting from off-site enhancement will be approximately equivalent to those which would have resulted from attaining enhancement goals in Ashton Reservoir. Long-term enhancement program costs will be developed based on results of reservoir and river investigations. IDFG costs and staff requirements necessary to conduct field investigations and the

[End of specified License inclusion @ Article 402]

Attachment 4
ASHTON DEVELOPMENT
Excerpt from the Idaho DEQ 2008 Integrated (303[d]/305[b]) Report

ID17040201SK008_03	Birch Creek - source to mouth	6.21	MILES

Combined Biota/Habitat Bioassessments

ID17040201SK013_02	Snake River - river mile 856 (T03N, R41E, Sec. 16) to Dry Be	20.45	MILES

Combined Biota/Habitat Bioassessments

17040202 Upper Henrys

ID17040202SK002_05	Warm River - Warm River Spring to mouth	0.57	MILES

Temperature, water Added 3/27/2006

ID17040202SK005_02	Warm River - source to Warm River Spring	70.29	MILES

Temperature, water Added 3/27/2006

ID17040202SK018_03	Buffalo River - source to Elk Creek	9.11	MILES

Combined Biota/Habitat Bioassessments

ID17040202SK030_02	Twin Creek - source to mouth	8.55	MILES

Combined Biota/Habitat Bioassessments

ID17040202SK033_02	Howard Creek - source to mouth	15.24	MILES

Temperature, water Added 3/27/2006

ID17040202SK034_02	Targhee Creek - source to mouth	28.84	MILES

Temperature, water Added 3/27/2006

ID17040202SK035_02	Timber Creek - source to mouth	16.97	MILES

Temperature, water Added 3/27/2006

ID17040202SK035_03	Timber Creek - source to mouth	3.37	MILES

Temperature, water Added 3/27/2006

ID17040202SK036_03	Duck Creek - source to mouth	4.79	MILES

Sedimentation/Siltation

Temperature, water

MDMT = 22.9 degrees C; high levels of warm water taxa in macroinvertebrates

ID17040202SK044_02	Icehouse Creek - source to Island Park Reservoir	17.65	MILES

Sedimentation/Siltation

ID17040202SK045_03	Sheridan Creek - Kilgore Road (T13N, R41E, Sec. 07) to mout	18.64	MILES

Sedimentation/Siltation

ID17040202SK046_04	Willow Creek - source to mouth	9.98	MILES

Fish Kills

Sedimentation/Siltation

17040203 Lower Henrys

ID17040203SK007_02	Squirrel Creek - Idaho/Wyoming border to mouth	45.26	MILES

Combined Biota/Habitat Bioassessments

Fecal Coliform

ID17040203SK007_03	Squirrel Creek - Idaho/Wyoming border to mouth	19.41	MILES

Combined Biota/Habitat Bioassessments

17040204 Teton

ID17040204SK007_02	North Fork Moody Creek - source to mouth	26.35	MILES

Fecal Coliform

ID17040204SK011_02	Warm Creek - source to mouth	5.78	MILES

Combined Biota/Habitat Bioassessments

Fecal Coliform

ID17040204SK021_03	Horseshoe Creek - pipeline diversion (SE ¼, NW ¼, Sec. 27,	4.81	MILES

Combined Biota/Habitat Bioassessments

ID17040204SK034_02	Warm Creek - source to mouth	17.6	MILES

Combined Biota/Habitat Bioassessments

Fecal Coliform

ID17040204SK046_02	Dick Creek spring complex - south to Darby Creek and north t	3.59	MILES

Combined Biota/Habitat Bioassessments

ID17040204SK050_02	Woods Creek - source to mouth, including spring creek tribu	5.41	MILES

Escherichia coli

17040205 Willow

ID17040205SK001_05	Willow Creek - Ririe Reservoir Dam to Eagle Rock Canal	5.47	MILES

Attachment 5
ASHTON DEVELOPMENT
FERC Order Modifying and Approving Wildlife Enhancement Plan

Unofficial FERC-Generated PDF of 19960912-0465 Issued by FERC OSEC 09/10/1996 in Docket#: P-2381-035

76 FERC ¶ 62,176

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp) Project No. 2381-035

ORDER MODIFYING AND APPROVING REVISED WILDLIFE ENHANCEMENT PLAN

SEP 10 1996

On December 29, 1995, PacifiCorp (licensee) filed a revised wildlife enhancement plan for the Ashton-St. Anthony Project. The licensee changed its wildlife enhancement program, deleting some measures required by its current plan and adding other measures in substitution. By letter dated April 11, 1995, the Director, Division of Project Compliance and Administration (Director) required the licensee to file a revised plan, for Commission approval, because of these changes.

