

PRE-APPLICATION DOCUMENT

Big Creek Hydroelectric Project
(FERC Project No. 10721)



Idaho Aviation Foundation
Eagle, Idaho

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Idaho Aviation Foundation, Big Creek Hydroelectric Project

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Pre-Application Document

Idaho Aviation Foundation, Big Creek Hydroelectric Project

1. Introduction

The Big Creek Hydroelectric Project, FERC Project 10721 (Project) is located in a remote mountainous region of central Idaho, 24 miles northeast of Yellow Pine in Valley County. The Project is owned and will be operated by the IAF to supply electrical power to the reconstructed and historic Big Creek Lodge which was destroyed by fire on October 28, 2008. The lodge, when complete in October of 2017, will restore an opportunity for the public to enjoy the beauty and recreation of the Big Creek Valley through the services provided by a backcountry lodge. Big Creek Lodge, unlike others that are privately held, will always be protected and available for public use.

The current operating license for the project expires on February 28, 2022. In accordance with 18 CFR § 5.17(a), IAF must file with FERC its application for a new license (relicense) no later than February 28, 2017. IAF has prepared this Pre-Application Document (PAD) pursuant to the requirements 18 CFR § 5.6. Simultaneously with filing of the PAD, IAF has filed with FERC a Notification of Intent (NOI) to file for a new license pursuant to 18 CFR § 5.5, and a request to utilize the Traditional Licensing Process (TLP) pursuant to 18 CFR § 16.8. IAF has also requested permission to be FERC's non-federal designee for purposes of consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA), the Endangered Species Act (ESA), and the Magnuson-Stevens Fishery Conservation and Management Act.

1.1 Pre-Application Document Purpose

IAF's filing of the PAD marks the formal start of the new license process for the Big Creek Hydroelectric Project. The PAD provides information about the existing Project facilities and operations. It is intended to be the primary source of relevant existing information and data related to the Project area and the PAD enables these entities to identify potential issues and related information needs, develop study requests and study plans, and prepare documents addressing the License Application. The PAD is structured to meet the content and form requirements of 18 CDFR § 5.6(d).

Figure 1.1-1 Project Vicinity - Big Creek to Yellow Pine

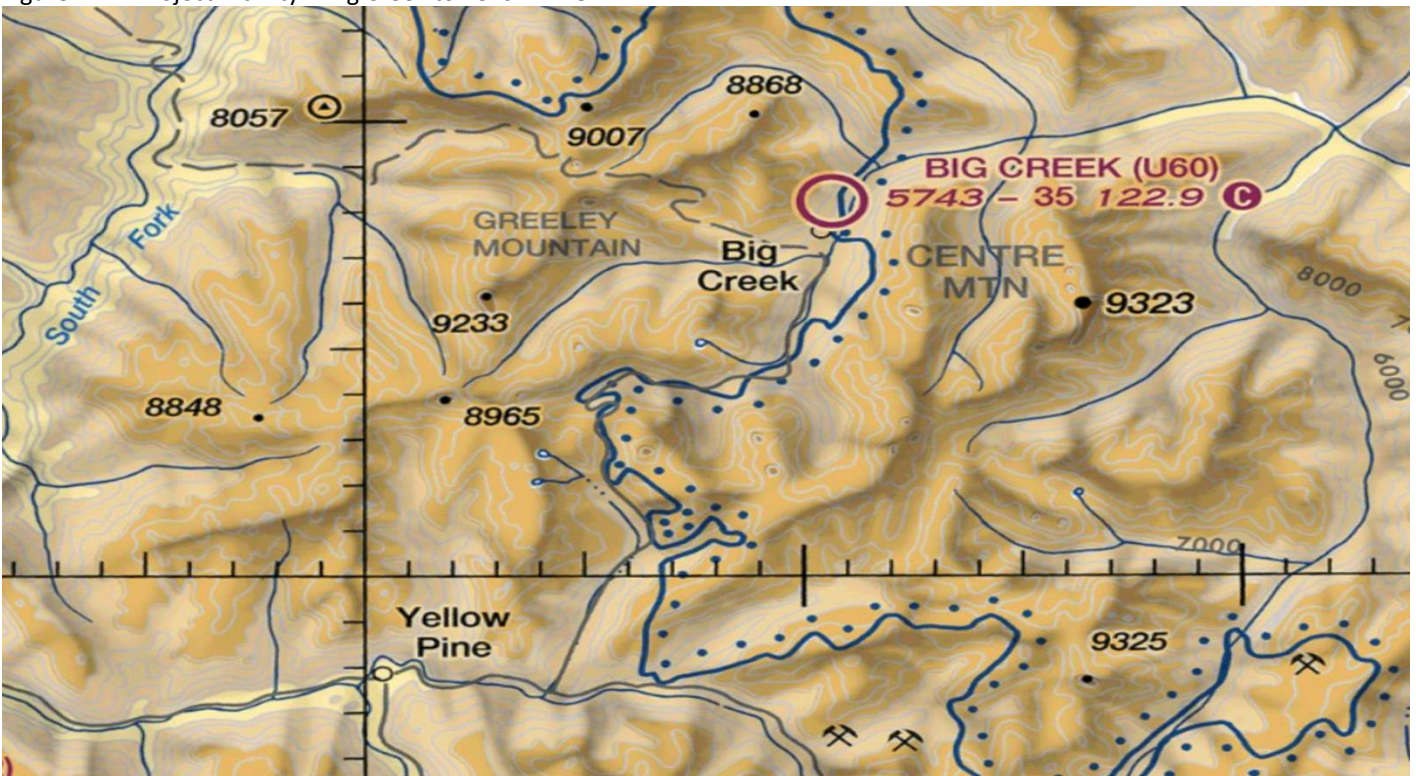


Figure 1.1-2 Project Vicinity - Big Creek to Warren

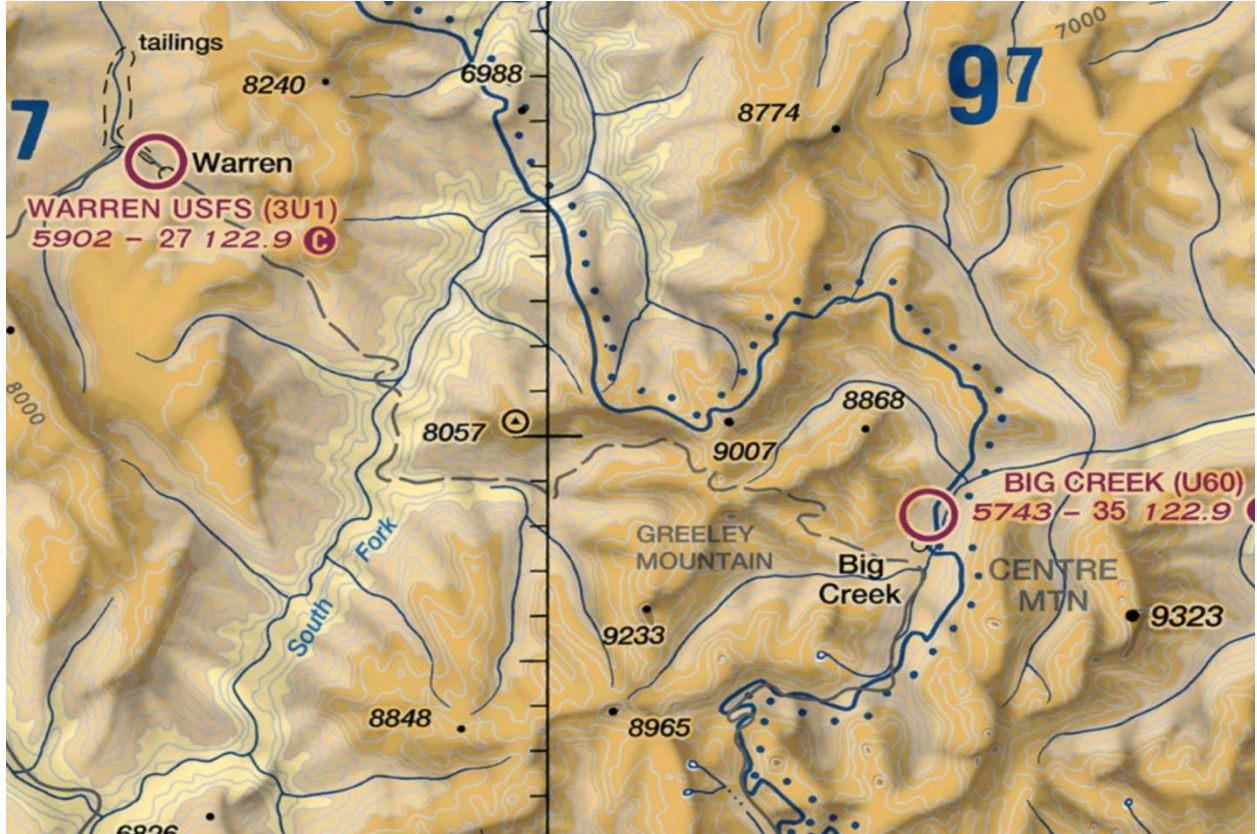
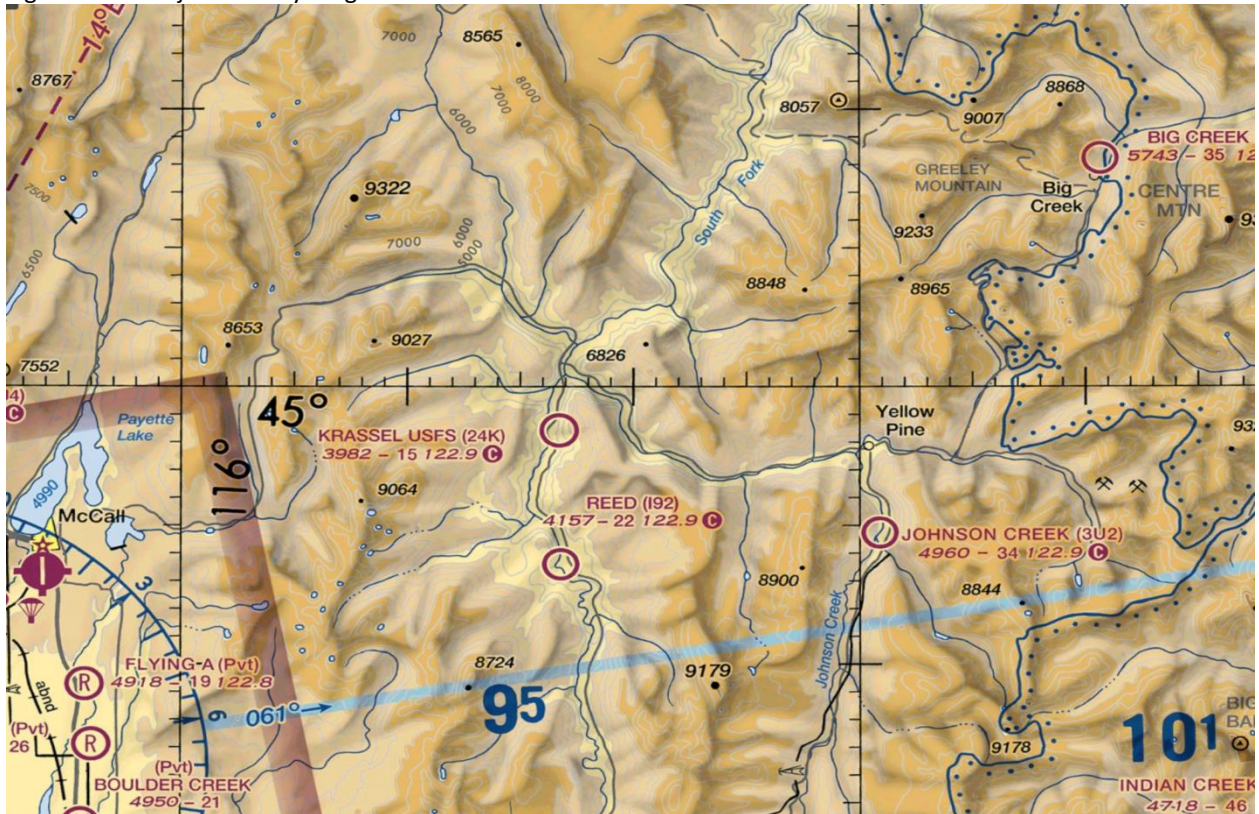


Figure 1.1-3 Project Vicinity - Big Creek to McCall



1.2 History of IAF and Big Creek Project

The J. Curtis Earl Idaho Aviation Foundation (IAF) was established as a companion organization to the Idaho Aviation Association (IAA). The IAF was formed as a contribution based organization for the purpose of benefiting and preserving all airports within Idaho. It was established as a tax exempt 501(c)(3) foundation to facilitate tax deductible contributions.

From the outset it was envisioned that the IAF would serve as the funding source for airstrip maintenance and improvement projects, educational pursuits, and other beneficial purposes while the IAA, as a not-for-profit organization, but without tax exempt status, would focus its financial resources on political advocacy to protect access to and the continued existence of airstrips within the jurisdiction of the government agencies.

The IAF funds aviation projects, makes educational grants, and sponsors special initiatives such as the Wilderness Within Reach program, an annual program in partnership with Boise Parks and Recreation that introduces disabled and handicapped individuals to a weekend in the backcountry via small aircraft.

IAF also strives to make more airstrips accessible to the public, which spurred interest in working with the Forest Service to rebuild the historic Big Creek lodge that burned to the ground in October of 2008. This is the project that puts the IAF before the Commission for the Project renewal license. The lodge, through public donations, will be completed in October of 2017, and not only will service and provide backcountry access for pilots, but the general public with road access as well. The IAF has a capable and motivated [Board](#) which guides the IAF in its pursuit of projects beneficial to aviation interests and negotiates for the protection and preservation of our precious airstrips.

The existing Big Creek hydroelectric generator system was originally constructed in 1968 and operated until about 1985. In 1986, the applicants, Big Creek Lodge and Outfitters, Inc. (Big Creek Lodge) acquired the lodge, located in the Payette National Forest (PNF), and a special use permit was issued by the US Forest Service. Big Creek Lodge delayed operation of the project until a FERC hydropower license was issued on March 26, 1992 (Project No. 10721). The project was operated seasonally from May through October to supply power to the lodge until, on October 23, 2008 a fire burned the lodge and an adjacent cabin to the ground.

Following the fire, Big Creek Lodge chose not to rebuild the structures destroyed in the fire, and in a cooperative agreement with the IAF, provided for the transfer of all the remaining infrastructure and personal property to the IAF.

Figure 1.2-1 Lodge Fire 2008



Figure 1.2-2 Lodge Fire 2008



On February 1, 2013 the IAF announced a plan to rebuild Idaho’s historic Big Creek Lodge. For over 74 years the lodge provided meals and lodging to miners, geologists, loggers, sportsmen, horsemen, hikers, ATV and snowmobile riders, and pilots. Big Creek is special from an historic standpoint, but the mountain views, wildlife, and a rustic lodge on a beautiful state maintained backcountry airstrip made the Big Creek experience a memorable one and worthy of being preserved for future access and enjoyment.

A 30 year Special Use Permit was signed and awarded to the IAF by the USFS on May 31, 2013 for the lodge site, including the hydroelectric system. Lodge construction supported by public donations began during the summer of 2015, and is expected to be completed in October of 2017. The “Rebuild Big Creek Lodge” project has been undertaken by the IAF to promote Idaho aviation’s image with the general public and enable users of all kinds (the lodge is accessible by both vehicle and airplane) to again enjoy the recreation and beauty of this remote site.

1.3 Licensing Process Selection

As an alternative to the default Integrated Licensing Process (ILP), IAF is proposing to use FERC’s Traditional Licensing Process (TLP) to obtain a new license for the Big Creek Project pursuant to 18 CFR § 5.3(b) and (c). On February 28, 2017 as part of the filing process, IAF filed a request with FERC for authorization to use the TLP. At the same time, IAF provided copies of the request to all affected resource agencies, Indian tribes, and members of the public likely to be interested in the proceeding (Appendix A), and published notice of the filing in local newspapers. Comments on the request must be filed with FERC by March 28, 2017, and should address, as appropriate, the following issues as they relate to the use of the TLP:

- Likelihood of timely license issues
- Complexity of the resource issues
- Level of anticipated controversy
- Relative cost of the TLP compared with that of the ILP
- Amount of available information and potential for significant dispute over studies
- Other factors believed by the commenter to be pertinent

In accordance with 18 CFR § 5.8(a) and (b), within 60 days of the filing of a request to use the TLP, FERC will issue a notice that includes the Director of the Office of Energy Projects’ decision on the request.

1.4 Authorized Agent

The persons listed below are authorized to act as agents for IAF during the licensing process:

Vic Jaro
Board Member
Idaho Aviation Foundation
PO Box 2016
Eagle, ID 83616
208-404-9627

Nadine Burak
Secretary/Treasurer
Idaho Aviation Foundation
PO Box 2016
Eagle, ID 83616
208-861-9056

2.0 Process Plan and Schedule

IAF carefully reviewed available licensing processes and their suitability for the Big Creek Project licensing efforts. IAF indicated its’ desire to utilize the TLP and the Proposed Process Plan reflects that procedure.

