REVIEW OF APPLICATION FOR LIHI CERTIFICATION

OF THE

ASHTON HYDROELETRIC PROJECT, LIHI #61

FERC Project No. 2381

Henry's Fork, Snake River

Freemont County, Idaho

September 18, 2020

E. Woody Trihey and Jean Baldrige, Reviewers

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FINAL REVIEW OF APPLICATION FOR LIHI CERTIFICATE OF

THE ASHTON HYDROELECTRIC PROJECT, LIHI #61

This report provides the final review findings and recommendations for re-certification of the Ashton Hydroelectric Project, LIHI #61, FERC No. 2381 (Project) as a low impact hydropower project. The application for recertification was submitted to the Low Impact Hydropower Institute (LIHI) by Pacificorp (Applicant) on December 23, 2019. On July 13, 2020, LIHI provided notice that the application was available to the public on the LIHI website. This review of the Ashton application follows the guidelines and performance standards of the 2nd edition of the LIHI handbook.

I. Introduction

The Project, owned and operated by PacifiCorp, is located at river mile 45 on the Henry's Fork of the Snake River in Southeastern Idaho. It has a generating capacity of 6.7 MW and consists of a single hydroelectric development, which includes a reservoir, dam and powerhouse. The Henry's Fork River has an average annual streamflow of 1,520 cfs at the Ashton Gage (USGS gage No.13046000). The Project operates in an instantaneous run-of-river mode. Ashton Reservoir is approximately 4 miles in length with a storage capacity of 6,080 acre feet.

The Project currently holds Low-Impact Hydro Institute (LIHI) certification No. 61, which was issued on December 31, 2014 and expired on December 31, 2019. The current LIHI term was extended to May 31, 2020 and again to October 31, 2020 to allow the owner time to provide additional information. LIHI is reviewing the Project to determine if recertification is warranted. This review is based on information describing the Project's facilities, history, setting, operation and degree of compliance with LIHI certification standards during the past 5 years.

II. Project Location and Site Characteristics

The Project is located at River Mile (RM) 45 on the Henry's Fork River in Freemont County, Idaho. The Henry's Fork supports a number of hydroelectric and water storage projects. There are two other dams in the vicinity of the Ashton Project (Figure 1). The U.S. Bureau of Reclamation operates Island Park Reservoir, a water supply reservoir, about 46 miles upstream of the Project (the hydro project is LIHI #2). Chester Dam of the Chester Diversion Hydroelectric Project (FERC No. 11879, LIHI #131) is located about 6.5 miles downstream of Ashton Dam at RM 38.5.

The Henry's Fork watershed in eastern Idaho and western Wyoming covers 1.7 million acres and has over 3,000 miles of rivers, streams and canals. Upper Henry's Fork encompasses about 1005 sq miles in Idaho, 30 sq miles of Wyoming, and 60 sq miles of Yellowstone National Park), for a total drainage area of 1095 sq miles. The northern boundary of the watershed is the continental divide, which is also the boundary between

the states of Idaho and Montana. Much of the watershed is in federal ownership and is managed by the U.S. Forest Service (USFS).