The Ashton-St. Anthony Project consists of two developments in Fremont County, Idaho. The Ashton development is located on the Henry's Fork of the Snake River. The St. Anthony Development is located on the Egin Irrigation Canal, a diversion of the Henry's Fork.

BACKGROUND

The Commission issued a license for the project on August 3, 1987. 1/ Article 405 required the licensee to consult with Idaho Fish and Game (IFG) and the U.S. Fish and Wildlife Service (FWS) and file a wildlife enhancement plan based on enhancement measures proposed in the application for license. The licensee filed a plan on June 28, 1990, which was modified and approved by a Director's order dated August 15, 1990. 2/ The licensee filed a supplement to the plan on October 1, 1990, which was modified and approved by a Director's order dated March 13, 1991. 3/

REVISED WILDLIFE ENHANCEMENT PLAN

The licensee's revised plan is designed to supersede its currently approved plan. The revised plan contains all enhancement measures in the approved plan and those measures that are either new or were modified by the licensee in consultation with IFG and the FWS. Major components in the revised plan include:

960912-0465

1/ 40 FERC ¶ 61,139.

2/ 52 FERC ¶ 62,126.

3/ 54 FERC ¶ 62,166.

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A. Ashton Reservoir

The licensee put up 3.7 miles of cattle fencing along the shoreline of Ashton Reservoir. Fencing allows the licensee to control grazing on selected riparian and upland areas, allowing vegetation to regrow, enhancing wildlife habitat. Twenty acres of land, enclosed by the licensee's fences, were planted with native trees and shrubs to speed the regrowth of vegetation. A 5.7-acre area is annually planted with alfalfa-bluegrass to provide goose forage. This area is also located adjacent to Ashton Reservoir within the licensee's fencing. Further, the licensee installed 15 raptor perches, 10 osprey nesting platforms, and 1 bald eagle nesting platform around the shoreline.

B. Wetland/Upland Complex

The licensee acquired conservation easements on 250 acres of an upland/wetland complex, privately owned by 5 landowners, located about 1 mile to the southeast of Ashton Reservoir. The easements prohibit changes to these lands which would diminish their current value for wildlife; for example, actions like expanding agricultural land for farming and building homes or other structures are prohibited. The licensee also acquired grazing rights to control cattle grazing on a total of 176 acres of land within and adjacent to the above 250-acre area. The conservation easements and grazing rights together allow the licensee to manage the above lands for wildlife purposes.

C. Sand Creek Wildlife Management Area (SCWMA)

The licensee put up 2.0 miles of cattle fencing at the SCWMA, located about 10 miles northwest of Ashton Reservoir, to control grazing and allow riparian and upland areas to regrow. The SCWMA is owned and operated by IFG. Further, the licensee installed 10 goose nesting platforms at various locations within the SCWMA.

D. Monitoring

The licensee filed annual monitoring reports by December 31, 1991 through 1995 in accordance with its approved plan. After 1995, the approved plan requires the licensee to file monitoring reports every 5 years beginning December 31, 2000, for the term of the license. Monitoring reports must be submitted to IFG and the FWS for comment prior to being filed with the Commission. The licensee proposes to continue this reporting schedule in the revised plan. The licensee's next monitoring report would be due December 31, 2000.

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CONSULTATION

The revised plan is the result of extensive negotiations among the licensee, IFG, and the FWS. The IFG and FWS agreed to the plan by separate letters dated November 30, 1995.

DISCUSSION

The licensee's revised plan incorporates all changes made to its wildlife enhancement program as required by the Director's April 11, 1995 letter. These changes include additional fencing and the acquisition of grazing rights, measures agreed upon by IFG and the FWS in lieu of other measures the licensee wished deleted. Additional fencing and the acquisition of grazing rights will allow the licensee to control grazing in important riparian and wetland areas, enhancing habitat for breeding, foraging, and roosting wildlife. These measures are appropriately included in the revised plan.