2.1 Process Plan

As mentioned in Section 1.3, IAF is proposing utilizing a TLP for the relicensing of the Project. Because the TLP has less defined processes relative to FERC’s default ILP, it is important to describe how IAF and other licensing participants in the pre-filing consultation will ensure effective communication with each other for the duration of the relicensing process.

This Process Plan is intended to facilitate communication and cooperation among IAF, federal and state agencies, and other interested organizations and parties (collectively, “licensing participants”) during the preparation of IAF’s application for a new license for the Project. This Process Plan is structured based on the assumption that FERC will approve the use of the TLP for the pre-filing consultation period of the Project.

The TLP, if approved, will require a joint meeting with the agencies, Indian tribes, and the public, and will provide opportunities for the licensing participants to provide comments on the PAD and to make study requests.

Given that the Project has occupied this watershed for nearly 49 years, and that IAF will not substantively change Project facilities and operations for the next license term, IAF believes that the TLP would be the most effective process for completing the necessary pre-filing work while providing for meaningful participation by agencies, other interested organizations, and the public. Should the TLP not be approved for use, IAF will continue with consultation utilizing the default ILP and follow the applicable regulations.

This Process Plan will govern communications among all licensing participants and provide public access to information regarding the consultation activities related to licensing of the Project. This includes:

1. Identification of issues and necessary studies,
2. Review of study results if required,
3. Discussion of IAF's proposed License Application and the recommendations of interested entities, and
4. Dispute resolution.

2.1.1 Participation in the Licensing Process

The licensing process for the Project is open to the general public and interested parties are encouraged to participate. A contact list, compiled by IAF, will be maintained to identify those agencies, organizations, individuals, or groups that have been identified as interested parties or who have requested to be included as licensing participants. The contact list will be used to provide notice of any public meetings, as well as notice of the availability of information for public review. The contact list will be updated periodically by IAF and inactive participants will be asked annually to re-affirm their interest in participating in the process.

2.1.2 Maintenance of the Public Reference File

IAF will maintain a public reference file at the IAF website (<http://www.idahoaviationfoundation.org/projects.php>) for access to key documents developed during the course of the licensing consultation, such as the PAD and NOI, meeting notices, meeting summaries, agendas, study plans, and study reports. The licensing website will also have an information library that allows licensing participants to access relevant information the IAF has gathered through its' due diligence process.

2.1.3 Meetings

IAF anticipates that the primary means of communication during this process will be electronic, written, and oral. Meetings will be scheduled as required by FERC's regulations and as needed throughout the relicensing process. Meetings will be held in Boise, Idaho with the location and room filed as part of the correspondence to interested parties 30 days prior to the meeting. IAF reserves the right to hold a meeting with less than 30 days' notice. Meeting notification may be made in writing, via fax, via email, or by telephone conversation with written confirmation to follow. To the extent possible, IAF will provide interested parties with an agenda via email and on the IAF website at least a week in advance of planned meetings.

IAF shall be responsible for scheduling all consultation meetings involving IAF and licensing participants. For the meeting specified in 18 CFR § 16.8(b)(3), IAF will provide the required notice in appropriate forums. Comments on the agendas may be submitted in writing to IAF up to one week before the scheduled meetings. If appropriate, IAF will incorporate any proposed changes to the agendas and will distribute a final agenda at the meeting. In addition, the agenda may be modified at the beginning of the meeting.

2.1.4 Documentation

All of the documentation requirements described below apply to substantive communications regarding the licensing of the Project; communications related to procedural matters (e.g., responding to inquiries regarding meeting scheduling) are not subject to the same documentation requirements.

IAF will distribute, whenever possible, all documents electronically in Microsoft Word or PDF format. Appendix A lists the agencies, tribes, and others on the distribution list as of February 28, 2017. Everyone on this list will receive notification that an electronic copy of the PAD is available on the Project website (<http://www.idahoaviationfoundation.org/projects.php>). IAF will also use this list to provide notice about the availability of major relicensing documents such as Scoping Documents, Proposed Study Plans, Study Reports, and the Draft License Application, and will provide electronic copies of these documents

upon request. In addition, IAF will distribute electronically (via email) public meeting notices, working meeting agendas, and meeting summaries upon request.

Certain Project-related documents are not available to the general public in accordance with FERC regulations. Critical Energy Infrastructure Information (CEII)(18 CFR 388.113), which is information about the design and safety of dams and appurtenant facilities that is necessary to protect national security and public safety, is not available to the general public. Anyone seeking CEII from FERC must file a CEII request. Additional information is available on FERC's website at:

<http://www.ferc.gov/legal/ceii-foia/ceii.asp>.

A. Meeting Summaries

IAF will be primarily responsible for providing a written summary of the matters addressed at all meetings involving IAF and licensing participants. The meeting summaries will identify topics discussed, areas of agreement or disagreement, and action items assigned to meeting participants. A draft meeting summary will be distributed to all meeting attendees within 15 days of the meeting. Any corrections to the draft meeting summary should be submitted to IAF within 15 days. IAF will finalize the meeting summary within 15 days after receiving corrections. If no corrections are submitted, the meeting summary will become final 40 days after the date of the meeting. If IAF does not incorporate proposed changes to the meeting summary, IAF will provide a rationale for not adopting the change and include this in the final meeting summary. Final meeting summaries will be posted on the licensing website.

B. Technical Documents

A variety of technical documents will be produced during the course of licensing consultation, including the PAD, study plans, study reports, and draft and final License Applications. Whenever comments are solicited on documents, review periods will be established and communicated to licensing participants. Review periods will typically be at least 30 days, unless longer periods are required by FERC regulations (e.g. 90 day comment period on the draft application). Participants will endeavor to provide comments to IAF within the timeframes specified for comment periods. IAF will consider adjusting comment periods, making them either longer or shorter, to better utilize available time within the course of pre-filing consultation, without jeopardizing the overall Project schedule. Any such adjustments will be made with the concurrence of the licensing participants.

C. Written correspondence

Any written correspondence (including emails) regarding substantive matters of the Project licensing between IAF and licensing participants will become part of the public reference file.

All written correspondence should be sent to IAF at the following address:

Vic Jaro
Board Member
Idaho Aviation Foundation
PO Box 2016
Eagle, ID 83616
208-404-9627

Nadine Burak
Secretary/Treasurer
Idaho Aviation Foundation
PO Box 2016
Eagle, ID 83616
208-861-9056

2.1.5 Distribution of Licensing Documentation

Distribution of licensing documents will be accomplished primarily by email, except when IAF receives a request for hard-copy mailings. If a licensing participant does not provide IAF with an email address, or if a participant has indicated a preference to receive hard-copy mailings, IAF will send paper documents through regular mail. A participant may also request to receive a paper copy of any specific licensing document by contacting Nadine Burak by phone at 208-861-9056 or by email at info@idahoaviationfoundation.org.

All licensing documents will be posted on the licensing website (<http://www.idahoaviationfoundation.org/projects.php>). Licensing documents (aside from brief letters, notices, etc.) will include a copy of the distribution list.

2.1.6 Revisions to the Process Plan

This Process Plan may be revised at any time upon general agreement of IAF and the participants.

2.1.7 Duration of the Process Plan

This Process Plan will remain in effect until FERC provides notice that the License Application is accepted for filing.

2.2 Joint Meeting and Site Visit

IAF has tentatively planned for the site visit and scoping meeting required under 18 CFR § 16.8(b)(3)(A). Recognizing the logistical challenges of accessing this remote backcountry location, the site visit will be conducted, if possible, during the summer of 2017. The visit will be offered to agencies, tribes, and those non-governmental organizations (NGO's) that have indicated a need to see the Project for purposes of informing their involvement in the Project going forward. The Joint Meeting, described in 18 CFR (b)(4), will be held in Boise, the building and time will be announced at a later date. The Joint Meeting is also open to the public. Questions regarding the site visit and joint meeting should be directed to Nadine Burak at 208-861-9056 or info@idahoaviationfoundation.org.

2.3 Proposed Schedule

As part of this PAD, IAF prepared a Process Plan and Schedule (see Table 2.3-1) that incorporates the anticipated pre-filing activities for the Big Creek TLP schedule.

Table 2.3-1 Pre-Filing Plan and Schedule

Note 1: These dates are subject to change. The schedule will be posted at <http://www.idahoaviationfoundation.org/projects.php> and updated as needed.

Note 2: The Big Creek site is remote and not accessible from November through June due to snow covered mountain passes. Scheduling of site visits and physical studies are limited to July through October.

Responsible Party	Pre-Filing Milestone	Tentative Date	FERC Regulation (18 CFR)
IAF	File NOI/PAD with FERC	02/28/17	5.5, 5.6
IAF	Submit request to use TLP to interested participants in the licensing process	02/28/17	5.5, 5.3(d)(1)m 16.8(b)
IAF	Public Notice of NOI in daily newspapers	03/07/17	5.3(d)(2)
IAF	NOI, PAD available to the public on the IAF website	03/08/17	
Participants	Comments on the request to use TLP due to FERC	NLT ¹ 03/28/17	5.3(d)(1)
FERC	Notice of Commencement of Proceeding and action on use of TLP or ALP	04/12/17	5.8
IAF	Notify FERC, public of Joint Meeting	05/12/17	16.8(i)
Agencies, Indian Tribes	Site visit	07/26/17	
All Participants	Joint Meeting with required documents	06/12/17	16.8(b)(3)(i) 4.38(g)(2)(iii)
All Participants	NOI/PAD comments and study requests	08/12/17	16.8(b)(4), 5.12
All Participants	Study request/approach meeting (as needed)	08/2017	Voluntary
All Participants	Any study disputes due ²	09/10/17	16.8(b)(6)
FERC	Dispute Resolution Process ²	As necessary	16.8(b)(6)
IAF	Study Plans Distributed	09/10/17	16.8(c)
Participants	Comments on Study Plans	10/10/17	
IAF	First Study Season	2018	16.8(c)
IAF	Study Report ^{3,4}	08/01/18	16.8(b)(3)(i)
IAF, Participants	Study Report Meeting ^{3,4}	09/01/18	16.8(b)(3)(i)
IAF	Study Report Meeting Summary ^{3,4}	10/01/18	16.8(b)(3)(i)
Participant	Comments on Study Report Meeting Summary ^{3,4}	10/16/18	16.8(b)(3)(i)
IAF	Draft License Application (DLA); Applicant Prepared Environmental Assessment (APEA)	NLT ¹ 02/28/18	16.8(c)(4)

Participants	Comments on DLA, APEA	NLT ¹ 05/28/18	16.8(c)(5)
IAF	Notify FERC, public of Joint Meeting	NLT ¹ 06/15/18	16.8(i)
All Participants	Joint Meeting (as needed)	NLT ¹ 06/30/18	16.8(c)(6)(i)
Third Stage Consultation			
IAF	License Application (LA), APEA filed	NLT ¹ 08/25/18	16.8(c)(10), 16.8(d)(1), 16.8(d)(2)

¹NLT = No Later Than

²These steps will take place only if necessary and may result in schedule modifications.

³Format and timeframes for discussion of study results will be discussed at the Joint Meeting.

⁴If studies are required.

3.0 Project Location, Facilities, and Operation

3.1 Applicant

3.1.1 Applicant's Name, Address, Phone Number:

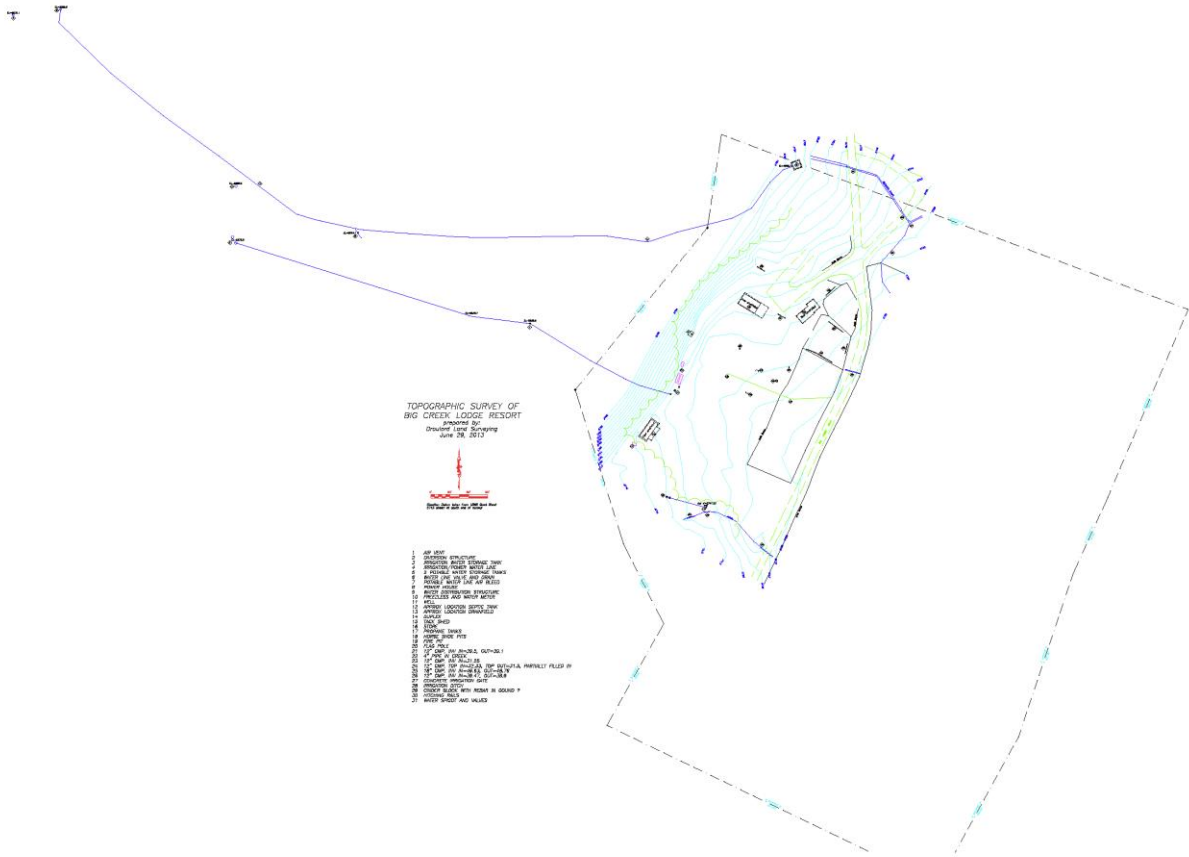
Idaho Aviation Foundation
 PO Box 2016
 Eagle, ID 83616
 208-861-9056

3.1.2 Applicant Agents:

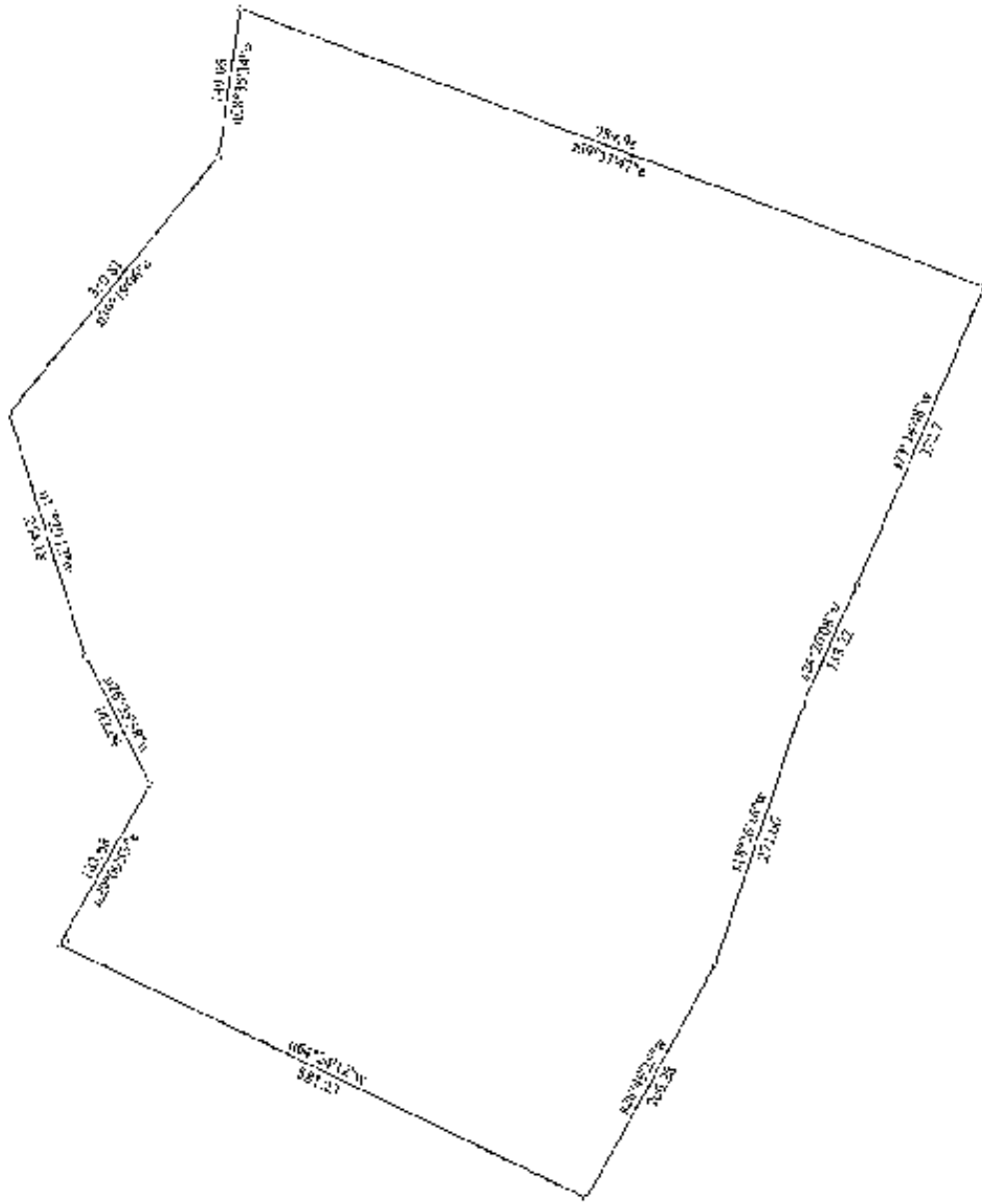
Vic Jaro
 Board Member
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 208-404-9627

Nadine Burak
 Secretary/Treasurer
 Idaho Aviation Foundation
 PO Box 2016
 Eagle, ID 83616
 208-861-9056

3.2-2 Topographic Survey of Big Creek Lodge



3.2-3 Big Creek Public Service Site Survey



Title:		Date: 11-17-2012
Scale: 1 inch = 150 feet	File:	

3.2-4 Big Creek Public Service Site Description of Area

BIG CREEK PUBLIC SERVICE SITE
BIG CREEK LODGE AND PASTURE
16.05 ACRES M/L

DESCRIPTION OF AREA:

Beginning at the section corner (brass cap) common to sections 26, 27, 34 and 35, Township 21 North, Range 9 East, Boise Meridian. (This Township is unsurveyed with the exception of sections 35 and 36).