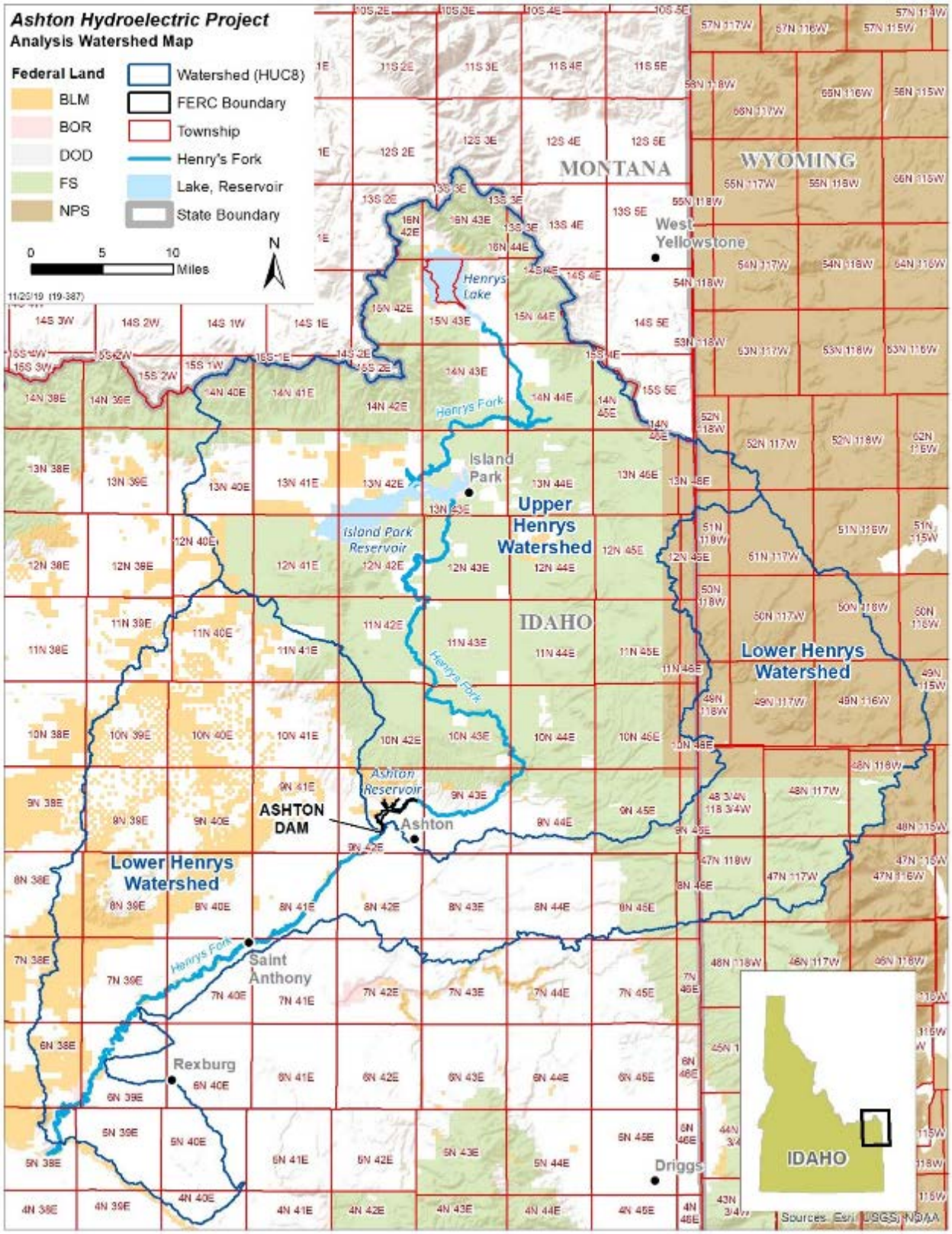

Figure 1. Project facilities and vicinity map

The Project is located near the southern boundary of the Upper Henry's Fork sub basin. Downstream of Ashton Dam, the Henry's Fork flows in a southwesterly direction for approximately 79 miles, where it joins the South Fork of the Snake River. The Project is located in a sparsely-populated, semi-arid area. The dominant land uses in the vicinity of the Project are irrigated agriculture and outdoor recreation, including trout fishing, hunting, rafting, and boating.

Figure 2. Ashton Reservoir

The Ashton Reservoir is approximately 4.6 miles long, has a surface area of 392.9 acres and a storage capacity of 6,080 acre-feet. The elevation at maximum pool is 5,155.9 ft and the retention time of water in the reservoir varies seasonally from 0.6 to 4.5 days.

Ashton Dam is an earth- and rock-filled dam, 56 ft-high and 226 feet long. The crest height of the dam is at elevation 5,156.6 ft. The downstream face of the dam is composed of roller compacted concrete. Rock fill stabilizes the upstream face of the dam. It has an 82-foot long, reinforced concrete spillway, with six 10-foot high radial gates. The outlet tunnel passes through the right abutment bedrock and includes slide gates for flow control.

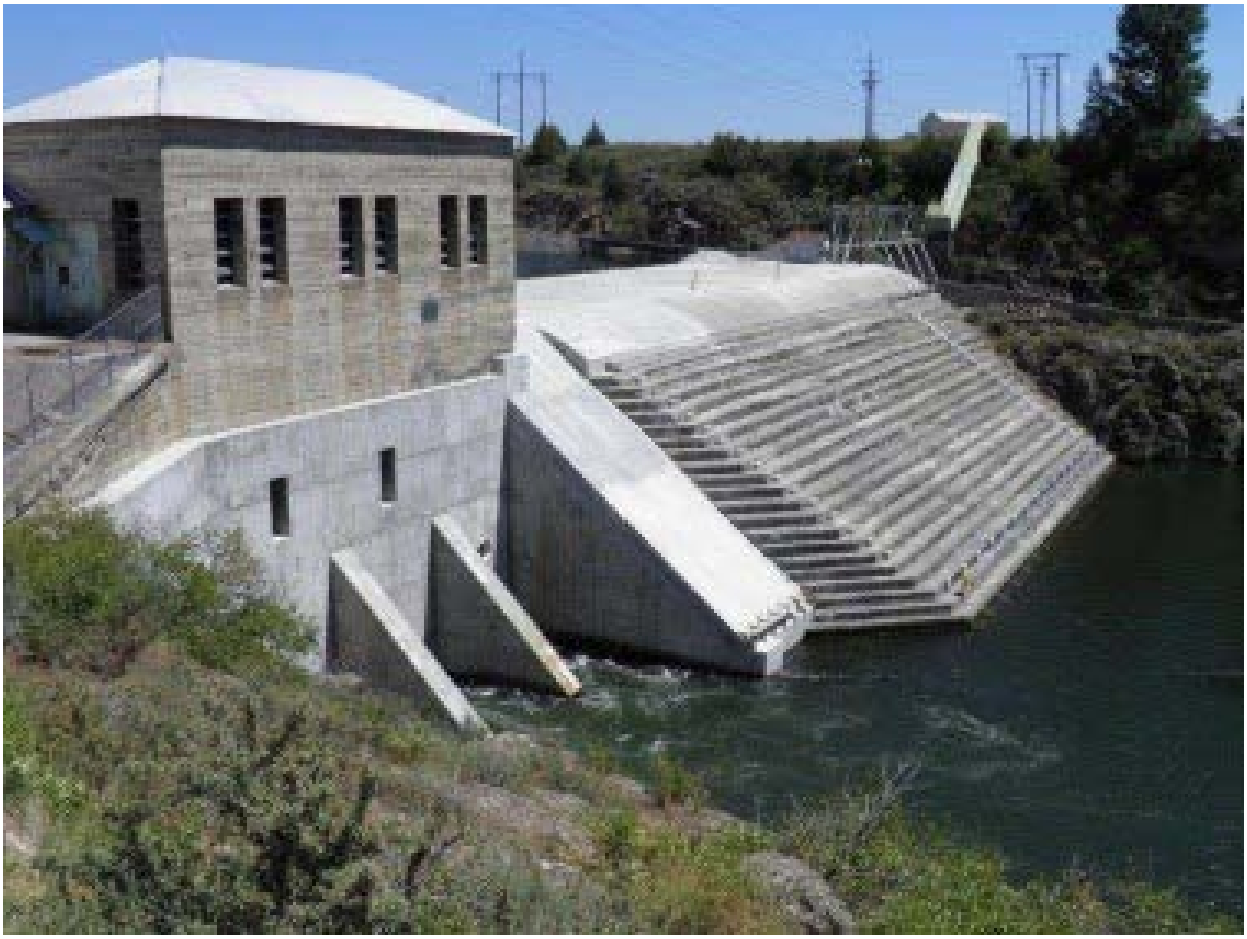

Figure 3. Ashton Dam and Powerhouse

The hydraulic capacity of the gated spillway is 6,070 cfs. When the reservoir surface reaches the top of the dam (elevation of 5,156.6 feet), the Project transitions from normal operations to full spill operations. Under full spill, the powerhouse is shut down and the outlet tunnel opened. Maximum outflow capacity of a full reservoir is 11,326 cfs. For context, the 100 year flood is 7,400 cfs.

The powerhouse is a reinforced concrete structure integrated into the dam. Located on the right bank, the powerhouse has three generation units, two with a nameplate rating of 2,000 kW, and one with a 2,700 kW rating. Three powerhouse intakes are located on the upstream face of the dam and are controlled by vertical slide gates. There are three trash racks with bar spacing at 1-3/8 inches. Additional information is provided in the PacifiCorp Application for LIHI Recertification (December 2019).