The licensee states in its plan that the 5.7-acre goose forage area, wetland/upland complex, and those features at the SCWMA are not within the project boundary. In accordance with §4.51(h)(2) of the Commission's regulations, the project boundary must enclose those lands necessary for operation and maintenance of the project and for other project purposes, such as recreation, shoreline control, or protection of environmental resources (See Order on Rehearing for the Skagit River Project where the Commission required the City of Seattle, Washington to include off-site habitat and recreation areas within the project boundary as project "islands" because these lands were necessary for project purposes under §4.51(h)(2)). 4/

Consequently, the project boundary should be revised to include the wildlife enhancement features in the licensee's revised plan. The boundary should be amended to include as many of these features as are reasonable given the nature of these features. As such, the boundary around Ashton Reservoir should be expanded to include all those lands being enhanced for wildlife by the construction of fences and by planting native vegetation and goose forage. Project boundary "islands" should be drawn around the wetland/upland complex. The project boundary should not be expended for the sole purpose of including individual osprey and bald eagle nesting or perch structures. The boundary should not include individual goose nesting structures or fenced areas at the SCWMA. Ordering paragraph (B) requires the licensee to file revised exhibit G drawings showing the above lands and features in the project boundary.

4/ Order on Rehearing dated June 26, 1996 at 75 FERC ¶61,319.

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CONCLUSION

The licensee's revised wildlife enhancement plan incorporates those changed and unchanged provisions in the licensee's current plan and should be approved with Commission staff's modification to file revised exhibit G drawings.

The Director orders:

(A) The licensee's revised wildlife enhancement plan filed December 29, 1995 is approved as modified by paragraph (B) below. The Commission reserves the right to require changes to the plan.

(B) Within 90 days from the date of this order, the licensee shall file, for Commission approval, revised exhibit G drawings showing those lands and features in the licensee's revised wildlife enhancement plan in the project boundary as discussed in this order.

(C) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

J. Mark Robinson
Director, Division of Project
Compliance and Administration

Attachment 6
ASHTON DEVELOPMENT
FERC Order Approving Wildlife Enhancement Plan Five-Year Summary Report

20060418-3008 Issued by FERC OSEC 04/18/2006 in Docket#: P-2381-056

UNITED STATES OF AMERICA 115 FERC ¶62,082
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp Project No. 2381-056

ORDER AMENDING FILING DATE AND ACCEPTING WILDLIFE ENHANCEMENT PLAN FIVE-YEAR SUMMARY REPORT

(Issued April 18, 2006)

On December 28, 2005, PacifiCorp (licensee) filed its wildlife enhancement plan five-year summary report pursuant to paragraph (C) of the Order Approving and Modifying Supplemental Wildlife Enhancement Plan, issued March 13, 1991[1] for the Ashton – St. Anthony Project. The project is located on the Henry's Fork of the Snake River in Fremont County, Idaho.

Paragraph (C) of the March 1991 Order requires the licensee to file the results of monitoring for the approved supplemental wildlife enhancement plan every five years beginning December 31, 2000.

The filed report documents wildlife monitoring results, work completed between 2001 and 2005, and activities proposed for the next reporting period. This report satisfies the filing requirements of paragraph (C) of the Order Approving and Modifying Supplemental Wildlife Enhancement Plan.

In its filing, the licensee requests that the filing requirement dates for the five-year reports be extended until March 31 of the following year. This change would allow data to be collected through the end of the monitoring period and included in the final report with time for a 30-day review by the resource agencies.

The licensee's request to amend the filing date for its five-year summary reports is reasonable and should be approved.

The Director orders:

(A) The wildlife enhancement plan five-year summary report, filed December 28, 2005, pursuant to paragraph (C) of the Order Approving and Modifying Supplemental Wildlife Enhancement Plan, issued March 13, 1991, is accepted.

[1] 54 FERC ¶ 62,166.

20060418-3008 Issued by FERC OSEC 04/18/2006 in Docket#: P-2381-056

(B) The filing dates for the five-year summary reports for the wildlife enhancement plan required by paragraph (C) of the Order Approving and Modifying Supplemental Wildlife Enhancement Plan, issued March 13, 1991, are changed to March 31 of the following year, beginning March 31, 2011.

(C) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. § 385.713.