Thence N. 89° 56' 00" W., 1,323.43 feet to the West 1/16 corner common to sections 26 and 35.

Thence E. 16° 55' 25" E., 1,465.28 feet to corner No. 6, the True Point of Beginning.

Thence N. 29° 09' 53" E., 183.68 feet to corner No. 7.

Thence N. 26° 35' 55" W., 142.04 feet to corner No. 8.

Thence N. 17° 29' 12" W., 254.18 feet to corner No. 9.

Thence N. 39° 19' 06" E., 330.81 feet to corner No. 10.

Thence N. 08° 35' 34" E., 149.05 feet to corner No. 11.

Thence S. 69° 31' 47" E., 789.98 feet to corner No. 12.

Thence S. 23° 14' 48" W., 322.70 feet to corner No. 13.

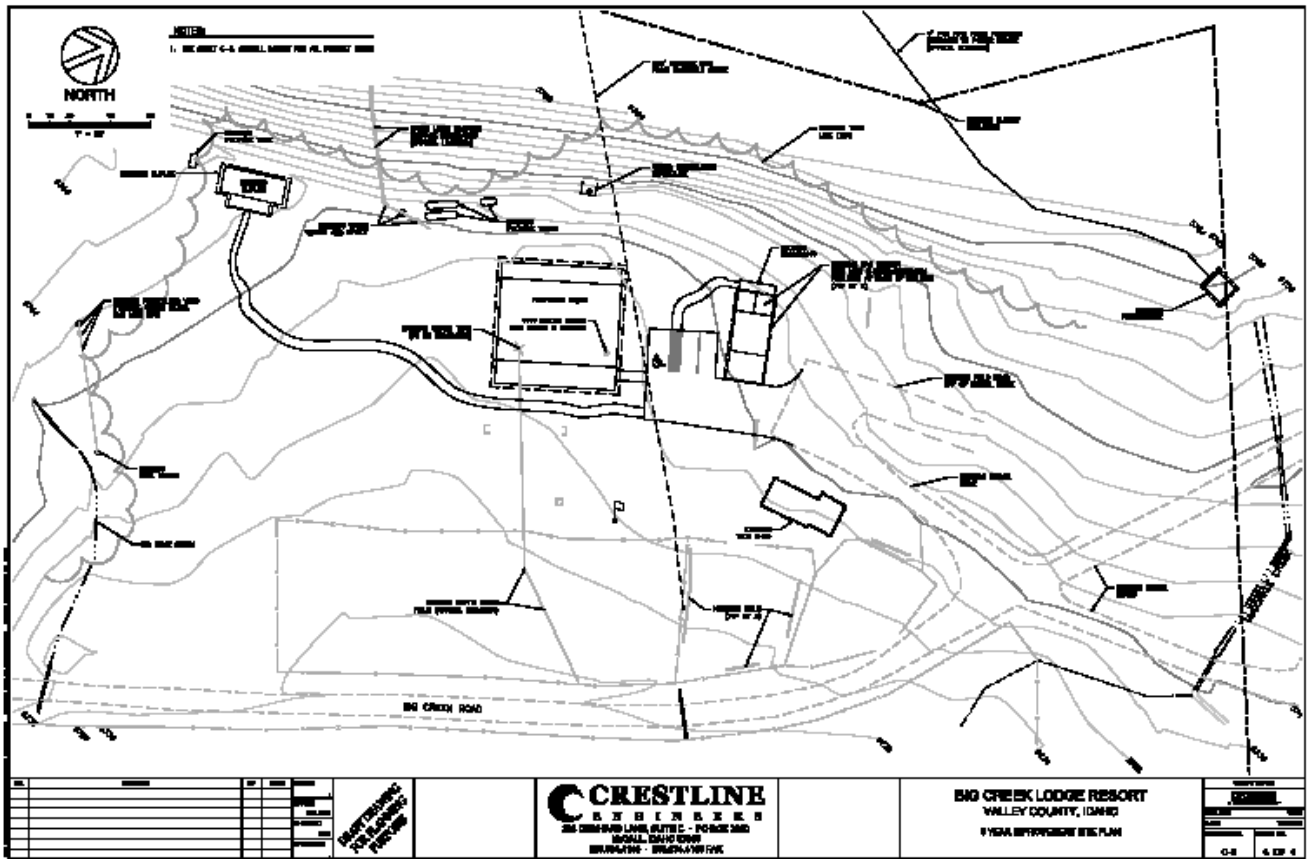
Thence S. 24° 26' 08" W., 133.22 feet to corner No. 14.

Thence S. 18° 36' 16" W., 271.06 feet to corner No. 15.

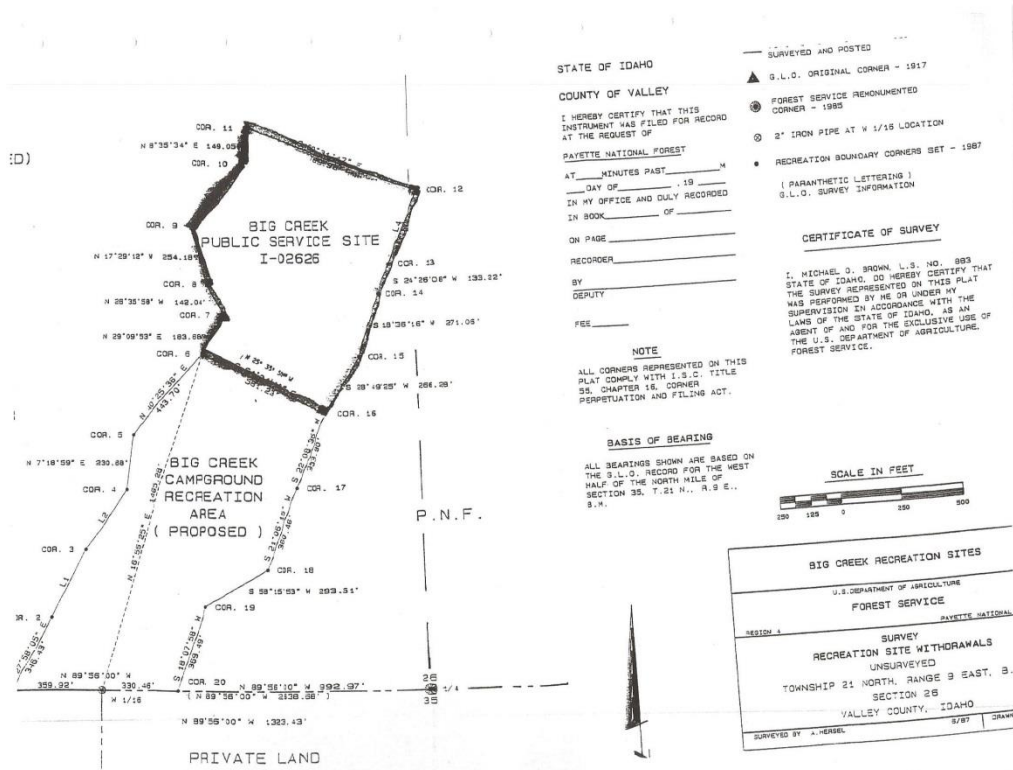
Thence S. 28° 19' 25" W., 266.28 feet to corner No. 16.

Thence N. ^{69° 26' 12"} 28° 35' 50" W., 561.23 feet to corner No. 6, the True Point of Beginning, 16.05 acres more or less.

3.2-5 Big Creek Lodge Site Layout



3.2-6 Big Creek Recreation Sites Survey



3.3 Detailed Description of all Existing and Proposed Project Facilities and Components

18 CFR 6 4.6Hc)(I)	Description
(i) The number of generating units, including auxiliary units	There will be 1 hydro generating unit in use. (Propane fueled 10kW generator auxillary/backup)
The capacity of each unit	The nameplate capacity is 8kW, estimated actual is 3.5kW.
Provisions, if any, for future units	There are no provisions for future units.
(ii) The type of each hydraulic turbine(s)	The turbine is a Canyon Hydro Pelton Turbine (8kW 200' head) driving a Marathon Magnapulus 8kW generator.
(iii) A description of how the plant is to be operated, manual or automatic	The plant is a manual system.
Whether the plant is to be used for peaking	The plant will not be used for peaking.
(iv) The estimated average annual generation in kilowatt-hours or mechanical energy equivalent	Total energy production based on a 169 day operating season is estimated to be 12,168 kWh.
(v) The estimated average head on the plant	237 ft.
(vi) The reservoir surface area in acres and, if known, the net and gross storage capacity	The steep gradient of McCorkle Creek does not produce a significant pooling behind the diversion. The diversion is approximately 5980' above mean sea level (MSL).
(vii) The estimated minimum and maximum hydraulic capacity of the plant (flow through the plant) in cubic feet per second	The maximum hydraulic capacity is 0.75cfs and the minimum expected flow is 0.1 cfs.

Estimated average flow of the stream or water body at the plant or point of diversion	The mean average flow is estimated to be 3 cfs.
(viii) Sizes, capacities, and construction materials, as appropriate, of pipelines, ditches, flumes, canals, intake facilities, powerhouses, dams, transmission lines, and other appurtenances	<p><u>Diversion and penstock inlet:</u> The diversion is a log raceway, 2' wide x 3' long, built into the bank of McCorkle Creek. The 4" PVC penstock extends through the wall of the diversion approximately 2"; the penstock is 12" up from the diversion floor. A screened metal cover is attached to the side of the diversion, and prevents debris (there are no game fish due to the steep creek gradient) from entering the penstock inlet.</p> <p><u>Penstock:</u> The 1340' of 4" penstock is buried the entire distance to the Generator House except for the estimated last 15'; the grade allowing the pipe to move above ground and pass through the wall. Just outside the wall is a 4" flow regulation and isolation valve for the turbine; just downstream of the valve is a 1/2" valved pressure gauge connection. The 4" line is attached to the turbine inlet. Water is discharged through an 18" corrugated tailrace and is returned to McCorkle Creek.</p> <p><u>Generator House:</u> The Generator House is a 10' x 12' log structure built on a concrete slab foundation and floor. There is a single manway door midway in the south facing 12' wall that provides ingress, egress, and the means to move equipment in and out of the building. A metal paneled gabled roof makes the building weather tight and allows snow to slough off during the winter.</p> <p><u>Generator:</u> Canyon Hydro Pelton Turbine (8kW 200' head) driving a Marathon Magnaplug 8kW generator .</p> <p><u>Electrical:</u> Electricity is supplied approximately 350' to the lodge through wires buried in 2" PVC conduit.</p>
(ix) The estimated cost of the project	The Big Creek Project was installed in 1968, so all infrastructure is in place. The IAF incurred cost for purchase and installation of the new turbine and generator is estimated to be \$50,000.
(x) The estimated capital costs and estimated annual operation and maintenance expense of each proposed environmental measure	The total capital costs would be approximately \$50,000. Yearly maintenance would amount to approximately \$500.

3.4 Description of the Current and Proposed Operation of the Project

3.4.1 Description of the Project. The Big Creek Project draws water from McCorkle Creek at a diversion built into

the banks of the creek. The penstock, which is 4" PVC, extends through the wall of the diversion approximately 2", and is 12" up from the diversion floor. A screened metal cover is attached to the side of the diversion, positioned over the 4" penstock to prevent aquatic life (none due to the high gradient of the stream) and debris from being transported through the system. A diversion check gate is used to build the water level in the diversion to above the penstock inlet, allowing flow through the system. 0.75 cfs of water flow is used for generation, and with a mean annual creek flow of 3.0 cfs, it insures that the instream flow below the diversion does not drop below aquatic base flow due to hydraulic withdrawal.

From late October through mid-May (off-season) the diversion check gate is removed, allowing 100% of stream flow to remain within the creek bed, dropping the water level passing through the diversion to well below the penstock inlet. The penstock inlet is sealed with plastic and clamps to prevent anything from entering the system during the off season and all water is drained from the line at the Generator House. In the late spring the penstock seal is removed, the check gate re-installed, and water once again fills the system.

Water flows through 1,340' of buried 4" PVC penstock to the generator house. A 4" flow regulation and isolation valve and a downstream ½" pressure gage isolation valve is installed just outside the west wall. A 4" line connects to the water inlet of the Canyon Hydro Pelton turbine and Marathon Magnaplug generator. Turbine discharge water is returned to McCorkle Creek through an 18" corrugated tailrace. The nameplate capacity of the generator is 8kW, but due to water diversion limitations, gross head, and pipe configuration, actual capacity is approximately 3.5kW. The Generator House is a 10'x12' log structure with a metal covered gable roof to shed the winter snow. It is built on a concrete slab foundation and floor. A man door in the middle of the south wall provides access for people and equipment. Electricity produced by the generator is sent to the lodge through approximately 350' of buried cable in 2" PVC conduit.

3.4.2 Proposed Mode of Operation:

The Big Creek Project has and will continue to operate run of river.

- Purposes of project (for example, use of power output):
Big Creek Lodge is nearly at the end of the road from Yellow Pine, Idaho; only a short distance from the trailhead of the Frank Church River of No Return Wilderness (FCRNRW) and literally on the edge of the wilderness. It is an off-grid facility. Electrical power to run the systems of the lodge such as lighting, potable water well pump, and other small loads, comes from only one possible source; a generator driven either by water or fossil fuel.

Since major appliances (refrigerator, freezer, ranges, grills, and hot water heater) will be propane powered, the estimated 3.5kW of renewable energy generating capacity of the newly installed high efficiency generator should be adequate for the expected electrical loads, reducing fossil fuel emissions. There will also be a backup propane fuel generator that can be used during periods of higher electrical demand.

- An estimate of the cost to develop the license application:
\$5,000-\$10,000 depending on how much outside professional assistance is required.

3.5 In the Case of an Existing License Project - Requirements and Compliance

In 2012, the IAF, as described previously in this document made the decision to re-build the historic Big Creek Lodge, which burned to the ground on October 28, 2008. The Forest Service issued Special Use Permits for both the Lodge and the Big Creek Projects in June of 2013. The compliance history will be a best effort given that IAF involvement began in 2013.

3.5.1 Requirement:

Required the release of a continuous minimum flow, at least equal to 50% of the instantaneous flow in the stream, to offset the minor effects this project may have on the aquatic resources of McCorkle Creek.

Compliance:

IAF understands that this requirement was satisfied in previous operations and IAF will comply when generation resumes upon lodge completion in late summer 2017 or spring/summer of 2018.

Requirement:

In the first six months of issuance, obtain from the USFS a Special Use authorization to do work of a land disturbing nature.

Compliance:

IAF understands that since all elements of the generation project were installed in 1968, the license issued was for the operation of an existing installation. No "land disturbing" work would have taken place.

Requirement:

Flow conditions are subject to the 0.75 cfs water right (water right held by the Forest Service and assigned to licensee) and no more diversion than that which would protect a minimum stream flow equal to 50% for the instantaneous flow in the stream.

Compliance:

IAF understands that this requirement was satisfied in previous operations and IAF will comply when generation resumes upon lodge completion in late summer 2017 or spring/summer 2018.

Requirement:

Within one year of issuance, licensee shall survey the boundaries of the Project, provide Forest Service and Commission with a survey plat, and the Project boundary shall be adjusted accordingly.