III. Regulatory and Compliance History

The Ashton Project and the Saint Anthony Project were owned by Utah Power and Light Company (UPL) and were originally licensed together in 1938 as one project. Although the two facilities shared a FERC license, these developments were operated separately, with no shared facilities or lands. The two developments were again licensed together in 1987, when FERC issued a 40-yr license ending December 31, 2027.

In 2013, PacifiCorp and Saint Anthony Hydro LLC proposed mutual terms of sale and transfer of the Saint Anthony Development from PacifiCorp to Saint Anthony Hydro, LLC. FERC approved the transfer on Sept. 13, 2013, created the Saint Anthony Project and assigned it Project No.14552. Ashton Development was renamed the Ashton Project (Project) and retained the original FERC Number (P-2381), previously granted to Utah Power and Light.

The Low Impact Hydropower Certification granted in 2014 pertained only to the Ashton Development. The Project has not had any license violations during the current LIHI certification term, 2014 through 2019, and none in 2020. There have been no material changes to Project facilities, operations or regulatory requirements since the last LIHI certification in 2014 (Pacificorp 2019, Application p 19).

A review of the FERC eLibrary since the last certification in 2014 showed that the Project had no deviations or compliance issues in this period from 2013 to 2020. There was no evidence of late filings or violations of the FERC license conditions. Based on the record review conducted for this recertification, the Project appears to be in compliance with all license conditions.

IV. Public Comments Received or Solicited by LIHI

This application was publicly noticed on July 13, 2020 and notice of the application was forwarded to the resource agencies and stakeholder representative listed in the application. No public comments were received by LIHI during the 60-day comment period which ended on September 11, 2020.

V. Zones of Effect

The Applicant identified two zones of effects (ZOEs) for the Project (Figure 4). The Project has an impoundment extending approximately 4.6 miles upstream of the dam, which is designated as Zone 1. Zone 2 is a Tailwater-Riverine Reach which extends about 800 feet immediately downstream of the dam and powerhouse. Since the powerhouse is attached to the dam, the Project does not have a bypass reach.

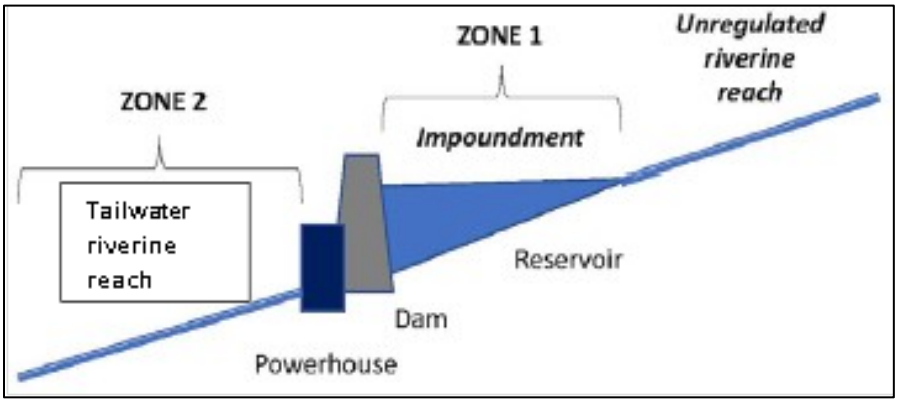

Figure 4. Schematic of Ashton Project showing relationship of the two identified ZOEs

ZOE 1: Impoundment: The Ashton Reservoir extends from the dam intake (near RM 45) upstream to the east end of the reservoir near RM 49.6. Here the channel transitions into an unregulated river reach. RM 49.6 is the eastern extent of the FERC Project boundary (Figure 5).