John E. Estep
Chief, Land Resources Branch
Division of Hydropower
Administration and Compliance

Attachment 7
ASHTON DEVELOPMENT
FERC Letter Confirming Compliance with License Article 408

FEB 2 8 1992

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D. C. 20426

Project No. 2381-022--Idaho
Ashton-St. Anthony Project
PacifiCorp

Mr. S. A. deSousa
Director, Hydro Resources
Pacific Power
920 S.W. Sixth Avenue
Portland, OR 97204

Dear Mr. deSousa:

This refers to the material you filed on December 31, 1991, to comply with article 408 of the license for the Ashton-St. Anthony Project. The material included a letter dated November 4, 1991, from the Idaho State Historic Preservation Officer stating that the turbine upgrade work will not affect the historic significance of the Ashton hydroelectric development or its eligibility for the National Register of Historic Places.

The material fulfills the requirements of article 408. If you have any questions concerning this matter, please contact Mr. John Costello at (202) 219-2914.

Sincerely,

J. Mark Robinson

J. Mark Robinson
Director, Division of Project
Compliance and Administration

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Attachment 8
ASHTON DEVELOPMENT
Recreation Amenities

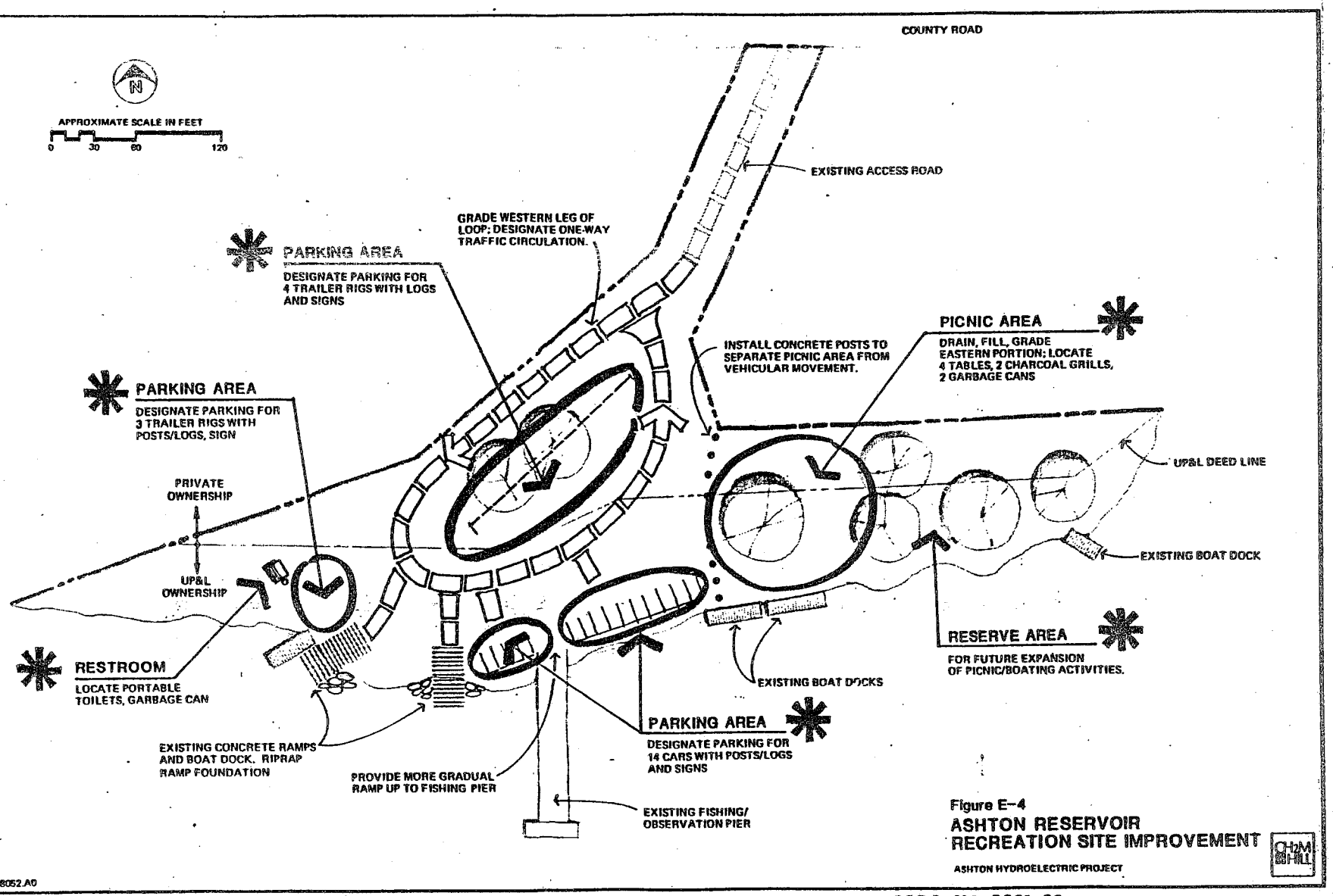

Figure E-4
ASHTON RESERVOIR
RECREATION SITE IMPROVEMENT
ASHTON HYDROELECTRIC PROJECT

B18052.A0

Federal Energy Regulatory Commission (FERC)
FERC Form 80

Licensed Hydropower Development Recreation Report

Form Approved
OMB No. 1902-0106
Expires: 09/30/2010
Burden 3.0 hours

This form collects data on recreational resources at projects licensed by the Federal Energy Regulatory Commission under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). Submit this form on or before April 1, 2009. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2015, 2021, etc.). Submit an original and two copies of the form to the Commission's Regional Office (specified in the cover letter to this form). The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. Please send your comments about this burden estimate, or any other aspect of this collection of information, including suggestions to reduce the burden, to: Director, Division of Hydropower Administration and Compliance, Federal Energy Regulatory Commission, 888 First Street NE, Washington, D.C. 20426 and the Office of Information and Regulatory Affairs, Desk Officer-FERC, Office of Management and Budget, Washington, D.C. 20503.

Failure to comply with this collection of information will not result in a penalty, if you were unaware that a valid control number assigned by the Office of Management and Budget must be displayed on this collection of information.

Instructions:

a. All data reported on this form must represent recreational facilities and services located within the development/project boundary.
b. To ensure a common understanding of terms, please refer to the Glossary on page 3.
c. Report actual data for each item. If actual data are unavailable, then please estimate.

Schedule 1. General Information

1. Licensee Name: PacifiCorp
2. Project Name: Ashton / St. Anthony
3. Project Number: 2381
4. Development Name: Ashton

8. Reservoir Surface Area at Normal Pool (acres): 464
9. Shoreline Miles at Normal Pool: 12
10. Percent of Shoreline Safely Accessible to the General Public by Land Travel without Trespassing: 5 %

States Development/Project Traverses (List state with largest area within the development/project boundary first):

5. State #1: Idaho
6. State #2:

7. Type of Project License: (check one) Major [✓] Minor [ ]

11. Data Collection Methods (enter percent for each method used; total must equal 100%):

100% traffic count/trail count
____ attendance records
____ staff observation
____ visitor assessment
____ estimate

For the previous calendar year, enter only the licensee's annual recreational construction, operation, and maintenance costs for the development (project). Also, enter the corresponding annual recreational revenues.

Item	Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)	
	Construction, Operation and Maintenance Costs	Recreation Revenues for Calendar Year
12. Dollar Values	8,450	Ø

13. Length of Recreation Season
Summer: From (MM/DD) 05/23 To 09/01 Winter: From (MM/DD) 09/02 To 05/22

Period	Number of visits to all recreational areas at development/project (in Recreation Days)	
	Annual Total	Peak Weekend Average
14. Daytime	45,580	1150
15. Nighttime	0	0

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

Marik Sternberg
Legal Name

Program manager
Title

208-852-5507
Area Code/Phone No.

Signature

03/20/2009
Date Signed

3/1/2009
Reporting Year Ending

Title 18 U.S.C.1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any false, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Schedule 2. Inventory of Recreational Resources

16. Enter data for each Recreational Resource Type (a). For Facility Capacity (f), of total available resources (b) + (c), compare the average total amount of weekend use (during the recreation season reported on Schedule 1, Item 13) with the total combined capacity of these resources to handle such use and enter a percentage that indicates their overall level of use. Do not consider peak weekend use (see Glossary). For example, if all available Boat Ramps are used to half capacity during non-peak weekend days, enter 50%. For all available Boat Ramps that are used beyond their combined capacity, enter the appropriate percentage above 100.