Compliance:

The IAF had the Lodge and Project boundaries surveyed and a plat has been provided to the Forest Service. The plat is included as a figure in this PAD documents submitted.

Requirement:

Clear and keep clear right of ways and dispose of timber, brush, or refuse. Keep area clean during maintenance, operation, alteration.

Compliance:

IAF has complied with this requirement.

Requirement:

Cultural resources survey plan to accommodate anything found. If archaeological or historic sites are discovered, stop all work, consult State Historic Preservation Officer (SHPO), file a Cultural Resources Management Plan.

Compliance:

IAF has found no identified resources. No plan required.

Requirement:

Northwest Power Planning Council states that we must protect to fullest extent fish and wildlife.

Compliance:

The Project has little to no negative impact on fish and wildlife. However, IAF is fully supportive of the need to protect fish and wildlife.

Requirement:

Report certain conveyances to Commission and Regional Director.

Compliance:

IAF is not aware of any conveyances.

3.5.2 A Summary of Project generation and outflow records for the five years preceding filing of the pre-application document.

As previously stated in this document, the Big Creek Lodge was destroyed by fire on October 28, 2008. There has been no power generation produced by the Project since that date. Hydro power generation will resume when the lodge is completed, which is projected to be October, 2017.

For information, IAF conducted an operating capacity test of the old Pelton Turbine and generator (as previously reported) and determined the capacity to be 0.75 kW, which would have been the historical generating capacity during the seasonal operation of the lodge.

3.5.3 Current net investment.

The Big Creek Project was installed in 1968, so all infrastructure is in place. The IAF incurred cost for purchase and installation of the new turbine and generator is estimated to be \$50,000.

3.5.4 A description of any new facilities or components to be constructed, plans for future development, or rehabilitation of the Project, and changes in Project operation.

No modifications are planned to the Project infrastructure. The hydro generation unit that was part of the system at the time of licensure on March 26, 1992, was old, obsolete, and extremely inefficient and has already been replaced. This was an equipment exchange and required work to be done only in the Generator House and conduit run to the lodge that is currently under construction. The details on the replacement unit have been extensively covered previously in this document.

4.0 Description of existing environment and resource impacts.

4.1 *Environmental Assessment of the Big Creek Hydroelectric Project on the Payette National Forest*

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- 2.5 Visual and Aesthetic
- 2.6 Archaeology and Heritage
- 2.7 Geology and Soils
- 2.8 Vegetation
- 2.9 Wildlife
- 2.10 Fisheries and Aquatic
- 2.11 Threatened, Endangered, and Sensitive Species
- 2.12 Wetlands
- 2.13 Water
- 2.14 Air
- 2.15 Monitoring

Section 3 - Specific requirements of the federal land manager (PNF) to protect and enhance environmental resources and values and to mitigate adverse impacts of the project on such resources.

Section 4 - References Cited

Section 1 - Introduction

The purpose of this environmental analysis is to assess the impacts of the currently operating hydropower unit at Big Creek Lodge. McCorkle Creek, which supplies water to the project, is a tributary to Big Creek which is located in the high country of central Idaho. McCorkle Creek is about 3 feet wide at its' mouth and falls a steep 235' from the diversion to the Generator House, a 17.5% grade. The Big Creek Lodge is located on a flat, grassy clearing approximately 350' south of McCorkle Creek in the remote Big Creek Valley. Both McCorkle Creek and the lodge are within the Payette National Forest (PNF). A US Forest Service (USFS) work station is located near the lodge, across McCorkle Creek to the north. Big Creek eventually meets with the Middle Fork of the Salmon River.

Long before the Big Creek Lodge was built the Big Creek drainage attracted hundreds of miners and ranchers to the area. Edwardsburg was established in 1904 near the present day airstrip, and with a general store and post office became the center of commerce.

The USFS established a ranger station at Big Creek in 1920. About a decade later brave pilots began using the

adjacent pasture as a landing field.

Big Creek Lodge was built in the mid-1930's, and along with a general store and gas station, provided a sanctuary for all those headed upstream or downstream. The road from Yellow Pine over Profile Summit was completed in 1933, which greatly improved access to the Big Creek Valley when compared to the difficult 40 mile route from Warren.

In 1957 the airstrip was completely rebuilt and extended to its' current length of nearly 3,600'. The USFS continued to operate the airstrip until 1961, when it issued a special use permit to the Idaho Department of Aeronautics. Now the Idaho Division of Aeronautics, the state continues to manage and maintain the airstrip.

Big Creek Lodge has been unique in being able to encourage public access to the beauty and recreational opportunities of the Big Creek Valley because of the airstrip and road access from Yellow Pine. It was expanded further when, in 1980, the 2.4 million acre River of No Return Wilderness area (renamed in 1984 for Idaho Senator Frank Church) was created by the United States Congress and provided the opportunity for a wilderness experience like few other places in America, and nowhere outside of Alaska.

Unfortunately, all this came to an end when, in October of 2008, just as the lodge was being shut down for the season, fire erupted and burned the lodge and a nearby cabin to the ground. The IAF, after being issued a 30-year special use permit (SUP) from the USFS in May 2013, began rebuilding the lodge in 2015; a beautiful log structure with five rooms and a commercial kitchen to feed and house tired and hungry recreationalists once again. It is expected the lodge will be completed in late summer of 2017.

The original hydropower project was constructed and began operation in 1968 and operated until 1985. After the lodge was sold to Big Creek Lodge and Outfitters, Inc. they applied for and were issued a minor license for a water power project on March 26, 1992; FERC Project No. P-10721. With the installation of a high efficiency turbogenerator in 2015 and 2016, the water diversion of 0.75 cfs is expected to generate 3.5kW of electricity.

The analysis area in the following section includes the entire SUP area and additional areas in close proximity to the hydropower apparatus (diversion, penstock, Generator House, etc.). It extends beyond this stated analysis area where applicable (e.g.: Visual and Aesthetic).

Section 2 - Affected Environments and Impact Assessment

2.1 Land Use

The Big Creek Project is managed as Forest Management Area 13 - Big Creek/Stibnite - in the PNF Land and Resource Management Plan (2003). The primary uses and activities in this management area have been mining, dispersed recreation, and watershed restoration.

Big Creek lies within the Management Prescription Category (MPC)/Resource Area 3.2, which in addition to Forest-wide Goals, Objectives, Standards, and Guidelines that provide guidance for all management areas, the guidance for this area is "Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources" (USDA Forest Service 2003, pp. III-256).

This area is adjacent to, but has been excluded from, the FCRNRW because of past mining activity and current mining potential. Land in the project vicinity, along the Big Creek Valley, is used for high country recreation, irrigated pastures, and managed forest and wilderness.

The main access routes to the Big Creek area are the native-surfaced Big Creek Road from Yellow Pine through Profile Gap, or Forest Road 340, from Warren, which are usually open from July through early November. A public access airstrip at Big Creek also serves local landowners and recreationists.

2.2 Recreation

Recreation is a major use in the Big Creek area. Activities include hunting, fishing, sightseeing, and pack trips from several trailheads into the adjacent wilderness. Big Creek Lodge will operate during the summer and fall seasons, and there is a small USFS campground next to the airstrip. The Lodge will have four rooms (including one handicap accessible) and a duplex available for public booking. A commercial kitchen and dining area will provide meals to those staying at the lodge, as well as pilots, campers, sightseers, and locals.

The remainder of the management area receives low to moderate dispersed use associated mainly with the Big Creek/Edwardsburg area, Missouri Ridge and Monumental Creek trails into the Wilderness, and high mountain lakes in the upper Profile Creek drainage. Most use in this area is local, though users come through the

area from all over the country to use the adjacent Wilderness, especially during big game hunting seasons. The area is in Idaho Fish and Game Management Units 25 and 26 (USDA Forest Service 2003, pp. III-261).

2.3 *Wilderness and Roadless Areas*

The Big Creek Lodge permit area and Big Creek Hydro Projects are proximate to but outside of the FCRNRW boundary. In accordance with the Wilderness Act, designated areas are to be managed "... for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness ..." (Wilderness Act). The impact of the Big Creek Project on the wilderness experience is minimal to non-existent, especially in comparison to other potential energy sources (e.g. increased reliance on propane).

2.4 *Wild and Scenic Rivers*

McCorkle Creek flows into the headwaters of Big Creek which when it crosses the boundary is within the FCRNRW. Big Creek is a tributary of the Middle Fork of the Salmon River, which has Wild and Scenic River status. McCorkle Creek is small (3' wide at its' mouth), has a well-established and stable stream bed, and has supplied diversion water for hydro- power generation since 1968. There is no evidence that the water quality as stated in the present licensing document (Project No. 10721) would pose a risk to Big Creek or Middle Fork water quality.

2.5 *Visual and Aesthetic*

The Big Creek Lodge lies in a scenic valley at the west edge of a green, willow and conifer-ringed meadow. The steep mountain slopes of the valley are covered with fir and pine forests. The lodge is located just south of the Big Creek airstrip at 5743 feet above MSL. The hydropower diversion is up a steep grade to the west of the lodge site, and since it is built into the bank of McCorkle Creek and slightly off the trail, it is difficult to see. The 4" PVC penstock is buried the entire 1340' down the hill to the Generator House where it rises above grade and enters through the west wall to supply the turbine. The penstock is not visible from the trail. The Generator House sits on the north end of the lodge site, is made of log construction with a metal roof, and is visible from within and without the lodge property boundaries. The powerline is buried in conduit the entire distance to the lodge electrical panel.

2.6 *Archaeology and Heritage*

There are no national registered properties on the project or lodge sites. The SUP issued for the lodge allows excavation of the foundation, and trenches for buried conduit and piping because there are no known archeological sites connected to either of the SUP's. Excavation did not reveal any issues or concerns.

2.7 *Geology and Soils*

The dominant landforms in Management Area 13-Big Creek/Stibnite are glaciated mountains and uplands, frost-churned uplands, fluvial mountains, and depositional lands. Slope gradient averages 10-80% in the glaciated mountains, 15-40% in the frost-churned uplands, 30-80% in the fluvial mountains, and 0-20% in the depositional lands. The area is predominantly underlain by granites of the Idaho Batholith and associated metamorphic roof pendants, mostly quartzite, marble, and calc-silicates. Soils generally have moderate to high surface erosion potential and low to moderate productivity (USDA Forest Service 2003, pp. 258).

2.8 *Vegetation*

The Big Creek Project is located within the cedar-hemlock-Douglas fir section of the Highland Columbia Forest Province (Bailey 1980). In the mixed Coniferous Forest, the dominant species are the western red cedar, western hemlock, and Douglas fir. In the meadow, dominant species include annual grasses, forbs, and perennial bunch grasses. The Big Creek Project was installed in 1968 and operated continuously until the fire destroyed the lodge in 2008, with the exception of a seven year period from 1985 to 1992, the result of a change in ownership. The license to operate the Big Creek Project was issued in March, 1992. Given that this is an existing installation, it is not expected to have any significant impact on the general vegetation within the project boundaries.

2.9 Wildlife

Because most of this management area lies above 5,500' MSL the terrestrial and avian wildlife to be found are generally high elevation species. The shrub lands and forests provide big game summer range but are generally too high for winter range. High elevation subalpine fir forests provide habitat for boreal owl, three-toed woodpecker, wolverine, lynx, as well as summer range for mammals such as deer, elk, black bear, and mountain lion.

Lynx: Habitats for threatened lynx have been mapped in Lynx Analysis Units. The PNF has been determined to be a secondary habitat (US Fish and Wildlife Service (FWS) Recovery Outline - Sept. 2005). According to FWS, the value of secondary habitat is unclear; there is currently not evidence to suggest that unoccupied secondary habitat is considered necessary for a viable population of lynx.

Wolves: Management Area 13-PNF is in the Central Idaho Wolf Recovery Area as defined in the Northern Rocky Mountain Wolf Recovery Plan (US FWS 1987). Wolves inhabit the PNF which surrounds the Big Creek Lodge Project area. Based on habitat characteristics and land use relationships, Kaminski and Hansen (1984) identified key areas for wolves within the PNF. These areas are important year-round or seasonal habitat for elk, the primary prey species of the Rocky Mountain Gray Wolf. The Big Creek Project isn't located within any of these key areas. Wolves generally avoid sites of human activity. Kaminski and Hansen (1984) list sufficient space with minimal exposure to humans as a primary component of wolf habitat.

Re-licensing the Big Creek Project wouldn't likely affect gray wolves for the following reasons:

1. Since Big Creek Lodge has operated since 1934 and the community of Edwardsburg is close by, there is and has been human activity in and around the project site for a long time. Wolves will avoid the area.
2. The Big Creek Project wouldn't alter existing habitat conditions.
3. The project area is not critical habitat for elk, thereby eliminating a main food source of wolves.

The entire area provides habitat for migratory land birds. Overall, terrestrial wildlife habitat is near properly functioning conditions in the high-elevation vegetation groups, but at low but increasing risk in the lower elevation groups due to insect or disease outbreaks or stand-replacing fire (USDA Forest Service 2013 and Big Creek Project (P-10721) license issued March 27, 1992).

Table 4.1-1 Intermountain Region (R4) Threatened, Endangered, Proposed, and Sensitive Species

Table 1: INTERMOUNTAIN REGION (R4) THREATENED, ENDANGERED, PROPOSED, AND, SENSITIVE SPECIES

June 2016

KNOWN / SUSPECTED DISTRIBUTION BY FOREST

STATUS	FOREST															
	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C
MAMMALS																
Black-footed ferret 3/11/67 <i>Mustela nigripes</i>			o													o
Sierra Nevada bighorn sheep <i>Ovis canadensis</i> sierra January 3, 2000														X		
BIRDS																
Southwestern willow flycatcher 2/27/95 <i>Empidonax traillii extimus</i> ED 3/29/95									X					?		

Gray wolf (Wyoming Rocky Mountain DPS 10J Experimental Population) <i>Canis lupus</i>			X	X									X			X
Utah prairie dog 6/04/73 <i>Cynomys parvidens</i>						X	X									
Northern Idaho ground squirrel 3/24/00 <i>Spermophilus brunneus</i>		X								X						
BIRDS																
Mexican spotted owl 3/16/93 <i>Strix occidentalis lucida</i> (ED 4/15/93)						X	X		X							
Yellow-billed cuckoo 11/03/2014 <i>Coccyzus americanus</i>	X	X	X		?	?	?	X	X	X		?	X	X	X	X
REPTILES AND AMPHIBIANS																
Desert tortoise 8/04/89 <i>Gopherus agassizii</i>															X	
Yosemite toad 6/30/2014 <i>Anaxyrus canorus</i>															X	
FISH																
Steelhead trout (Snake River summer) <i>Oncorhynchus mykiss</i>		X			X					X	X	X				
THREATENED	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C
Chinook salmon, Snake River sprg/smr <i>Oncorhynchus tshawytscha</i> 4/22/92 (ED 5/22/92)		X			X					X	X	X				
Chinook salmon, Snake River fall <i>Oncorhynchus tshawytscha</i> 4/22/92 (ED 5/22/92)										X						
Greenback cutthroat trout <i>Oncorhynchus clarki stomia</i>									X							
Railroad Valley springfish 3/31/86 <i>Crenichthys nevadae</i>														X		
Lahontan cutthroat trout 10/13/70 <i>Oncorhynchus clarki henshawi</i>								X						X		
Columbia River bull trout 6/10/98 <i>Salvelinus confluentus</i>		X			X			X		X	X	X				
Paiute cutthroat trout 3/11/67 <i>Oncorhynchus clarki seleniris</i>														X		
PLANTS																
Deseret milkvetch 10/20/99 <i>Astragalus desereticus</i>									?						?	
Heliotrope milkvetch 11/6/87 <i>Astragalus limnocharis</i> var. <i>montii</i> (A. <i>montii</i>)									X							