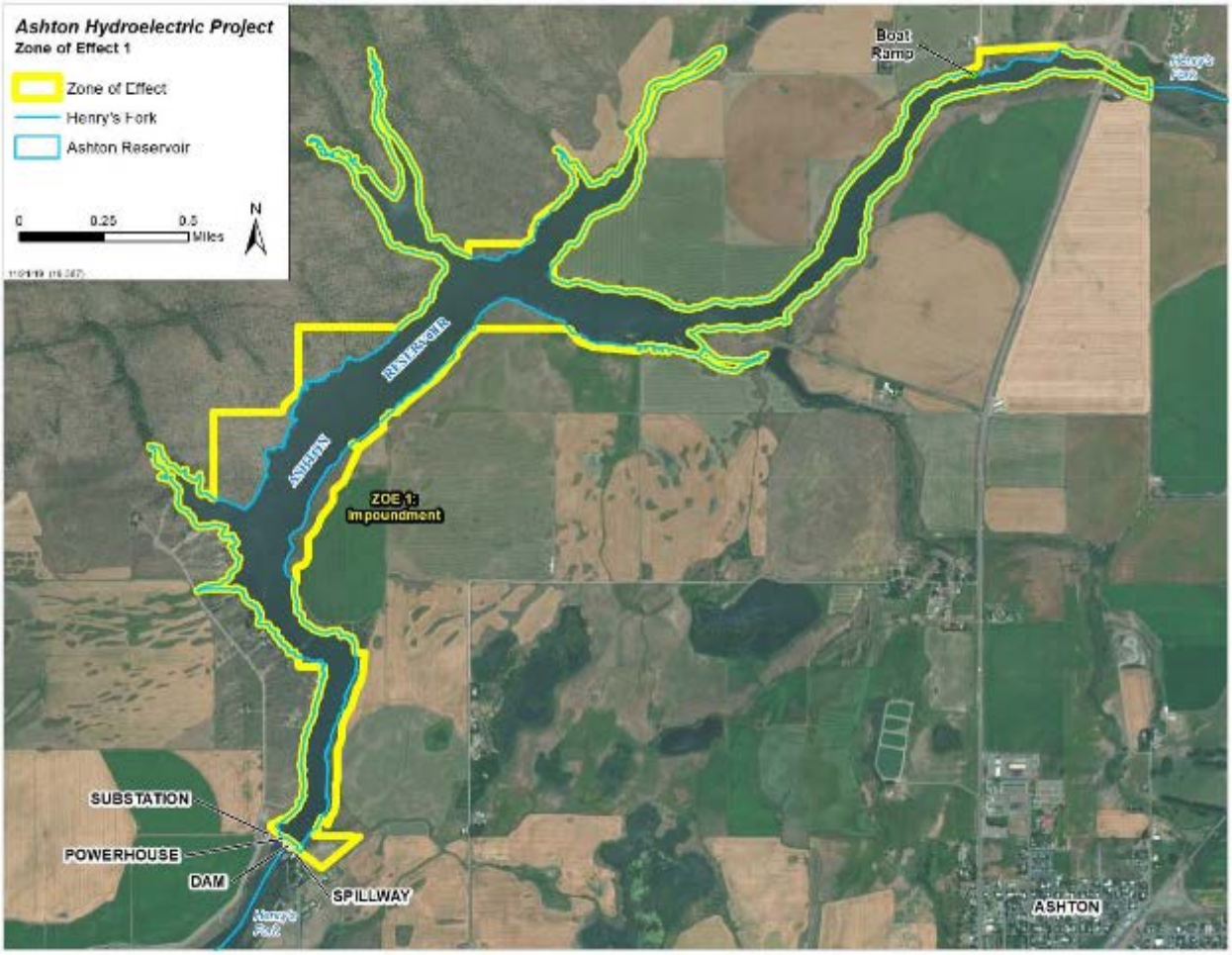

Figure 5. Aerial view of ZOE 1: Impoundment

ZOE 2: Tailwater-Riverine Reach: The Riverine reach begins at the dam and powerhouse and extends downstream a short distance, (approximately 0.15 miles) to the west end of the Project Boundary near RM 44.9 (Figure 6). The downstream ZOE is confined within a steep canyon with a gravel bar and small patches of riparian vegetation on the banks. This area coincides with the downstream extent of the FERC Project boundary.

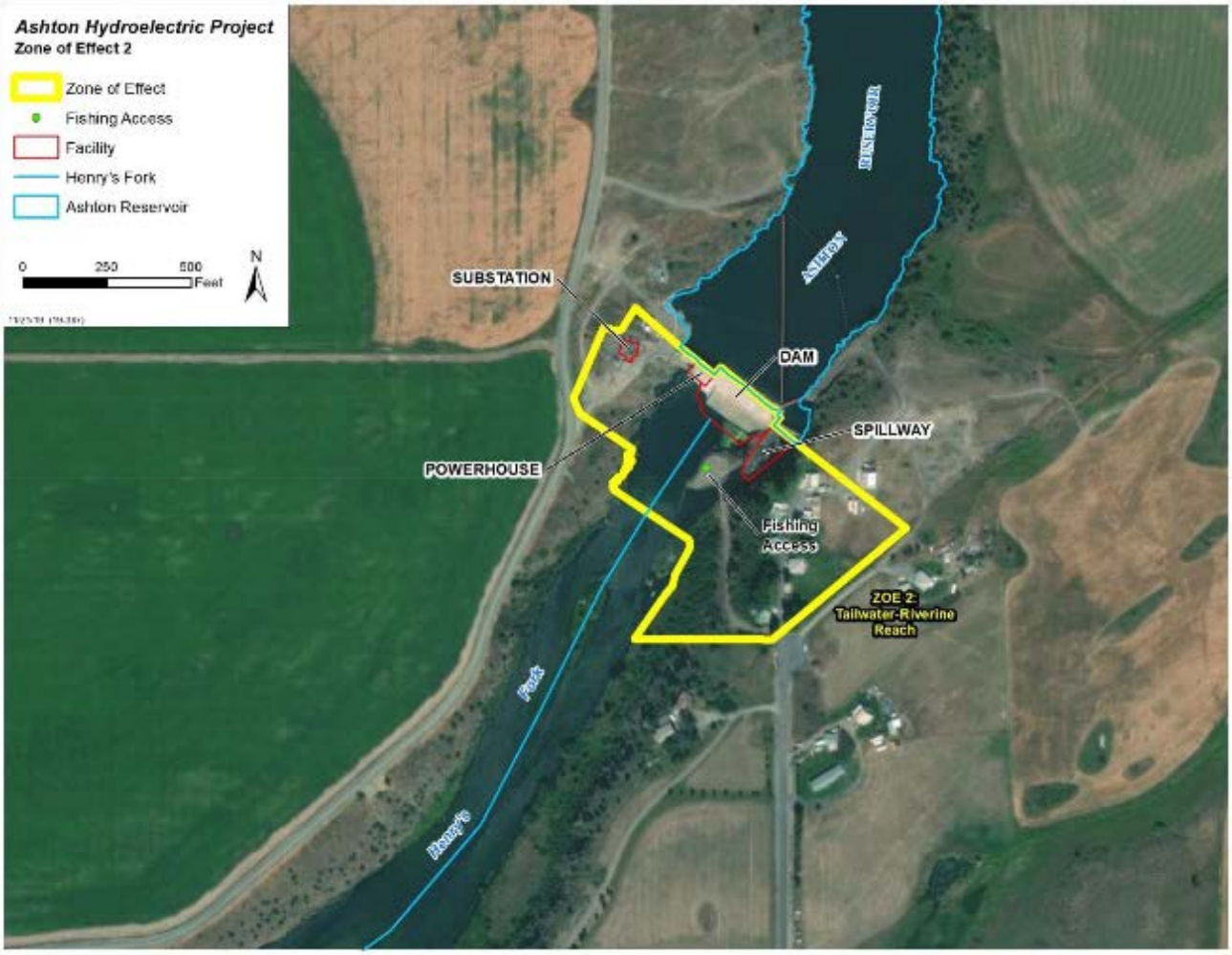

Figure 6. Aerial View of ZOE 2: Tailwater Riverine Reach

The certification criteria and standards selected by the Applicant for each ZOE are summarized in matrix Tables 1 and 2 and are examined in Section VI, Detailed Criteria Review. The certification criteria and alternative standard are described in the Low Impact Hydropower Certification Handbook 2nd Edition. The Project is evaluated on its performance to provide and protect environmental and social benefits in eight areas. These include: Ecological Flow Regimes, Water Quality, Upstream Fish Passage, Downstream Fish Passage, Shoreline and Watershed, Threatened and Endangered Species, Cultural and Historic Resources, and Recreation Resources. The effects of

the Project on these elements are examined in each of the two identified ZOEs. The Applicant selected the standards shown in the tables below. Where the reviewer disagrees with the selected standards, recommended standards are indicated in **RED** in the matrix tables below.