Recreational Resource Type (a)	No. of Available Resources			Total Miles/Acres (e)	Facility Capacity (percent) (f)
	User Free (b)	User Fee (c)	No. FERC Approved Resources (d)		
Access Areas. (No Facilities). Unimproved but well-known/popular sites which can be used to reach development/project waters (including waters below a dam) without trespassing on other property. Such areas can be used for launching boats, fishing, swimming, or other water recreational purposes.				N/A	
Boat Launch Areas. Improved areas having one or more boat launching lanes and (a) are usually marked with signs, (b) have compacted gravel or concrete surfaces, and (c) usually have adjacent parking lots.	1			N/A	40
Boat Launch Lanes. The number of lanes are determined by the total number of boats that can be launched easily at the designated boat launch areas at one time.	2			N/A	40
Marinas. Public and Private facilities on or adjacent to the development/project waters for the docking, fueling, repair and storage of boats, and which may rent boats and equipment, or sell bait or food.				Acres	
White Water Boating. Access areas below a dam that can be used for rafting/kayaking.				N/A	
Canoe Portages. Site located above and below a dam, diversion, or other obstruction where persons can launch and take out canoes; and the improved, designated, and maintained trails connecting such sites.				Miles	
Tailwater Fishing Facilities. Platforms, walkways, or similar structures to facilitate below-dam fishing.	1			N/A	5
Fishing Piers. Structures which are installed and maintained in development/project waters specifically for fishing. This code excludes tailwater fishing facilities.				N/A	
Parks. Designated areas which usually contain multiple use facilities (e.g., picnic sites, playgrounds, swimming beaches, and boat ramps). Individual facilities within each park should be reported under the appropriate resource type (e.g. playground areas, picnic areas, etc.)	1			4 Acres	40
Playground Areas. Have playground equipment, game courts/fields, jogging tracks, etc.				Acres	
Trails. Improved pathways used for non-automobile recreational travel which (a) can be located on a reference map, and (b) are designated according to type of use (hiking, bridle, trail bikes, snow mobiles, cross-country skiing). This category excludes canoe portages.	1			Miles	
Swimming Areas. Sites providing access to development/project waters where swimming facilities (bath houses, designated swim areas, parking, and sanitation facilities) are available.				Acres	
Picnic Areas. Areas designated and maintained for picnicking and which contain one or more picnic sites, each of which includes a picnic table and in some cases cooking grills, trash receptacles, and a parking area.	2			Acres	
Wildlife Areas. Natural areas and reserves specifically created and managed for the protection and propagation of wildlife and the viewing of wildlife in their natural habitat.	2			Acres 500	10
Visitor Centers. Facilities located in a kiosk, pavilion or similar structure from which persons may obtain information about the development/project, its operation, recreational facilities, and related items of interest.				N/A	
Interpretive Displays. Facilities (exhibits and museums) which describe or explain archaeological, historic, or prehistoric objects, structures, sites, areas, activities, artifacts, and materials.				N/A	
Overlooks. Public areas to view natural areas/project features (e.g., pull-offs or vistas).				Acres	
Hunting Areas. Public or private areas open to the general public for hunting.				Acres	
Golf Courses. All types of golf areas, except miniature golf.				Acres	
Cottage/Cabin Sites. Recreational dwellings which are seasonally rented by the public for recreational purposes.				N/A	
Camping Areas/(Campgrounds). Areas containing two or more campsites, tent sites, or trailer/recreational vehicle (RV) sites which accommodate overnight camping. This category does not include group camps.				Acres	
Tent/Trailer/RV Sites. The total number of sites within Camping Areas that have been specifically developed for tent, trailer, or RV use. This category does not include sites within group camps.				Acres	
Organizational Camps. Camping areas that are maintained and operated by a specific entity but which may be used by other persons or groups (scout camps, military base recreation camps, church camps, handicapped children camps).				Acres	
Group Camps. Camping areas which are equipped with facilities to accommodate use by the general public. These areas usually require registration or advance reservation.				Acres	
Winter Sports. Any facility or site providing sports like skiing, sledding, ice skating, or ice fishing.				N/A	
Other - such as informal/dispersed camping areas, unimproved trails, etc. (specify):				N/A	