Slick-spot peppergrass 10/08/09 <i>Lepidium papilliferum</i>			?														
Winkler cactus <i>Pediocactus winkleri</i>											?						
Maguire's primrose 8/21/85 <i>Primula cusickiana</i> var. <i>maguirei</i> (<i>P. maguirei</i>)																	X
Last chance townsendia 8/21/85 <i>Townsendia aprica</i>						X	X										
Ute ladies' tresses orchid 1/17/92 <i>Spiranthes diluvialis</i> (2/18/92)			?		?			?				?	?	X		X	?
Webber ivesia 7/3/2014 <i>Ivesia webberi</i>															X		
PROPOSED	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C	
North American wolverine <i>Gulo gulo</i> (<i>luscus</i>)	X	X	X	X	X					X	X	X	X	X		X	
CANDIDATE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C	
Sierra Nevada red fox <i>Vulpes vulpes necator</i>															X		
Whitebark Pine <i>Pinus albicaulis</i>		X	X		X			X		X	X	X	X	X			
SENSITIVE	A SH	BOI	B- T	CAR	C HA	DIX	FIS	H UM	M-L	P AY	SAL	S AW	T AR	T OI	UIN	W -C	
MAMMALS																	
Bighorn Sheep <i>Ovis canadensis</i> - Includes Rocky Mountain bighorn sheep (<i>O. c. canadensis</i>), California bighorn sheep (<i>O. c. californiana</i>), and desert bighorn sheep (<i>O. c. nelsoni</i>) (7/29/2009)	X	X	X		X		X	X	X	X	X	X	X	X	X	X	
Gray wolf (Rocky Mountain DPS) <i>Canis lupus</i>		X		X	X					X	X	X	X			X	
Pygmy rabbit <i>Brachylagus idahoensis</i>				X	X	X	X	X			X	X	X	X			
Spotted bat <i>Euderma maculatum</i>	X	X	X	X	X	X	X	X	X	X	X	X	?	X	X	X	
Fisher <i>Martes pennanti</i>		X	X		X					X	X	X	?		X		
Southern Idaho Ground Squirrel <i>Spermophilus brunneus endemicus</i>		X								X							
Townsend's Western Big-Eared Bat <i>Corynorhinus townsendii townsendii</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
BIRDS																	
Bald eagle <i>Haliaeetus leucocephalus</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Boreal owl <i>Aegolius funereus</i>	X	X	X	X	X					X	X	X	X			X
Greater sage-grouse <i>Centrocercus urophasianus</i>	X	X	X	X	X	X	X	X	X	?	X	X	X	X	X	X
Greater sage-grouse Bi-State DPS <i>Centrocercus urophasianus</i>													X			
Trumpeter swan <i>Cygnus buccinator</i>			X	X									X			
Peregrine falcon 3/20/84 <i>Falco peregrinus anatum</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Common loon <i>Gavia immer</i>		X	X		+					?	+	X	X			
Harlequin duck <i>Histrionicus histrionicus</i>			X	X	?+					X	?+		X			
Mountain quail <i>Oreortyx pictus</i>		X						X		X		X		X		
Flammulated owl <i>Otus flammeolus</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C
White-headed woodpecker <i>Picoides albolarvatus</i>		X								X		X		X		
Three-toed woodpecker <i>Picoides tridactylus</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Great gray owl <i>Strix nebulosa</i>	X	X	X	X	X					X	X	X	X	X		X
California spotted owl <i>Strix occidentalis occidentalis</i>														X		
Columbian sharp-tailed grouse <i>Tympanuchus phasianellus columbianus</i>		X		X				X		X		X	X			X
Northern goshawk <i>Accipiter gentilis</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
REPTILES AND AMPHIBIANS																
Columbia spotted frog <i>Rana luteiventris</i>	?	X	X	X	X			X	X	X	X	X	X	X	X	X
Boreal Toad <i>Bufo boreas</i>	X		X	X		X	X		X				X		X	X
FISH																
Wood River sculpin <i>Cottus leiopomus</i>												X				
Westslope cutthroat trout <i>Oncorhynchus clarki lewisi</i>		X	X		X					X	X	X				
Colorado River cutthroat trout <i>Oncorhynchus clarki pleuriticus</i>	X		X			X	X		X						X	X

Bonneville cutthroat trout <i>Oncorhynchus clarki utah</i>			X	X		X	X	X	X						X	X
Yellowstone cutthroat trout <i>Oncorhynchus clarki bouvieri</i>			X	X								X	X			
Northern Leatherside Chub <i>Lepidomeda copei</i>			X	X								X	X			X
Southern Leatherside Chub <i>Lepidomeda aliciae</i>						X	X		X						X	
Big Lost River Whitefish <i>Prosopium williamsoni</i>					X											
INSECTS																
Spring Mountain Checkerspot <i>Chlosyne acastus robusta</i>														X		
Dark Blue														X		
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C
<i>Euphilotes ancilla purpura</i>																
Morand's Checkerspot <i>Euphydryas anicia morandi</i>														X		
PLANTS																
Pink agoseris <i>Agoseris lackschewitzii</i>			X								X		X			
Wonderland Alice flower <i>Aliciella (=Gilia) caespitosa</i>						X	X									
Chatterley Onion <i>Allium geyeri</i> var. <i>chatterleyi</i>									X							
Swamp onion <i>Allium madidum</i>										X						
Tolmie's onion <i>Allium tolmiei</i> var. <i>persimile</i>		X								X						
Candystick <i>Allotropa virgata</i>										X						
Sweet-flowered rock jasmine <i>Androsace chamaejasme</i> ssp. <i>carinata</i>			X						X				X			
Charleston angelica <i>Angelica scabrida</i>														X		
Wheeler's angelica <i>Angelica wheeleri</i>															X	X
Meadow pussytoes <i>Antennaria arcuata</i>								X								
Charleston pussytoes <i>Antennaria soliceps</i>														X		

Link Trail columbine <i>Aquilegia flavescens</i> <i>var. rubicunda</i>										X							
Graham columbine <i>Aquilegia grahamii</i>	X																
Rosy King's sandwort <i>Arenaria kingii</i> ssp. <i>rosea</i>														X			
Petiolate wormwood <i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>petiolata</i>	X																
Eastwood milkweed <i>Asclepias eastwoodiana</i>								X						X			
Clokey milkvetch <i>Astragalus aequalis</i>														X			
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C	
Lost River milkvetch <i>Astragalus amnis-amissi</i>					X												
Goose Creek milkvetch <i>Astragalus anserinus</i>												?					
Lemhi milkvetch <i>Astragalus aquilonius</i>					X							?					
Bicknell milkvetch <i>Astragalus consobrinus</i>							X			?							
Meadow milkvetch <i>Astragalus diversifolius</i> var. <i>diversifolius</i>			X		X								X				
Dana milkvetch <i>Astragalus</i> <i>henrimontanensis</i>						X											
Isely's milkvetch <i>Astragalus iselyi</i>										X							
Starvling milkvetch <i>Astragalus jejunus</i> var. <i>jejunus</i>			X	X													
Long Valley milkvetch <i>Astragalus johannis-</i> <i>howellii</i>														X			
Broad-pod freckled milkvetch <i>Astragalus lentiginosus</i> var. <i>latus</i>								X									
Navajo Lake milkvetch <i>Astragalus limnocharis</i> var. <i>limnocharis</i>						X											
Table Cliff milkvetch <i>Astragalus limnocharis</i> var. <i>tabulaeus</i>						X											
Lee Canyon milkvetch <i>Astragalus oophorus</i> var. <i>clokeyanus</i>														X			
Lavin's egg milkvetch <i>Astragalus oophorus</i> var. <i>lavinii</i>														X			
Payson's milkvetch <i>Astragalus paysonii</i>			X							X			?				
Spring Mountain milkvetch <i>Astragalus remotus</i>														X			

Lamoille Canyon milkvetch <i>Astragalus robbinsii</i> var. <i>occidentalis</i>								X									
Toquima milkvetch <i>Astragalus toquimanus</i>															X		
Currant milkvetch <i>Astragalus uncialis</i>								X									
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C	
White Cloud milkvetch <i>Astragalus vexilliflexus</i> var. <i>nubilus</i>					X					X		X					
Guard milkvetch <i>Astragalus zionis</i> var. <i>vigulus</i>						X											
Bodie Hills rockcress <i>Boechea (=Arabis) bodiensis</i>														X			
Grouse Creek rockcress <i>Boechea (=Arabis) falcatoria</i>								X									
Spring Mountains rockcress <i>Boechea (=Arabis) nevadensis</i>														X			
Washoe tall rockcress <i>Boechea (=Arabis) rectissima</i> var. <i>simulans</i>														X			
Galena Creek rockcress <i>Boechea (=Arabis) rigidissima</i> var. <i>demota</i>														X			
Ophir rockcress <i>Boechea (=Arabis) ophira</i>														X			
Tiehm rockcress <i>Boechea (=Arabis) tiehmii</i>														X			
Upswept moonwort <i>Botrychium ascendens</i>														X			
Dainty moonwort <i>Botrychium crenulatum</i>	X												X	X	X		
Slender moonwort <i>Botrychium lineare</i>	X							?		?		X		X	?	X	
Paradox moonwort <i>Botrychium paradoxum</i>						X											
Little grape fern <i>Botrychium simplex</i>												X					
Moosewort <i>Botrychium tunux</i>														X			
Beautiful Bryum <i>Bryum calobryoides</i>		X										X					
Cascade reedgrass <i>Calamagrostis tweedyi</i>										X							
Cusick camas <i>Camassia cusickii</i>										X							
Seaside sedge <i>Carex incurviformis</i>			X		X												

SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C
Black and purple sedge <i>Carex luzulina</i> var. <i>atropurpurea</i>			X													
Tioga Pass sedge <i>Carex tiogana</i>														X		
Aquarius paintbrush <i>Castilleja aquariensis</i>						X										
Christ's Indian paintbrush <i>Castilleja christii</i>												X				
Tushar paintbrush <i>Castilleja parvula</i> var. <i>parvula</i>						X	X									
Reveal paintbrush <i>Castilleja parvula</i> var. <i>revealii</i>						X										
Centennial rabbitbrush <i>Chrysothamnus parryi</i> ssp. <i>montanus</i>													X			
Flexible alpine collomia <i>Collomia debilis</i> var. <i>camporum</i>											X					
Wasatch fitweed <i>Corydalis caseana</i> spp. <i>brachycarpa</i>															X	X
Creutzfeldt-flower cryptanth <i>Cryptantha creutzfeldtii</i>									X							
Yellow-white catseye <i>Cryptantha ochroleuca</i>						X										
Bodie Hills draba <i>Cusickiella</i> <i>quadricostata</i>														X		
Pinnate spring-parsley <i>Cymopterus beckii</i>						X			X							
Davis' wavewing <i>Cymopterus davisii</i>												X				
Douglas' biscuitroot <i>Cymopterus douglassii</i>					X						X	X				
Goodrich biscuitroot <i>Cymopterus goodrichii</i>														X		
Cedar Breaks biscuitroot <i>Cymopterus minimus</i>						X										
Brownie ladyslipper <i>Cypripedium</i> <i>fasciculatum</i>	X															X
Lesser yellow Lady's slipper <i>Cypripedium parviflorum</i> (<i>Cypripedium calceolus</i>																X
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C
var. <i>parviflorum</i>)																
Wyoming tansymustard <i>Descurainia torulosa</i>			X													

Wasatch shooting star <i>Dodecatheon utahense</i>																	X
Idaho douglasia <i>Douglasia idahoensis</i>		X									?		?				
Abajo peak draba <i>Draba abajoensis</i>									X								
Arid draba <i>Draba arida</i>														X			
Star draba <i>Draba asterophora</i> var. <i>asterophora</i>														X			
Wasatch Draba <i>Draba brachystylis</i>														X	?		X
Burke's draba <i>Draba burkei</i>																	X
Rockcross draba <i>Draba globosa</i> (=D. <i>densifolia</i> var. <i>apiculata</i>)	X		X		X							X				X	X
Jaeger draba <i>Draba jaegeri</i>														X			
Maguire draba <i>Draba maguirei</i>																	X
Serpentine draba <i>Draba oreibata</i> var. <i>serpentina</i>									?					X			
Charleston draba <i>Draba pauciflora</i>														X			
Pennell draba <i>Draba pennellii</i>									X								
Mt. Belknap draba <i>Draba ramulosa</i>									X								
Santaquin draba <i>Draba santaquinensis</i>																X	
Creeping draba <i>Draba sobolifera</i>							X	X									
Stanley's whitlow-grass <i>Draba trichocarpa</i>					X							X					
Nevada willowherb									X					X			
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C	
<i>Epilobium nevadense</i>																	
Spring Mountain goldenweed <i>Ericameria</i> <i>compacta</i> (=Haplopappus <i>compactus</i>)														X			
Pine Valley goldenweed <i>Ericameria crispata</i> (=Haplopappus <i>crispus</i>)							X										
Narrow-leaf goldenweed <i>Ericameria discoidea</i> var. <i>linearis</i> (=Haplopappus <i>macronema</i> var. <i>linearis</i>)			X														

Abajo daisy <i>Erigeron abajoensis</i>										X							
Carrington daisy <i>Erigeron carringtonae</i>										X							
Snake Mountain erigeron <i>Erigeron cavernensis</i>								X									
Cronquist daisy <i>Erigeron cronquistii</i>																	X
Garrett's fleabane <i>Erigeron garrettii</i>															X		X
Kachina daisy <i>Erigeron kachinensis</i>										X							
Woolly daisy <i>Erigeron lanatus</i>			X														
Maguire daisy <i>Erigeron maguirei</i>								X									
LaSal daisy <i>Erigeron mancus</i>										X							
Untermann daisy <i>Erigeron untermannii</i>	X																
Widtsoe buckwheat <i>Eriogonum aretioides</i>							X										
Elsinore buckwheat <i>Eriogonum batemanii</i> var. <i>ostlundii</i>								X									
Desert buckwheat <i>Eriogonum brevicaule</i> var. <i>desertorum</i>												X					
Welsh buckwheat <i>Eriogonum capistratum</i> var. <i>welshii</i>					X												
Sunflower Flat buckwheat									X								
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C	
<i>Eriogonum douglasii</i> var. <i>elkoense</i>																	
Toiyabe buckwheat <i>Eriogonum esmeraldense</i> var. <i>toiyabense</i>															X		
Clokey buckwheat <i>Eriogonum heermannii</i> var. <i>clokeyi</i>															X		
Lewis's buckwheat <i>Eriogonum lewisii</i>									X								
Logan buckwheat <i>Eriogonum loganum</i> (= <i>E. brevicaule</i> var. <i>loganum</i>)																	X
Guardian buckwheat <i>Eriogonum meledonum</i>						X						X					
Altered andesite buckwheat <i>Eriogonum robustum</i>															X		

Clokey greasebush <i>Glossopetalon clokeyi</i>														X		
Smooth dwarf greasebrush <i>Glossopetalon pungens</i> var. <i>glabra</i> (= <i>G. pungens</i>)														X		
Puzzling halimolobos <i>Halimolobos perplexa</i> var. <i>perplexa</i>										X						
Canyon sweetvetch <i>Hedysarum occidentale</i> var. <i>canone</i>									X							
Jones goldenaster <i>Heterotheca jonesii</i>						X										
Sierra Valley ivesia <i>Ivesia aperta</i> var. <i>aperta</i>														X		
Dog Valley ivesia <i>Ivesia aperta</i> var. <i>canina</i>														X		
Charleston ivesia <i>Ivesia cryptocaulis</i>														X		
Jaeger ivesia <i>Ivesia jaegeri</i>														X		
Plumas ivesia <i>Ivesia sericoleuca</i>														?		
Utah ivesia <i>Ivesia utahensis</i>															X	X
Wasatch jamesia															X	X
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C
<i>Jamesia americana</i> var. <i>macrocalyx</i>																
Zion jamesia <i>Jamesia americana</i> var. <i>zionis</i>						X										
Basin jamesia <i>Jamesia tetrapetala</i>								X								
Grimes lathyrus <i>Lathyrus grimesii</i>								X								
Wasatch pepperwort <i>Lepidium montanum</i> var. <i>alpinum</i>															?	X
Neeses' peppergrass <i>Lepidium montanum</i> var. <i>neeseeae</i>						X										
Hazel's prickly phlox <i>Leptodactylon pungens</i> ssp. <i>hazeliae</i>										X						
Garrett bladderpod <i>Lesquerella garrettii</i>															X	X
Hitchcock bladderpod <i>Lesquerella hitchcockii</i> var. <i>hitchcockii</i>														X		
Payson bladderpod <i>Lesquerella paysonii</i>			X	X									X			

Maguire lewisia <i>Lewisia maguirei</i>								X									
Sacajawea's bitterroot <i>Lewisia sacajaweaana</i>		X			X					X	X	?					
Canyonlands lomatium <i>Lomatium latilobum</i>									X								
Three-ranked hump-moss <i>Meesia triquetra</i>														X			
Goodrich stickleaf <i>Mentzelia goodrichii</i>	X																
Bank monkeyflower <i>Mimulus clivicola</i>											X						
Fish Lake naiad <i>Najas caespitosa</i>							X										
Idaho pennycress <i>Noccaea idahoensis</i> var. <i>aileeniae</i> (=Thlaspi <i>aileeniae</i>)					X							X					
Shevock rockmoss <i>Orthotrichum shevockii</i>														X			
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C	
Spjut's brittle-moss <i>Orthotrichum spjutii</i>														X			
Challis crazyweed <i>Oxytropis besseyi</i> var. <i>salmonensis</i>					X												
Beaver Mountain groundsel <i>Packera</i> (=Senecio) <i>castoreus</i>							X										
Podunk groundsel <i>Packera</i> (=Senecio) <i>malmstenii</i>						X											
Arctic poppy <i>Papaver radicum</i> var. <i>pygmaeum</i>	X																X
Naked-stemmed parrya <i>Parrya nudicaulis</i>			X														
Paria breadroot <i>Pediomelum pariense</i>						X											
Stemless beardtongue <i>Penstemon acaulis</i> var. <i>acaulis</i>	X																
Dune penstemon <i>Penstemon arenarius</i>														?			
Red Canyon beardtongue <i>Penstemon bracteatus</i>						X											
Cache beardtongue <i>Penstemon compactus</i>				X													X
Elegant penstemon <i>Penstemon concinnus</i>								?									
Idaho penstemon <i>Penstemon idahoensis</i>												X					