Table 1. ZOE 1. Impoundment

	Criterion	*Alternative Standards*				
		1	*2*	*3*	*4*	*Plus*
A	Ecological Flow Regimes	X				
B	Water Quality	X		X		
C	Upstream Fish Passage	X				
D	Downstream Fish Passage				X	
E	Shoreline and Watershed Protection		X			
F	Threatened and Endangered Species Protection	X				
G	Cultural and Historic Resources Protection	X	X			
H	Recreational Resources		X			

Table 2. ZOE 2. Downstream Reach

	Criterion	*Alternative Standards*				
		1	*2*	*3*	*4*	*Plus*
A	Ecological Flow Regimes	X				
B	Water Quality	X				
C	Upstream Fish Passage	X			X	
D	Downstream Fish Passage	X				
E	Shoreline and Watershed Protection	X				
F	Threatened and Endangered Species Protection	X				
G	Cultural and Historic Resources Protection		X			
H	Recreational Resources			X		

VI. Detailed Criteria Review

A. Ecological Flow Regime

Goal

The flow regimes in riverine reaches that are affected by the facility support habitat and other conditions suitable for heathy fish and wildlife resources.

Assessment of Standard and Criterion selected by Applicant.

The Applicant selected Standard A-1, Not Applicable/De Minimis Effect, to apply to both ZOEs. This standard is applicable to both ZOEs because the facility operates in a true run-of river operational mode and there are no bypass reaches or water diversions associated with the Facility.

Under normal operating conditions, the Project does not alter the streamflow regime either in the Impoundment ZOE or in the Tailwater/Downstream ZOE. Thus, the Reviewers concur with the selection of the A-1 standard and the Project's compliance with this standard.

Discussion

The Project flow requirements are defined in Article 401 of the Project's FERC license (See Appendix A-1-1, page 14 of the Application). The license requires that the Project operate in an instantaneous run-of-river mode for the protection of fish and wildlife resources in the Henry's Fork River. Run-of-river operations may be temporarily modified if required by operating emergencies beyond the control of PacifiCorp or upon mutual agreement between PacifiCorp and Idaho Dept. of Fish and Game (IDFG). This occurred once in April 2015 when run-of-river operations were temporarily modified to enable an aerial survey for property rights research. This modification was agreed to in advance by the IDFG and approved by FERC. [1]

Based on our review of the recertification application, supporting documents and the FERC eLibrary, the Reviewers find the Project to be in compliance with the A-1 standard in both ZOEs and continues to satisfy this criterion.

B. Water Quality

Goal

Water quality is protected in waterbodies directly affected by the facility, including downstream reach, by-pass reach and impoundments above dams and diversion.

Assessment of Criteria and Standards selected by Applicant

The Applicant selected Standard B-3 in both ZOEs:

[1] https://elibrary.ferc.gov/eLibrary/filedownload?fileid=13888249

In the absence of an applicable agency recommendation specific to the facility, the facility owner must demonstrate that the project is in compliance with the quantitative water quality standard established by the state or other regulatory authority to support designated uses pursuant to the federal Clean Water Act or other applicable stature in the facility area and downstream.

The Reviewers find that Standard B-1, Not Applicable/De Minimis Effect, is more appropriate for both reaches.

Discussion

Standard B-3, Site-Specific Studies, is used in the absence of an applicable agency recommendation specific to the facility. The Applicant demonstrated that the Project is in compliance with the quantitative standards established by the state or other regulatory authority to support designated uses pursuant to the federal Clean Water Act or other applicable stature in the facility area and in the downstream reaches.

The Applicant chose this criterion because the Ashton Reservoir is part of section of river where insufficient information existed for classification of water quality standards at the time of the completion of Idaho Department of Environmental Quality's (IDEQ) 2016 Integrated Report (IDEQ 2018a).

The Reviewers have found no evidence of impaired water quality in the Ashton Reservoir in a general online search, and in a search of the Project's FERC Record. No commentary appears in the FERC record identifying water quality issues or concerns at, or near, the Project. The Applicant notes that the segment of the river, where the Project is located, is classified as Category 3 waters due to insufficient information to determine if beneficial uses are being attained (Page 20, Application). In 2014, as a requirement of its previous LIHI certification, Pacificorp conducted a water quality monitoring study and submitted it to IDEQ for review and comment. IDEQ found that the Project has little or no negative impacts on State water quality standards (see Appendix A-2.2-2 of the application).

PacifiCorp's 2014 study (Pacificorp 2014) and the March 3, 2014 letter from IDEQ (Attachment 4A in original application)[2], demonstrate the Project is in compliance with LIHI Standard B-1, in both the Impoundment and the Tailwater Riverine Reach.

The Ashton Project is operated in a true run-of-the-river fashion and has an impoundment with a gross storage volume of 6,080 acre ft. The average annual river flow at the dam is 1,520 cfs. Streamflow retention within the impoundment would be of too brief a period for water quality attributes, such as reservoir temperature or dissolved oxygen stratification, to be adversely affected.

The Henry's Fork River, including the reaches upstream and downstream of Ashton Dam, support a premier trout fishery (see section 2.3.2 of Application). There is also a strong fishery in the Ashton Reservoir, supported by stocking rainbow and brown trout

[2] https://lowimpacthydro.org/wp-content/uploads/2020/07/2014-Ashton-Attachments-to-Recertification-Questionnaire.pdf

funded by Pacificorp. The existence of the excellent fishery upstream of Ashton and within the Ashton Reservoir is a clear indication that water quality is not adversely altered by Project operations.

Based on the Application, supporting documentations and the lack of any FERC eLibrary documents to the contrary, this review finds that the Project does not adversely affect water quality for cold water aquatic life or salmonid spawning. The Reviewers find the Project is in compliance with the B-1 Water Quality Standard in both ZOEs and the Project continues to satisfy this criterion.

C. Upstream Fish Passage Ecological Flow Regime Ecological Flow Regime

Goal

The facility allows for the safe, timely and effective upstream passage of migratory fish. This criterion is intended to ensure that migratory species can successfully complete their life cycles and maintain healthy sustainable fish and wildlife resources in areas affected by the facility.

Assessment of Criteria and Standards selected by Applicant

The Applicant selected Standard C-1, not applicable/De Minimis effect for the Impoundment ZOE and Standard C-4, Acceptable Mitigation in lieu of upstream passage provisions at the facility for the downstream ZOE. The reviewers agree with the application of Standard C1 to the impoundment since once fish have passed upstream of a dam there is no further Project-related barrier to continued passage. The reviewers believe that Standard C1 is also applicable to the downstream ZOE, regarding migratory fish species.

Discussion

There are no known historic or current records of anadromous, catadromous, or potadromous fish within the river segment affected by the Project. No fish passage prescriptions have been included in previous licensing processes. The occurrence of the 200 ft-high Shoshone Falls downstream on the Snake River near Twin Falls, Idaho precludes access by anadromous fish to all of Southeastern Idaho. Since migratory species do not exist in the vicinity of the Project, the C1 Standard is applicable for both ZOEs regarding migratory fish species.

The resident fish in the vicinity of the Project, which include Utah chubs, Utah sucker, rainbow and brown trout, brook trout, and mountain whitefish may move locally in the river system, but these species do not require specific migrations to achieve reproductive success. The most recent Fish Management Plan prepared by IDFG which includes the river segment from St. Anthony to Mesa Falls (which includes the Ashton facilities) “there are good number of wild rainbow trout and increasing numbers of brown trout” (IDFG 2019). Since resident fish do not require migration above the Project to

successfully execute their life history the Project has a de minimis effect on upstream passage.

Based on the FERC record, fish passage at Ashton Dam has not been a focus of state or federal resource agencies. Article 402 of the FERC license called for implementation of a fisheries enhancement plan. The Plan included fish stocking in the reservoir to address the impact of the creation of the reservoir behind Ashton Dam. Because of the character of the local habitat, the reservoir does not provide the habitat values, nor the fishing success, of the riverine reaches upstream and downstream of the Ashton Reservoir. To mitigate for this characteristic of the Reservoir, PacifiCorp developed and implemented a fish stocking plan for the Reservoir, in consultation with IDFG, which was approved by FERC (FERC 1999).

The Fish Stocking Plan calls for PacifiCorp to provide funding to IDFG to support the production of rainbow trout for annual stocking of Ashton Reservoir. This program meets IDFG's goal of maintaining a high-catch-rate fishery, appropriate for beginner anglers and managed as a yield fishery under general regulations (IDFG 2019).

IDFG plans to continue to manage the area as a wild population. IDFG (2019) noted that Henry's Fork from St. Anthony to Mesa Falls continues to produce good numbers of rainbow trout and is showing increasing numbers of brown trout.

In conclusion, since migratory species do not occur in the vicinity of the Project, and the resident species occurring in the Project area do not require migration to accomplish their life history, the Standard C1, Not Applicable/De minimis effect for upstream passage applies to both ZOE's and the Project continues to satisfy this criterion.

D. Downstream Fish Passage

Goal

The facility allows for the safe, timely and effective downstream passage of migratory fish. For riverine (resident) fish, the facility minimizes loss of fish from reservoirs and upstream river reaches, affected by facility operations. All migratory species can successfully complete their live cycles and maintain healthy, sustainable fish and wildlife resources in the areas affected by the facility.

Assessment of Criteria and Standards selected by Applicant

The Applicant selected Standard D-4, Acceptable Mitigation, for the impoundment ZOE and Standard D-1, Not Applicable/De Minimis Effect for downstream ZOE. The. Downstream reaches can typically qualify for Standard D-1 since once below a dam and powerhouse there is no further Project-related barrier to continued downstream passage. The enhancement of the trout fishery in the impoundment to mitigate turbine induced mortalities, also benefits Recreation. This beneficial effect is discussed under Criterion H, Recreation.

Discussion

Although no migratory fish are present, resident fish in the reservoir can become entrained and pass through the Project's turbines. Because the Project is operated in an instantaneous run-of-river mode, a large percentage of the total streamflow continually passes though the turbines. Thus, it can be concluded that much of downstream movement of resident fish (both game and non-game species) occurs though the powerhouse. Based on comparative literature review of salmonid mortality conducted by Ecosystems Research Institute (1990), for the type of turbine used in the Ashton Powerhouse; turbine-induced mortality at the Ashton Powerhouse is believed to be relatively low. Estimates range from less than 12 per cent mortality for Turbines 2 and 3, to less than 16 percent for Turbine 1, (page 8 of Application).

Fish sampling conducted by the IDFG in 1985, as reported by Maiolie (1987), found that salmonid species (the principle game species) represented less than 6 percent of the Impoundment Zone's species composition and Utah chubs and Utah suckers represented over 94 percent.

There are no migratory fish present in the Henry's Fork River. Resident rainbow and brown trout are stocked in Ashton Reservoir as mitigation for the effects of the creation of Ashton Reservoir on the aquatic habitat that was there prior to the construction of Ashton Dam.

To increase fish available to the recreational fishery, PacifiCorp implemented a stocking program in consultation with IDFG, where PacifiCorp funds the IDFG to produce and stock fish in Ashton Reservoir Application page 28). The fish stocking program is considered mitigation for the impoundment of 4.6 miles of former riverine habitat and the limited amount of turbine-induced mortality of salmonids resulting from passage through the powerhouse (FERC 1999).

Based on our review of the application, FERC elibrary, and other available information, we find that the Project meets Standard D-4 in the Impoundment ZOE and Standard D-1 in the Tailwater/Riverine ZOE, and thus continues to satisfy this criterion.

E. Shoreline and Watershed Protections

Goal

The facility has demonstrated that sufficient action has been taken to protect, mitigate, or enhance the condition of soils, vegetation, and ecosystem functions on shoreline and watershed lands associated with the Facility.

Assessment of Criteria and Standards selected by Applicant

The Applicant selected the E-2 Standard (Compliance with Agency Recommendations) for the Impoundment ZOE and the E-1 Standard (Not Applicable. De Minimis Effect) for the Downstream ZOE. Based upon review of the Application, supporting documentation from the FERC eLibrary, the Reviewers agree with the Applicant's choice of performance standards and the Facility's compliance with them.

Figure 7. Bald eagles at Ashton Reservoir

The downstream ZOE is a short tailwater section (0.1 mile) of the Henry's Fork confined within a steep canyon with a gravel bar and small patches of riparian vegetation on the banks (Figure 8). This area coincides with the downstream extent of the FERC Project boundary. PacifiCorp ownership within the Project boundary downstream of the dam is limited to approximately 750 feet of the southeast shoreline. The river bed is owned by the State of Idaho and the Project boundary follows the downstream extent of an easement granted by the state for the dam and tailwater. Downstream of the Project boundary, the banks are private lands not controlled by PacifiCorp.