Charleston beardtongue <i>Penstemon leiophyllus</i> var. <i>keckii</i>															X		
Lemhi penstemon <i>Penstemon lemhiensis</i>												X					
Mt. Moriah penstemon <i>Penstemon moriahensis</i>								X									
Little penstemon <i>Penstemon parvus</i>						X	X										
Pinyon penstemon <i>Penstemon pinorum</i>						X											
Bashful penstemon <i>Penstemon pudicus</i>								X									
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C	
Rhizome beardtongue <i>Penstemon rhizomatosus</i>								X									
Wassuk beardtongue <i>Penstemon rubicundus</i>														X			
Jaeger beardtongue <i>Penstemon thompsoniae</i> ssp. <i>jaegeri</i>														X			
Ward beardtongue <i>Penstemon wardii</i>							X										
Inconspicuous phacelia <i>Phacelia inconspicua</i>								?									
Small-flower phacelia <i>Phacelia minutissima</i>		X						X				?					
Mono phacelia <i>Phacelia monoensis</i>														X			
Salmon twin bladderpod <i>Physaria didymocarpa</i> var. <i>lyrata</i>											X		X				
Creeping twinpod <i>Physaria integrifolia</i> v. <i>monticola</i>			X														
Whitebark Pine <i>Pinus albicaulis</i>		X	X		X			X		X	X	X	X	X			
Altered andesite popcorn flower <i>Plagiobothrys glomeratus</i>														X			
Marsh's bluegrass <i>Poa abbreviata</i> ssp. <i>marshii</i>					X			X			X	X		X			
White Mountain skypilot <i>Polemonium chartaceum</i>														X			
Williams combleaf <i>Polyctenium williamsii</i>														X			
Angell cinquefoil <i>Potentilla angelliae</i>						X											
Cottam cinquefoil <i>Potentilla cottamii</i>												X					X

Sagebrush cinquefoil <i>Potentilla johnstonii</i>								X									
Alkali primrose <i>Primula alcalina</i>													X				
Ruby Mountain primrose <i>Primula capillaris</i>								X									
SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C	
Nevada primrose <i>Primula cusickiana</i> var. <i>nevadensis</i> (=P. <i>nevadensis</i>)								X									
Greenland primrose <i>Primula egalikensis</i>			X														
Bugleg goldenweed <i>Pyrocoma</i> (=Haplopappus) <i>insecticuriis</i>		X										X					
Radiate goldenweed <i>Pyrocoma radiata</i> (=Haplopappus <i>radiatus</i>)										X							
Bartons' blackberry <i>Rubus bartonianus</i>										X							
Arizona willow <i>Salix arizonica</i>						X	X		X								
Weber's saussurea <i>Saussurea weberi</i>			X														
Tobias' saxifrage <i>Saxifraga bryophora</i> var. <i>tobiasiae</i>										X							
Tolmie's saxifrage <i>Saxifraga tolmiei</i> var. <i>ledifolia</i>										X							
Musinea groundsel <i>Senecio musiniensis</i>									X								
Mono ragwort <i>Senecio pattersonensis</i>														X			
Clokey silene <i>Silene clokeyi</i>														X			
Nachlinger silene <i>Silene nachlingerae</i>								X									
Maguire campion <i>Silene petersonii</i>						X	?		X								
Railroad Valley globemallow <i>Sphaeralcea caespitosa</i> var. <i>williamsiae</i>								X									
Rock-tansy <i>Sphaeromeria capitata</i>						X											
Low sphaeromeria <i>Sphaeromeria compacta</i>														X			
Masonic Mountain jewelflower <i>Streptanthus oliganthus</i>														X			
Soft aster			X														

SENSITIVE	ASH	BOI	B-T	CAR	CHA	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	TOI	UIN	W-C
<i>Symphotrichum molle</i> (=Aster mollis)																
Charleston kittentails <i>Synthyris ranunculina</i>														X		
Caespitose greenthread <i>Thelesperma caespitosum</i>	X															
Uinta green thread <i>Thelesperma pubescens</i>																X
Bicknell thelesperma <i>Thelesperma subnudum</i> var. <i>alpinum</i>						X	X									
Wavy-leaf thelypody <i>Thelypodium repandum</i>					X											
Alpine goldenweed <i>Tonestus</i> (=Haplopappus) <i>alpinus</i>														X		
Barneby woody aster <i>Tonestus</i> (=Aster) <i>kingii</i> var. <i>barnebyana</i>							X								X	
Sevier townsendia <i>Townsendia jonesii</i> var. <i>lutea</i>							X									
Charleston ground daisy <i>Townsendia jonesii</i> var. <i>tumulosa</i>														X		
Short-style tofieldia <i>Triantha occidentalis</i> ssp. <i>brevistyla</i>										X						
Currant Summit clover <i>Trifolium andinum</i> var. <i>podocephalum</i>								X								
Leiberg's clover <i>Trifolium leibergii</i>								X								
Rollins clover <i>Trifolium macilentum</i> var. <i>rollinsii</i>														X		
Charleston violet <i>Viola charlestonensis</i>														X		
Smith violet <i>Viola franksmithii</i>																X
Lithion violet <i>Viola lithion</i>								X								
Idaho range lichen <i>Xanthoparmelia</i> <i>idahoensis</i>											X					

ASH - Ashley

Challis

CHA -

M-L - Manti-LaSal

TAR - Targhee

BOI - Boise

DIX - Dixie

PAY - Payette

TOI - Toiyabe

B-T - Bridger-Teton

Fishlake

FIS -

SAL - Salmon

UIN - Uinta

CAR - Caribou

Humboldt

HUM -

SAW - Sawtooth

W-C - Wasatch-Cache

KEY:

X = known distribution species and/or habitat
 ? = suspected or potential habitat
 * = wild and naturally reproducing stocks
 + = migration corridors only
 o = offsite impacts (e.g. downstream)

This list was compiled from the following sources:

R-4 Vertebrate Sensitive Species List (August 13, 1990)
 R-4 Sensitive Plant List (April 29, 1994)
 Endangered and Threatened Wildlife and Plants, USDA-U.S. Fish & Wildlife Service (August 20, 1994)
 Northern Goshawk - Listed as a Sensitive Species in R4 (October 31, 1991)
 Miscellaneous Federal Registers

r = reintroduced Central Idaho & Yellowstone populations, covered under ESA Section 10(j), and declared experimental non-essential populations, and thus are treated like "proposed" species
 ## = no longer meet "sensitive" criteria (personal communication with Forest botanists and Dr. Duane Atwood), but no official list revision yet
 Dates are dates the Final Rule was published in the *Federal Register*;
 ED = Effective dates are about 30 days later if not listed.

Table 4.1-2 Probability of Occurrence of TE&S Species for the Big Creek Hydro Analysis Area

Table 2. Probability of occurrence of TE&S species for the Big Creek hydro analysis area						
Species	Scientific name	Preferred habitat	Documented sightings in or directly adjacent	Habitat in or directly adjacent to analysis	Could project impact species or habitat?	Rationale
FEDERALLY LISTED SPECIES						
ENDANGERED SPECIES						
Sockeye salmon	<i>Oncorhynchus nerka</i>	Sockeye spend approximately the first half of their life cycle rearing in lakes. The remainder of the life cycle is spent foraging in estuarine and marine waters of the Pacific Ocean. Critical habitat was designated for the Snake River ESU on December 28, 1993 and for the Ozette Lake ESU on September 2, 2005.	No	No	No	
THREATENED SPECIES						
Canada lynx	<i>Lynx canadensis</i>	Lynx are generally found in moist, boreal forests that have cold, snowy winters and a high density of their favorite prey: the snowshoe hare. Snowshoe hares tend to occur in habitats where dense stands of young conifers provide shelter, and where they can forage on conifer boughs that protrude above several feet of snow. These forest thickets may result from wildfires, timber harvest, or other disturbances. Meanwhile, lynx also use mature forests with dense undercover and downed wood for denning.	No	No	No	
Northern Idaho ground squirrel	<i>Spermophilus brunneus</i>	Northern populations are associated with shallow rocky soils in xeric meadows surrounded by ponderosa pine and Douglas-fir forest; southern populations inhabit low rolling hills and valleys now dominated by annual grassland with relict big sagebrush and bunch grasses (Yensen et al. 1991, Yensen 1991). This squirrel may occur on slopes and rarely on ridges (Yensen 1984). It burrows extensively in shallow rocky soils, but nest burrows are located in adjacent areas with deeper (>1 meter) well-drained soils (Yensen et al. 1991).	No	No	No	
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	BREEDING: Open woodland (especially where undergrowth is thick), parks, deciduous riparian woodland; in the West, nests in tall cottonwood and willow riparian woodland. Nests in deciduous woodlands, moist thickets, orchards, overgrown pastures; in tree, shrub, or vine, an average of 1-3 meters above ground (Harrison 1979). Subspecies OCCIDENTALIS requires patches of at least 10 hectares (25 acres) of dense riparian forest with a canopy cover of at least 50 percent in both the understory and overstory; nests typically in mature willows (Biosystems Analysis 1989). NONBREEDING: forest, woodland, and scrub. Also mangroves in Puerto Rico (Raffaele 1983).	No	No	No	

Steelhead trout	<i>Oncorhynchus mykiss</i>	Steelhead are capable of surviving in a wide range of temperature conditions. They do best where dissolved oxygen concentration is at least 7 parts per million. In streams, deep low-velocity pools are important wintering habitats. Spawning habitat consists of gravel substrates free of excessive silt. Critical habitat for 10 west coast steelhead DPSs was designated on September 2, 2005. Critical habitat for the Puget Sound steelhead was designated on February 24, 2016.	No	No	No	
Chinook salmon	<i>Oncorhynchus tshawytscha</i>	Chinook salmon generally spend most (often 2-4 years but up to 6 years) of their lives in the ocean. For spawning, they migrate up to several hundred kilometers upstream to their natal stream, where eggs are deposited in gravel bottoms of large streams and rivers.	Yes	Yes	No	
Columbia River bull trout	<i>Salvelinus confluentus</i>	Global Range: (200,000-2,500,000 square km (about 80,000-1,000,000 square miles)) This distinct population segment of bull trout includes populations residing in the Columbia River and its tributaries in portions of Oregon, Washington, Idaho, and Montana, including four geographic areas (1) lower Columbia River (downstream of the Snake River confluence), (2) mid-Columbia River (Snake River confluence to Chief Joseph Dam), (3) upper Columbia River (upstream from Chief Joseph Dam), and (4) Snake River and its tributaries (including the Lost River drainage) (USFWS 1998). Populations in Canada are not included. Remaining important strongholds for this DPS tend to be found in large areas of contiguous habitats in the Snake River basin of central Idaho Mountains, upper Clark Fork and Flathead rivers in Montana, and the Blue Mountains in Washington and Oregon (USFWS 1998).	No	No	No	
PROPOSED SPECIES						
North American wolverine	<i>Gulo gulo (luscus)</i>	Terrestrial Habitat(s): Alpine, Forest - Conifer, Grassland/herbaceous, Shrubland/chaparral, Tundra, Woodland - Conifer Special Habitat Factors: Burrowing in or using soil, Fallen log/debris, Habitat Comments: Alpine and arctic tundra, boreal and mountain forests (primarily coniferous). Limited to mountains in the south, especially large wilderness areas. Usually in areas with snow on the ground in winter. Riparian areas may be important winter habitat. May disperse through atypical habitat. When inactive, occupies den in cave, rock crevice, under fallen tree, in thicket, or similar site. Terrestrial and may climb trees.	No	Yes	No	
CANDIDATE SPECIES						
Whitebark Pine	<i>Pinus albicaulis</i>	Terrestrial Habitat(s): Forest - Conifer, Forest/Woodland, Woodland - Conifer	No	No	No	
SENSITIVE SPECIES						

Bighorn Sheep	<i>Ovis Canadensis</i>	Terrestrial Habitat(s): Alpine, Bare rock/talus/scree, Cliff, Desert, Grassland/herbaceous, Shrubland/chaparral, Woodland - Conifer, Woodland - Hardwood, Woodland - Mixed	No	No	No	
Rocky Mountain bighorn sheep	<i>O. c. Canadensis</i>	Habitat Comments: Bighorn sheep occur in mesic to xeric, alpine to desert grasslands or shrub-steppe in mountains, foothills, or river canyons (Shackleton et al. 1999, Krausman et al. 1999). Many of these grasslands are fire-maintained (Geist 1971, Erickson 1972). Suitable escape terrain (cliffs, talus slopes, etc.) is an important feature of the habitat. In winter, Rocky Mountain Bighorns spend as much as 86% of their time within 100 meters of escape terrain (Oldemayer et al. 1971, Erickson 1972), and usually stay within 800 meters of escape terrain throughout the year (Pallister 1974). Mineral licks are more important in the range of Rocky Mountain Bighorn than in the range of "California" Bighorn, presumably because the soils in the range of the former are generally lower in mineral content (Van Dyke 1978). Distribution is correlated with low precipitation levels, especially in winter and spring. Elevation varies considerably, both geographically and seasonally, from as low as 450 meters to over 3,300 meters (Shackleton et al. 1999)				
California bighorn sheep	<i>O. c. californiana</i>					
Desert bighorn sheep	<i>O. c. nelsoni</i>					
Gray wolf	<i>Canis lupus</i>	Habitat generalists and will establish territories anywhere there is sufficient food.	Yes	Yes	No	
Spotted bat	<i>Euderma maculatum</i>	This species occurs in various habitats from desert to montane coniferous stands, including open ponderosa pine, pinyon-juniper woodland, canyon bottoms, riparian and river corridors, meadows, open pasture, and hayfields. Active foraging may be mostly in open terrain, including forest clearings, meadows, and open wetlands, sometimes in open areas near buildings (see review in Schmidt 2003) or even golf courses. Roosts, including maternity roosts, generally are in cracks and crevices in cliffs (Wai-Ping and Fenton 1989, Pierson and Rainey 1998, Rabe et al. 1998), sometimes in caves or in buildings near cliffs (Sherwin and Gannon 2005). Winter habits poorly known.	No	Yes	No	
Fisher	<i>Martes pennanti</i>	Terrestrial Habitat(s): Forest - Conifer, Forest - Hardwood, Forest - Mixed, Woodland - Conifer, Woodland - Hardwood, Woodland - Mixed Special Habitat Factors: Fallen log/debris, Standing snag/hollow tree Habitat Comments: Fishers inhabit upland and lowland forests, including coniferous, mixed, and deciduous forests. They occur primarily in dense coniferous or mixed forests, including early successional forest with dense overhead cover (Thomas et al. 1993). Fishers commonly use hardwood stands in summer but prefer coniferous or mixed forests in winter. They generally avoid areas with little forest cover or significant human disturbance and conversely prefer large areas of contiguous interior forest (see USFWS 2004). Powell (1993) concluded that forest type is probably not as important to fishers as the vegetative and structural aspects that lead to abundant prey populations and reduced fisher vulnerability to predation, and that they may select forests that have low and closed canopies. Several studies have shown that fishers are associated with riparian areas (see USFWS 2004), which are in some cases protected from logging and generally more productive, thus having the dense canopy closure, large trees and general structural complexity associated with fisher habitat (Dark 1997). Riparian areas may be important to fishers because they provide important rest site elements, such as broken tops, snags, and coarse woody debris (Seglund 1995).	No	No	No	