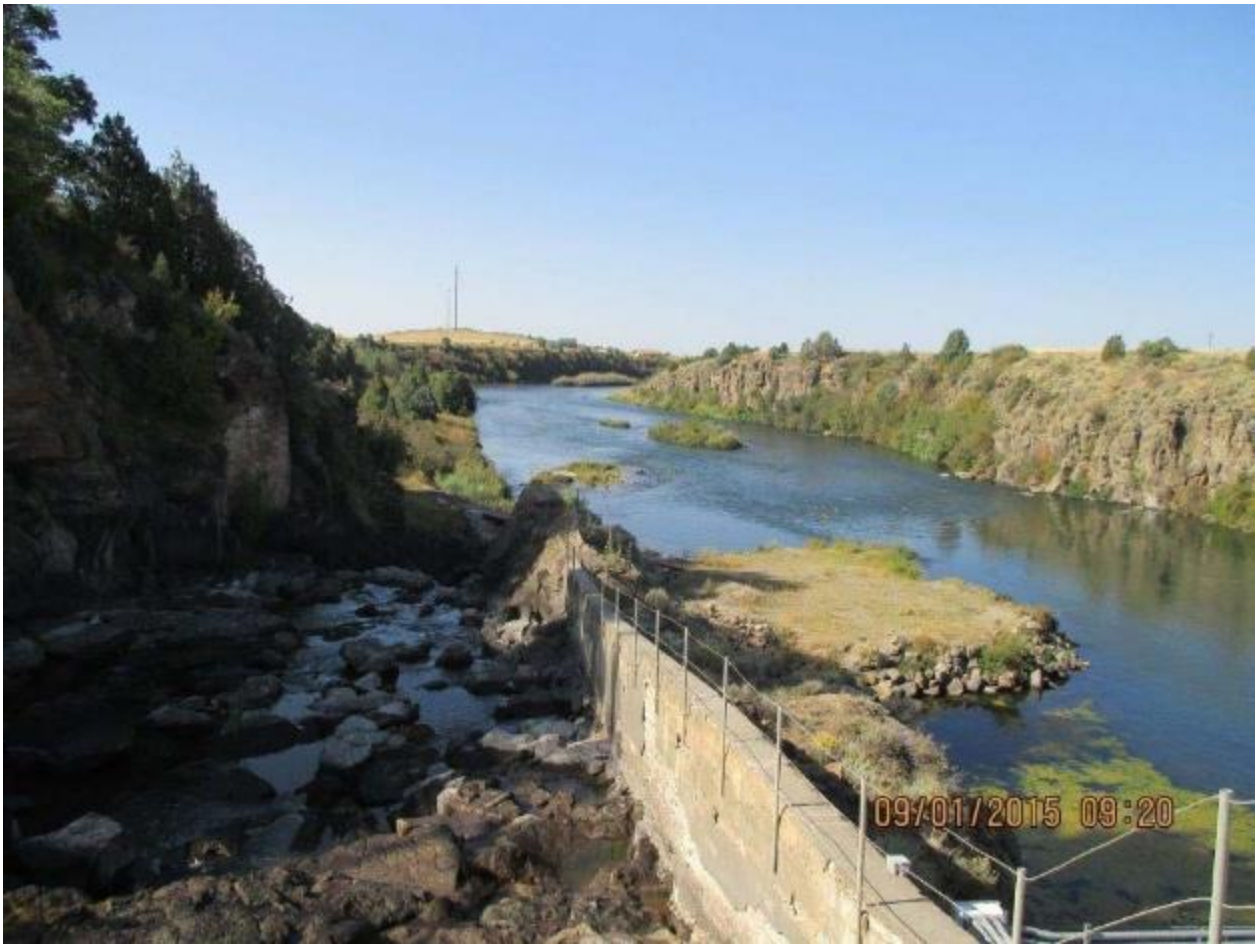

Figure 8. Downstream Reach

Discussion

Although there were no agency recommendations for developing shoreline or watershed management plans associated with Project Licensing, PacifiCorp consulted with the U.S. Fish and Wildlife Service (FWS) and the IDFG pursuant to Article 405 of the FERC license, and developed a Wildlife Enhancement Plan that serves to protect and enhance riparian and shoreline areas. This Plan, originally developed in 1990, was subsequently updated in 1995 and in 2016 (PacifiCorp 2016c). The terrestrial areas within the Impoundment ZOE are managed/protected by controlling livestock access with fencing, conservation easements, leases, raptor and waterfowl nesting platforms, and fee-title property acquisition (Refer to Figure 5). Monitoring and noxious weed control are performed annually on these properties. The most recent five-year summary report 2011 – 2015 was submitted in 2016, with the next planned for submittal in 2021. The preparation and implementation of the Wildlife Enhancement Plan also contributes to the Project's recreational value as discussed under the Recreation criterion.

Based on our review of the application, FERC elibrary, and other available information, we find that the Project meets Standard E-2 in both ZOEs, and thus continues to satisfy this criterion.

F. Threatened and Endangered Species

Goal

The Facility does not negatively impact federal or State listed species.

Assessment of Criteria and Standards selected by Applicant

The Applicant selected Standard F-1 Not Applicable/ De Minimis Effect for both ZOEs. The Reviewers agree with the Applicant's section of the F-1 Standard and the Facility's compliance with this standard.

Discussion

There are no reports or assertions of listed species found in the vicinity of the Project. Thus, application of the F-1 Standard is appropriate for both ZOEs. Information regarding listed species in habitat areas adjacent to the Ashton Facilities, and the suitability of these habitats for these species, is discussed on Page 36 through 38 of the Application. Based on review of the information in the Application and the absence of concern for listed species in the records in FERC's eLibrary, the Project appears to be in compliance with the F-1 standard in both ZOEs.

The application states there are no known listed species at the facility. The Project's Environmental Assessment indicated that bald eagle and peregrine falcon migrate through the area but are no longer listed. Other federally-listed species found within the surrounding Freemont County but not at the Project include grizzly bear, Ute ladies' tresses, Canada lynx and yellow-billed cuckoo. Utes ladies' tresses have been found downstream of the Project. The mapped summer range of the yellow-billed cuckoo may overlap the Project area, but the only observations have been downstream of the Project and suitable habitat (dense riparian shrub) within the Project footprint is limited.

Idaho does not have an endangered species act law but maintains a list of sensitive species for classification purposes, including Canada lynx which is classified as threatened and which has not been documented at the Ashton site.

Based on our review of the application, FERC elibrary, and other available information, we find that the Project meets Standard F-1 in both ZOEs, is unlikely to affect any species even if present, and thus continues to satisfy this criterion.

G. Cultural and Historic Resource Protection

Goal

The Facility does not unnecessarily impact cultural or historic resources that are associated with the Facility's lands and waters, including resources important to local indigenous populations, such as Native Americans.

Assessment of Criteria and Standards selected by Applicant

For Cultural and Historic Resource Protection, only two Alternative Standards are available. The Applicant selected the G-1 Standard (Not Applicable De Minimis effect) for the impoundment ZOE, and the G-2 Standard (Facility Compliance with an Approved Plan) for the downstream ZOE. Since the powerhouse is attached to the dam, a bypass reach does not exist at this facility.

The Reviewers found the G-2 Standard to be applicable to both ZOEs.

Discussion

The Application indicated that cultural resources are known to exist within the impoundment's drawdown zone. During a 2012 dam remediation project, the impoundment was drawn down and a foot survey confirmed the existence of prehistoric material at four sites in one portion of the reservoir.

During normal operations, the four sites remained submerged and thus, protected. The State Historic Preservation Office (SHPO) found no adverse impacts to the sites from construction or operation of the facility and no evidence of disturbance (letter from SHPO, dated June 20, 2012; Appendix A-27-1 of the Application). Because of their location in the drawdown zone, PacifiCorp does not believe that ground disturbing activity would occur at, or near, the sites of the prehistoric artifacts. The Applicant states that when future drawdowns are planned, further coordination with SHPO and the relevant tribes, could be implemented, if warranted (Page 41 of Application).

Given the degree of coordination that has occurred between PacifiCorp and the SHPO relative to the four sites where cultural resources were found, and the absence of negative comments from the SHPO or FERC regarding their inundation, it appears to the Reviewers that submergence of the sites is considered a protective measure acceptable to the SHPO. Since cultural resources are known to exist in the impoundment and are submerged as a result of Project operations, the Reviewers found that the Project exhibits a greater degree of compliance with the G-2 Standard than the G-1 Standard.

Based on our review of the application, FERC elibrary, and other available information, we find that the Project continues to satisfy this criterion. We recommend a condition requiring consultation with the SHPO and relevant tribes prior to drawdowns.

H: Recreational Resources

Goal:

The facility accommodates recreation on lands and waters controlled by the Project and provides recreational access to its associated lands and waters without fee or charge.

Assessment of Criteria:

The Applicant selected Standard H-2, compliance with agency recommendations for the impoundment ZOE and Standard H-3, Assured Accessibility for the downstream ZOE. The Reviewers concur with the selection of these standards**.**

Discussion:

On page 42, the Application notes: “At the time of the Federal Energy Regulatory Commission (FERC) relicensing, the project recreation facilities were limited to one concrete boat ramp at the upstream end of the Ashton Reservoir. Article 406 of the FERC project license (FERC 1987, page 20) called for the development and upgrade of recreation facilities at Ashton Reservoir. This included the addition of a new picnic area and parking lot, repairing boating facilities, and the installation of an accessible ramp at the fishing- observation pier. Recreational enhancements, required by new the license, were implemented and approved by FERC (FERC 2018c).”

These actions demonstrate that the Project is in compliance with the H-2 standard, Agency Recommendation, in the Impoundment ZOE.

The 1987 FERC license contained no requirements for a recreation site in the riverine reach downstream ZOE. This reach, immediately downstream from the dam, is in a narrow canyon, which affords very limited access. An informal picnic area and fishing access is currently located on a gravel bar approximately 90 feet downstream from the base of the dam (PacifiCorp 2018a, As-built Recreation Site Plan Drawing R-2). This area was originally constructed as partial mitigation for a minimum flow issue in the 1990s. This fishing access site has been approved by FERC and made part of the recreation area improvement plan implemented under Article 406 of the license (FERC 2018c). Pacificorp requested modification of the FERC Project boundary (as shown on Exhibit G) to include the fishing access site. These actions show PacifiCorp’s commitment to recreation as they provide free public access to this area. The FERC environmental inspection conducted on August 22, 2018 indicated that the site was well maintained and is providing public benefit (FERC 2018a).

Thus, the Reviewers conclude that the Project is in compliance with the LIHI Standard H-3 for the Downstream ZOE.

The fish stocking program has not only mitigated for the loss of riverine angler satisfaction and potential turbine mortalities due to construction and operation of the Ashton Dam and Reservoir but has also resulted in creation of a high-quality recreational fishery in the reservoir. Such a reservoir fishery is a highly desirable alternative to river fishing for families with young children or novice anglers.

The stocking program also contributes to a high-quality riverine fishery above and below the reservoir. THE IDFG Fisheries Management Plan 2019-2024 (IDFG 2019 page 314) indicates that the section of river from St. Anthony to Mesa Falls, which includes the Project area, “is currently producing good number of wild rainbow trout, with increasing numbers of brown trout”.

The Wildlife Enhancement Plan (WEP) protects, or mitigates, terrestrial and wetland habitats to a high degree through the implementation of a variety of actions (Application page 33-34). These protection and mitigation measures are supplemented by such enhancement measures as installation of artificial perches and nesting platforms for raptors and waterfowl. The result of the WEP is not only protection and mitigation of soils, vegetation and ecosystem function on the shoreline and watershed lands associated with the Project, but also results in providing the public with a meaningful, no-cost opportunity for wildlife viewing.

Based on our review of the application, FERC elibrary, and other available information, we find that the Project continues to satisfy this criterion.

VII. Certification Recommendation

This review finds that the Ashton Project continues to meet the LIHI standards and should be recertified for a five-year term with one condition:

> **Condition 1:** The facility owner shall consult with the SHPO and relevant Tribes on potential impacts to submerged cultural or historic resources, in advance of all planned drawdowns that could expose these resources. Documentation of drawdowns and consultation shall be provided in annual compliance submittals to LIHI.

VIII. Literature Cited

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