Southern Idaho Ground Squirrel	<i>Spermophilus brunneus endemicus</i>	Terrestrial Habitat(s): Grassland/herbaceous Special Habitat Factors: Burrowing in or using soil Habitat Comments: Compared to the northern subspecies, the southern Idaho ground squirrel lives on lower elevation, paler colored soils formed by granitic sands and clays from the Boise Mountains (USFWS 2004). Southern Idaho ground squirrels inhabit low rolling hills and valleys in lower-elevation shrub/steppe in the lower Weiser and Payette river basins. They inhabit an area once dominated by big sagebrush (<i>Artemisia tridentata</i>), bitterbrush (<i>Purshia tridentata</i>), and a variety of native forbs and bunchgrasses (Yensen 1984, 1991; Yensen et al. 1991). Prescott and Yensen (1999) suggested that these squirrels prefer areas with a high percentage of native cover types, especially areas with big sage; however, some non-native features may enhance their survival as well, specifically alfalfa fields, haystacks, or fence lines. The predominant vegetation was formerly big sagebrush-bunchgrass-forb associations, with bitterbrush (<i>Purshia tridentata</i>) found in the sandier locations (Yensen 2000b). The big sagebrush-bunch grass-forb complex has dramatically changed so that most of the former vegetative structure has been replaced by exotic annuals. [USFWS 2004]	Yes	Yes	No	
Townsend's Western Big-Eared Bat	<i>Corynorhinus townsendii townsendii</i>	Maternity and hibernation colonies typically are in caves and mine tunnels. Prefers relatively cold places for hibernation, often near entrances and in well-ventilated areas. In California, most limestone caves are too warm for successful hibernation; solitary males and small groups of females are known to hibernate in buildings in the central part of the state. Does not use crevices or cracks; hangs from the ceiling, generally near the zone of total darkness (Schmidly 1991). Uses caves, buildings and tree cavities for night roosts. Throughout much of the known range, commonly occurs in mesic habitats characterized by coniferous and deciduous forests (Kunz and Martin 1982). Habitats in western California include: cultivated valleys bordered by broad-leaved trees and dense thickets of brush; nearby hills with extensive grassy slopes, groves of oaks, areas of chaparral, and forests of coniferous trees and madrone; oak-covered hills just below the juniper and pinyon belt; coastal lowlands supporting dense ocean-side vegetation such as brush and lush annuals (see Handley 1959). Recorded in the Providence Mountains of the Mohave Desert in caves and tunnels near the boundary between the yucca belt of the lower slopes and the pinyon-juniper belt of the upper slopes (see Handley 1959). Habitats in western Oregon include pine-fir-hemlock-broadleaf deciduous forest (see Handley 1959). Nimble; able to fly through narrow passages (Hoffmeister 1986). Females gather in small nursery colonies in the warm parts of caves or mines, sometimes in buildings. Individuals generally return to the same maternity roost in successive years.	No	No	No	
Bald eagle	<i>Haliaeetus leucocephalus</i>	Associated with large bodies of water. Nest in forested areas near oceans, rivers, estuaries, lakes, and reservoirs. (Marshall et al. 2003)	Yes	Yes	No	
Boreal owl	<i>Aegolius funereus</i>	Terrestrial Habitat(s): Forest - Conifer, Forest - Hardwood, Forest - Mixed Special Habitat Factors: Standing snag/hollow tree Habitat Comments: Dense coniferous forest, mixed forest, thickets of alder, aspen, or stunted spruce, most commonly in proximity to open grassy situations (AOU 1983); muskeg bogs. In the Rockies, occurs generally in mature, multilayered spruce-fir forest. Roosts in dense cover by day, in cool microsites in summer; frequently changes roosting site.	No	Yes	No	
Greater sage-grouse	<i>Centrocercus urophasianus</i>	Terrestrial Habitat(s): Desert, Grassland/herbaceous, Savanna, Shrubland/chaparral Habitat Comments: Habitat includes foothills, plains, and mountain slopes where sagebrush is present (AOU 1983), often with a mixture of sagebrush, meadows, and aspen, in close proximity.	No	No	No	

Peregrine falcon	<i>Falco peregrinus anatum</i>	Terrestrial Habitat(s): Cliff, Desert, Shrubland/chaparral, Tundra, Urban/edificarian, Woodland - Conifer, Woodland - Hardwood, Woodland - Mixed Habitat Comments: Various open situations from tundra, moorlands, steppe, and seacoasts, especially where there are suitable nesting cliffs, to mountains, open forested regions, and human population centers (AOU 1983). When not breeding, occurs in areas where prey concentrate, including farmlands, marshes, lakeshores, river mouths, tidal flats, dunes and beaches, broad river valleys, cities, and airports.	No	No	No	
Common loon	<i>Gavia immer</i>	Estuarine Habitat(s): Bay/sound, Lagoon, River mouth/tidal river Riverine Habitat(s): BIG RIVER Lacustrine Habitat(s): Deep water, Shallow water	No	No	No	
Harlequin duck	<i>Histrionicus histrionicus</i>	Habitat Comments: Winters in rough coastal waters, especially along rocky shores or reefs; summering nonbreeders and immatures also occur in this habitat (Cassirer et al. 1993). Nests along fast-moving rivers and mountain streams on rocky islands or banks. Streams are braided to reticulate with many riffles and rapids (Cassirer et al. 1993). Requires relatively undisturbed, low gradient, meandering mountain streams with dense shrubby riparian areas (greater than 50% streamside shrub cover), and woody debris for nesting and brood rearing; also needs mid-stream boulders or log jams and overhanging vegetation for cover and loafing; indicator of high water quality (Spahr et al. 1991). Sometimes nests beside mountain lakes and lake outlets	No	No	No	
Mountain quail	<i>Oreortyx pictus</i>	Generally found in shrub dominated communities in open forests, ridge tops, mountain slopes (Marshall et al. 2003).	No	Yes	No	
Flammulated owl	<i>Otus flammeolus</i>	In dry open forest in mid elevation range between 3600 and 4600 feet. Nest in mixed forest dominated with Ponderosa Pine (Marshall et al. 2003).	No	Yes	No	
White-headed woodpecker	<i>Picoides albolarvatus</i>	In open ponderosa pine or mixed conifer forest dominated by ponderosa pine. It requires large trees and snags for nesting and foraging (Csuti et al. 1997, Marshall et al. 2003).	No	Yes	No	
Three-toed woodpecker	<i>Picoides tridactylus</i>	Found in variety of mixed conifer forests dominated with or mixed with lodgepole pine, typically above 4500' and contains high proportion of dead trees (Csuti et al. 1997).	No	Yes	No	
Great gray owl	<i>strix nebulosa</i>	Inhabit mature to old-growth coniferous forests adjacent to forest openings and clearings such as meadows (Csuti et al. 1997)	No	Yes	No	
Columbian sharp-tailed grouse	<i>Tympanuchus phasianellus columbianus</i>	Found in grassland or grass-shrub habitats and utilize deciduous shrubs and trees for wintering (Marshall et al. 2003)	No	Yes	No	
Northern goshawk	<i>Accipiter gentilis</i>	Mature stands with large trees, a high canopy closure, and an open understory. The stands are generally located on moderate slopes, benches, toe of slope, level ground, and typically close to perennial water. (Marshall et al. 2003)	No	No	No	
Columbia spotted frog	<i>Rana luteiventris</i>	Slow moving streams, ponds, springs, and marshes with emergent vegetation, water that remains aerobic and does not freeze to the sediment (springs and creeks) are most likely necessary for winter survival in areas subject to freezing. (Washington Herp Atlas 2009)	No	No	No	

Westslope cutthroat trout	<i>Oncorhynchus clarki lewisi</i>	Habitat Comments: Small mountain streams, main rivers, and large natural lakes; requires cool, clean, well-oxygenated water; in rivers, adults prefer large pools and slow velocity areas (stream reaches with numerous pools and some form of cover generally have the highest fish densities); often occurs near shore in lakes (Spahr et al. 1991). Juveniles of migratory populations may spend 1-4 years in their natal streams, then move (usually in spring or early summer, and/or in fall in some systems) to a main river or lake where they remain until they spawn (Spahr et al. 1991, McIntyre and Rieman 1995). Many fry disperse downstream after emergence (McIntyre and Rieman 1995). Juveniles tend to overwinter in interstitial spaces in the substrate. Larger individuals congregate in pools in winter.	No	Yes	No	
Swamp onion	<i>Allium madidum</i>	Habitat Comments: Seasonally wet meadows along low ground water courses and vernal pools. Elevation is 3800-6500 feet (Spahr 1991). Also found in disturbed areas and in a meadow heavily grazed by cattle and sheep (Steele 1981).	No	Yes	No	
Tolmie's onion	<i>Allium tolmiei</i> var. <i>persimile</i>	Found on dry, open ground, usually in rocky, gravelly, or clay soils.	No	No	No	
Candystick/Sugarstick	<i>Allotropa virgate</i>	Candystick/sugarstick - Habitat Comments: Deep humus or partially decomposed logs, generally in the shaded areas of old growth coniferous forests at 2300-6700 feet.	No	Yes	No	
Payson's milkvetch	<i>Astragalus paysonii</i>	Habitat Comments: Open places in the timber belt, burned-over forests, on decomposed granites, or other open disturbed mountainous sites on silty and ashy soils.	No	Yes	No	
White Cloud(s) milkvetch	<i>Astragalus vexilliflexus</i> var. <i>nubilus</i>	Habitat Comments: Subalpine and alpine areas on talus slopes in sagebrush communities at 10000-11000 feet (Spahr et al. 1991). Idaho Native Plant Society (1991) mentions open ridgeline and slope habitats that are sparsely vegetated; 8000-9600 feet; volcanic, granitic and metamorphic substrates.	No	Yes	No	
Slender moonwort	<i>Botrychium lineare</i>	Terrestrial Habitat(s): Cliff, Forest - Conifer, Forest/Woodland, Grassland/herbaceous, Woodland - Conifer Habitat Comments: Wagner and Wagner (1994) stated that it is difficult to describe a typical habitat for this species because the known sites are so different. It has been found mostly at higher elevations (about 1500-3000 m) in mountains, but specific habitats have ranged from a meadow dominated by knee-high grass, shaded woods and woodlands, grassy horizontal ledges on a north-facing limestone cliff, and a flat upland section of a river valley. Possibly a colonizer of disturbed, early seral habitats (USFWS 2003).	No	Yes	No	
Cascade reedgrass	<i>Calamagrostis tweedyi</i>	Habitat Comments: Montane grasslands, open slopes, open coniferous forests; sometimes in burned areas, clearcuts or on ridges at mid-elevations.	No	Yes	No	
Cusick camas/Cusick's camassia	<i>Camassia cusickii</i>	Habitat Comments: Occurs at low to mid elevations on steep, rocky hillsides and ridgetops in moist soils, usually along or near creeks. Often found in sagebrush scrub and among scattered ponderosa pine.	No	No	No	

Idaho douglasia	<i>Douglasia idahoensis</i>	Habitat Comments: SUMMARY: Subalpine ridges, summits, and adjacent upper slopes, on gravelly soils derived from granitic parent materials. Most populations occur on northerly-facing slopes; several appear to be restricted to lee sides of ridges, where wind-deposited snow accumulates and lasts later into summer than in adjacent areas. The subalpine vegetation is characterized by open, forb-dominated communities and woodlands dominated by white-bark pine (<i>Pinus albicaulis</i>) and subalpine fir (<i>Abies lasiocarpa</i>). There is often a high proportion of bare ground. Elevation range is about 2190-2710 m. <i>Douglasia idahoensis</i> populations typically occur on well-drained, shallow, decomposed granitic soils derived from the Idaho batholith. At least portions of one population (Square Mountain) also occurs on quartzite substrate.	No	Yes	No	
Puzzling halimolobos /puzzling rockcress	<i>Halimolobos perplexa</i> var. <i>perplexa</i>	Habitat/Ecology: Occurs in reddish, clay-rich soil with scattered rock, at 530 m (1750 ft) elevation. The site is mostly flat with 30% cover of bare ground. Not much information on habitat.	No	No	No	
Hazel's prickly phlox	<i>Leptodactylon pungens</i> ssp. <i>Hazeliae</i>	Occurs in dry, open forest, woodland, shrubland, and grassland habitats and their intergradations.	No	Yes	No	
Sacajawea's bitterroot	<i>Lewisia sacajaweanana</i>	Habitat Comments: Occurs in montane and subalpine habitats at elevations of 5,000 to 9,500 feet.	No	Yes	No	
Bank monkeyflower/ hill monkeyflower	<i>Mimulus clivicola</i>	Habitat Comments: <i>Mimulus clivicola</i> is restricted to a very specific set of habitat parameters. Plants typically occur in open pockets of moist, exposed mineral soil created by natural disturbances (erosion, big-game activity, etc.) or human-caused disturbances (roadcuts, etc.). They are almost exclusively found on southern exposures (southeast, south, southwest) with steep slopes (generally > 60%) in microhabitats that hold moisture during the spring.	No	Yes	No	
Whitebark Pine	<i>Pinus albicaulis</i>	Terrestrial Habitat(s): Forest - Conifer, Forest/Woodland, Woodland - Conifer Habitat Comments: Within montane forests and on thin, rocky, cold soils at or near timberline. 1300 - 3700 m (Flora of North America 1993). In moist mountain ranges, whitebark pine is most abundant on warm, dry exposures; but in semiarid ranges, it becomes prevalent on cool exposures and moist sites (Burns and Honkala, 1990). Although its role in the plant community is changing, whitebark pine historically dominated many of the upper subalpine plant communities of the western United States and was a major component of subalpine forests in the northern Rocky Mountains, the northern Cascades, the Blue Mountains, and the Sierra Nevada.	No	Yes	No	
Radiate goldenweed /snake river goldenweed	<i>Pyrrocoma radiata</i> (= <i>Haplopappus radiatus</i>)	Habitat Comments: A grazing-modified sagebrush/grassland community. Usually a specific soil type that is slightly to very calcareous and often overlies a shale formation (FWS, 1995). Steep, rocky hillsides (Idaho Native Plant Society, 1991).	No	Yes	No	
Bartons' blackberry	<i>Rubus bartonianus</i>	Habitat Comments: At least partially shaded in shrub communities on higher riparian terraces along streams and in shrub-dominated ephemeral stream beds, so water is available in abundance at least seasonally. Also occasionally on lower slopes in mixed shrub communities, but never far from the riparian zone. Soils derived from basalt parent materials (ISSSP 2010).	Yes	Yes	No	

Tobias' saxifrage	<i>Saxifraga bryophora</i> var. <i>tobiasiae</i>	Habitat Comments: Tobias' saxifrage occurs in openings in subalpine forest communities, classified as the <i>Vaccinium globulare</i> phase of the <i>Abies lasiocarpa</i> / <i>Xerophyllum tenax</i> habitat type. Within this community it occurs in microhabitats characterized by considerable amounts of bare soil and substrate instability. The cause of the instability has two sources: earth cores created by pocket gopher activity and meltwater channels between bedrock or areas stabilized by perennial vegetation. Plants are found on the flat-to-gently sloping portions of the meltwater channels. It does not occur in the steeper channel sections, where the substrate is continually subject to downslope movement, nor in gravelly depressions where ephemeral ponding takes place. Although saturated early in the growing season, soils at all sites are dry by about mid-July. Populations occur mostly on aspects other than north. Elevations of known populations range from 7,400 to 8,400 feet. The underlying geology is uniformly intrusive, although several rock-types are present, including quartz monzonite, granodiorite, and quartz diorite.	No	Yes	No	
Tolmie's saxifrage	<i>Saxifraga tolmiei</i> var. <i>ledifolia</i>	Native Habitat: Meadows or moist rocky areas in the mountains	No	Yes	No	
Short-slyle tofieldia	<i>Triantha occidentalis</i> ssp. <i>brevistyla</i>	A plant of wet meadows, streambanks and bogs. It may also be found on moist alpine ridges.	No	No	No	

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Citation for data on website including State Distribution, Watershed, and Reptile Range maps:

NatureServe. 2015. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://explorer.natureserve.org>. (Accessed: February 25, 2017).

Citation for Bird Range Maps of North America:

Ridgely, R.S., T.F. Allnutt, T. Brooks, D.K. McNicol, D.W. Mehlman, B.E. Young, and J.R. Zook. 2003. Digital Distribution Maps of the Birds of the Western Hemisphere, version 1.0. NatureServe, Arlington, Virginia, USA.

Acknowledgement Statement for Bird Range Maps of North America:

"Data provided by NatureServe in collaboration with Robert Ridgely, James Zook, The Nature Conservancy - Migratory Bird Program, Conservation International - CABS, World Wildlife Fund - US, and Environment Canada - WILDSPACE."

Citation for Mammal Range Maps of North America:

Patterson, B.D., G. Ceballos, W. Sechrest, M.F. Tognelli, T. Brooks, L. Luna, P. Ortega, I. Salazar, and B.E. Young. 2003. Digital Distribution Maps of the Mammals of the Western Hemisphere, version 1.0. NatureServe, Arlington, Virginia, USA.

Acknowledgement Statement for Mammal Range Maps of North America:

"Data provided by NatureServe in collaboration with Bruce Patterson, Wes Sechrest, Marcelo Tognelli, Gerardo Ceballos, The Nature Conservancy-Migratory Bird Program, Conservation International-CABS, World Wildlife Fund-US, and Environment Canada-WILDSPACE."

Citation for Amphibian Range Maps of the Western Hemisphere:

IUCN, Conservation International, and NatureServe. 2004. Global Amphibian Assessment. IUCN, Conservation International, and NatureServe, Washington, DC and Arlington, Virginia, USA.

Acknowledgement Statement for Amphibian Range Maps of the Western Hemisphere:

"Data developed as part of the Global Amphibian Assessment and provided by IUCN-World Conservation Union, Conservation International and NatureServe."

2.10 Fisheries and Aquatic

The Upper Big Creek Watershed provides spawning and rearing habitat for Chinook salmon, steelhead trout, bull trout, and west slope cutthroat trout (USDA Forest Service 2003 pp III-258). Chinook salmon are an important resource that may be cumulatively affected within the Big Creek Basin, but there are no Chinook salmon in McCorkle Creek. Although some fish exist in the lower gradient sections of McCorkle Creek, there are no game species. Therefore, the re-license of the Big Creek Project would have no impact on Chinook salmon or other game species.

McCorkle Creek is a tributary stream and can be considered as influencing the water quality and quantity of aquatic habitat downstream in the Big Creek watershed, but this hydro project does not affect either downstream water quality or quantity due to run-of-river operation and absence of a reservoir.

2.11 Threatened, Endangered, and Sensitive Species

This section addresses potential effects of the Big Creek Project on federally endangered and threatened species, and Region 4 sensitive species (TE&S) that may occur in or nearby the project boundaries. Federally endangered and threatened species are those listed by the FWS under section 4 of the Endangered Species Act (ESA). The Region 4 sensitive species list is a USFS regional list that includes species ranked in the Federal Register as FWS candidate species

or ranked by the Nature Conservancy as G1(globally imperiled), G2 (locally imperiled), or G3(rare). The objectives of the FS sensitive species program are to develop and implement management practices to insure that species do not become threatened or endangered because of FS actions (FSM2670.22-1), and to maintain viable populations of all native and desired non-native wildlife, fish, and plant species in habitats distributed throughout their geographic range on FS lands (FSM 2670.22-2).

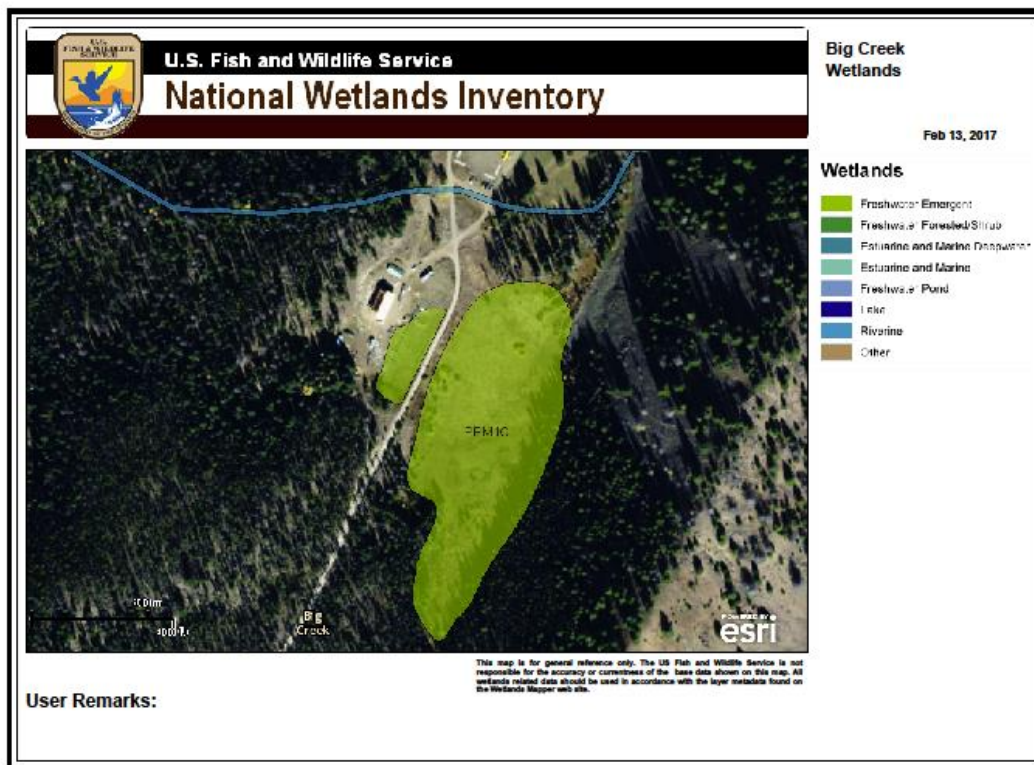
A document entitled “Intermountain Region (R4) Threatened, Endangered, Proposed, and Sensitive Species, June 2106, Known/Suspected Distribution by Forest” is attached above in section 2.9 *Wildlife* for information. Forest identifier “PAY”, indicating the Payette National Forest, is the forest of note for the Big Creek Lodge and Big Creek Project. The Canada lynx, Gray wolf, Chinook salmon, and other game fish have been discussed in previous sections; 2.9 *Wildlife and 2.10 Fisheries and Aquatic*.

As recorded previously in this document, a US Department of Agriculture, Forest Service, Resort/Marina Term Special Use Permit for 30 years was issued by the FS on May 31, 2013 to the IAF for Big Creek Lodge, including the Big Creek Project. On page 21, paragraph H, Protection of Habitat of Endangered, Threatened, and Sensitive Species specifies that the permit holder shall be responsible for protective and mitigative measures specified by the authorized officer. It further states that if protective measures prove inadequate, if other such areas are discovered, or if new species are listed as federally threatened or endangered or as sensitive by the Regional Forester, the authorized officer may specify additional protection regardless of when such facts become known. Discovery of such areas by either party are to be promptly reported to the other party.

Location of areas needing special measures for protection of plants or animals listed as threatened or endangered under the ESA of 1973, 16 U.S.C.531 et seq., as amended, or as sensitive by the Regional Forester under authority of FSM 2670, derived from ESA Section 7, Consultation, may be shown on a separate map, and made a part of the permit, or identified on the ground. No such map was included as part of the permit, and there have been no areas “identified on the ground”.

2.12 Wetlands

Figure 4.1-1 National Wetlands Inventory - Big Creek Wetlands



Based on a review of the National Wetlands Inventory (NWI) maps as a source document, the corral west and the pasture east of the Yellow Pine/Big Creek road within the boundaries of the FS Special Use Permit for Big Creek Lodge and the Big Creek Project are wetlands with the designation PEM1C. The code description is as follows:

P System PALUSTRINE: The Palustrine System includes all non-tidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below .05 ppt.

EM Class EMERGENT: Characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.

1 Subclass PERSISTENT: Dominated by species that normally remain standing at least until the beginning of the next growing season. This subclass is found only in the Estuarine and Palustrine systems.

C Water Regime SEASONALLY FLOODED: Surface water is present for extended periods especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.

The corral and pasture, fenced by native buck and rail fencing, are listed as site improvements in the Special Use Permit, and are managed per a Pasture Management Plan that is included in the permit as Exhibit B. The plan is based on the Animal Unit Month basis, defined as the forage consumed by one animal for 30 days, and regulates the number of head of stock that can be grazed by the public and for the benefit of guests of Big Creek Lodge.

Big Creek Lodge, with its' corral and pasture, has been operating at this FS site since it was built in 1934. With the FS Guard Station co-located in the same valley, FS personnel are well acquainted with the past operations of the lodge and the new permit is reflective of lodge operating measures that have proven to be viable and protective of FS property, including those areas that are designated wetlands.

The Big Creek Project is outside of the wetland areas, and was installed and has operated since 1968 with no negative impacts.

2.13 Water Quality and Quantity

McCorkle Creek is a tributary to Big Creek. Extensive searches reveal no water quality data for McCorkle Creek. Since it is located in a remote area of the PNF and there is presently four feet of snow on the ground, no samples can be drawn before late spring (if required).

The creek has been used as a source of drinking water in the past, the FS Guard Station at Big Creek draws its' water from a spring located just above the Big Creek Project diversion, and since there is no other type of development in the watershed of this small mountain creek, it is assumed water quality is good to excellent.

The total water diverted for hydroelectric generation is limited to 0.75 cfs during the seasonal operation (May-October) of the Big Creek Lodge. Water used for power generation is a non-consumptive use and is returned at the same quality and quantity to the creek bed 1340' downstream from which it was drawn. The average mean annual flow for McCorkle Creek is 3 cfs, and since only 0.75 cfs or no more than half of any flow present in the stream is allowed for generation, and because there are no game fish, rare aquatic species, or recreational fishing in McCorkle Creek, the bypass flow is and has been adequate to protect the biological resources of the creek.

2.14 Air

The Big Creek Project is in Valley County, Idaho. Particulate matter is the primary pollutant of concern related to Forest Management. Between 1995 and 1999, emissions trends in Valley County improved for PM₁₀, while PM_{2.5} emissions remained constant. The most common sources of particulate matter within the county were wildfire, prescribed fire, and fugitive dust from unpaved roads. There were no point sources within the county (USDA Forest Service 2003 pp. 258).

The Big Creek Project is a non-emissions energy source, and with the improvement in generating capacity (.075kW to 3.5kW) derived from upgrading the turbine/generator unit, emissions will be reduced from a propane fuel backup/auxiliary generator. When water flows in McCorkle Creek at historic norms, the generating capacity of the hydro unit will be adequate to meet lodge requirements.

2.15 Monitoring

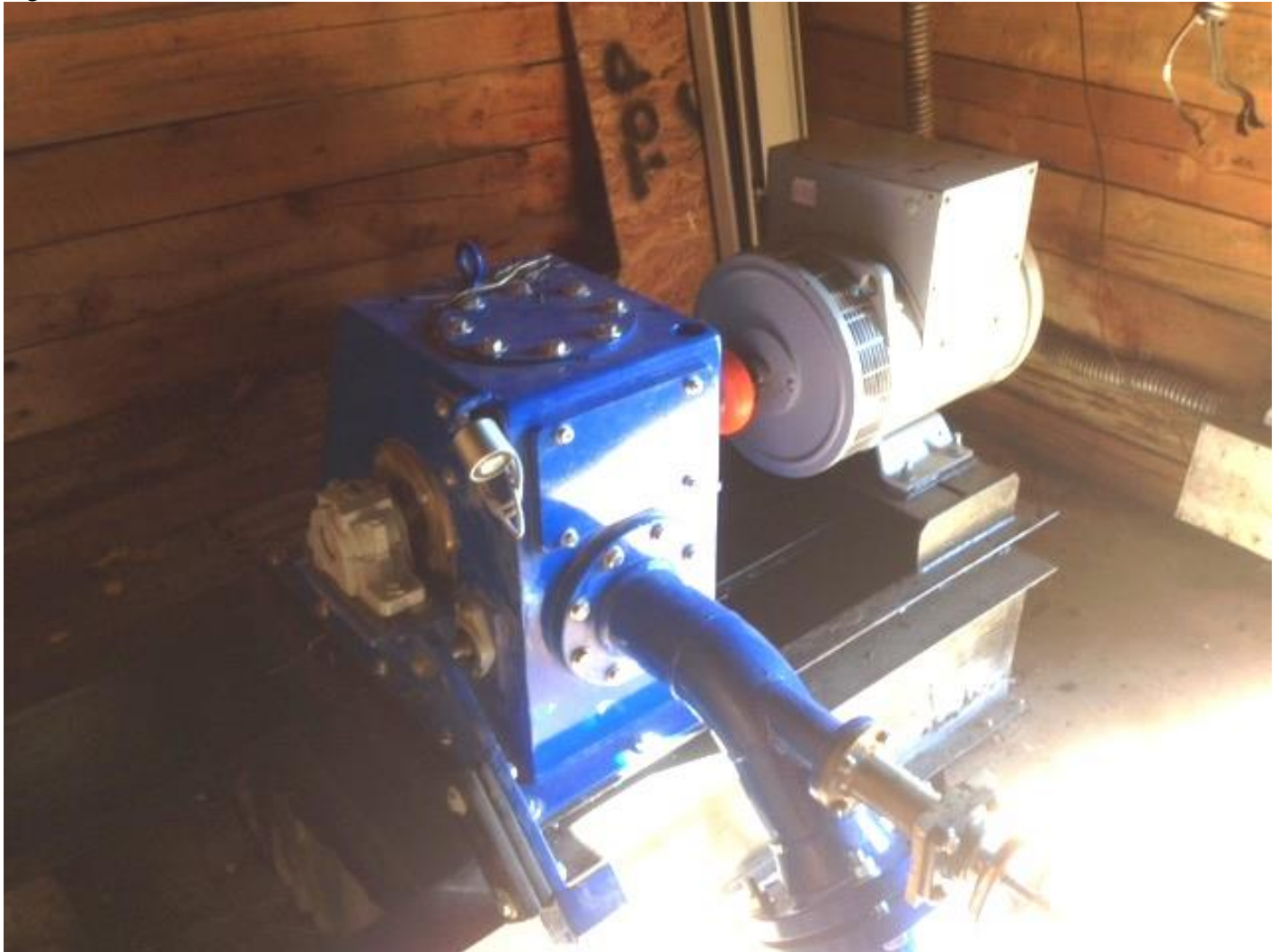
Monitoring and reporting will be conducted as required by the Big Creek Lodge Special Use Permit for Archaeological-Paleontological Discoveries (none expected) in accordance with 25 U.S.C. 3002(d) and 43 CFR10.4 for Native American Graves Protection and Repatriation (NAGPRA) and, as called out, the Protection of Habitat of Endangered, Threatened, and Sensitive Species (nothing was called out).

Section 3 -Mitigation and specific requirements of the federal land manager (Payette National Forest) to protect and enhance environmental resources and values and to mitigate adverse impacts of the project on such resources.

Preliminary Issues and Studies List

No issues or potential studies have been identified that are associated with the currently licensed Big Creek Project. There are no known negative environmental impacts to the resource area that are detailed in this section. This project was installed and became operational almost 49 years ago and is a fully mature installation with no additional modifications planned. With the system's small size, non-consumptive and non-polluting use of water and mandatory minimum stream bed flow requirements, there just isn't much that can go wrong and damage the environment, wildlife, etc. The turbine and generator replacement previously described will allow more power production from a renewable hydro energy source and reduce emissions from the backup/emergency fossil fuel powered generator, providing a positive improvement in area air quality. The installation of an efficient hydro power source offers real environmental benefits.

Figure 4.1-2 New Turbine and Generator



Section 4 - References Cited:

Bailey, Robert G. *Description of the Ecoregions of the United States*. 1980.
<https://www.fws.gov/wetlands/Documents/Description-of-the-Ecoregions-of-the-United-States.pdf>. Accessed 19 February 2017.

Big Creek Project (P-10721)

Kaminski, T., and J. Hansen. 1984. *Wolves of Central Idaho*. *Montana Cooperative Wildlife Research Unit, U.S. Fish and Wildlife Service*, Technical report or bulletin.

USDA Forest Service. 2003. Forest Management Area 13 Big Creek/Stibnite. Payette National Forest Land and Resource Management, pp. III-256-262.

(US Fish and Wildlife Service (FWS) Recovery Outline - Sept. 2005).

FSM2670.22. 2005. *FSM 2600 - Wildlife, Fish, and Sensitive Plant Habitat Management, Chapter 2670-Threatened, Endangered and Sensitive Plants and Animals*, USDA Forest Service Manual. pp. 4.

(US Fish and Wildlife Service (FWS) Recovery Outline - Sept. 2005).

“Wilderness Act” (16 U.S.C. 1121 (note))

4.2 Socioeconomic Resources

The Big Creek Project is located in a remote mountainous forest and serves a small wilderness lodge. Dirt road accesses the valley from either Yellow Pine (24 miles away) or Warren (40 miles away). Also in the vicinity are multiple private cabins (the community of Edwardsburg) and a USFS Ranger Station. Historically there was mining nearby, but none are currently operating. There is a commercial outfitting business about 1 mile south that operates in the surrounding area and there is a 3500' grass runway maintained by the state of Idaho.

4.3 Tribal Resources

During the licensing process for the Big Creek Project that culminated in a minor license dated March 26, 1992 it was determined the project would not affect tribal lands, other tribal interests, or treaty rights. The IAF will reach out to the tribes in the area of central Idaho to confirm that the above statement is still valid and factual.

APPENDIX A - DISTRIBUTION LIST

Kootenai Tribe
Northern Idaho Agency
David Shaw, Acting Superintendent
Bureau of Indian Affairs
PO Drawer 277
Lapwai, ID 83540

Kootenai Tribe of Idaho
Northern Idaho Agency
Gary Aitken Jr., Chairman
PO Box 1269
Bonners Ferry, ID 83805-1269

US Fish and Wildlife Service
US Department of the Interior
Attn: Director
1849 C Street NW, Room 3238
Washington, DC 20240-0001

US Environmental Protection Agency
Attn: Region 10 Administrator
1200 Sixth Avenue
Seattle, WA 98101

Hydropower Reform Coalition
Attn: National Coordinator
830 Reville Street
Bellingham, WA 98229

Idaho Department of Fish and Game
Virgil Moore, Director
PO Box 25
Boise, ID 83707-0025

Idaho Parks and Recreation
David Langhorst, Director
5657 Warm Springs Avenue
Boise, ID 83716-8700

Idaho State Historical Society
Janet Gallimore, Executive Director
2205 Old Penitentiary Road
Boise, ID 83712

Matt Cutlip
Federal Energy Regulatory Commission
805 SW Broadway, Suite 550
Portland, OR 97205

Nez Perce Tribe
Northern Idaho Agency
David Shaw, Acting Superintendent
Bureau of Indian Affairs
PO Drawer 277
Lapwai, ID 83540

US Forest Service
Intermountain Region (R4)
324 25th Street
Ogden, UT 84401

National Marine Fisheries Service
Idaho State Habitat Office
David Mabe, State Director
800 E. Park Blvd., Suite 220
Boise, ID 83712-7768

United States Geological Survey
Attn: Western Regional Director
345 Middlefield Road
Menlo Park, CA 94025

Idaho Department of Environmental Quality
Water Quality Division
Barry Burnell, Administrator
1410 North Hilton
Boise, ID 83706

Idaho Department of Environmental Quality
Surface Water Manager
Don Essig, Program Manager
1410 North Hilton
Boise, ID 83706

Golden Eagle Audubon Society
PO Box 8261
Boise, ID 83707

Federal Energy Regulatory Commission
Portland Regional Office
805 SW Broadway
Fox Tower - Suite 550
Portland, Or 97205

Jim Nutt-Fisheries Biologist
Inter-Regional Ditch Bill Team
Forest Service, Region 4, Intermountain Region
161 East Mallard Drive, Suite 110
Boise, ID 83706

Nez Perce Tribe
Nez Perce Agency
Mary Jane Miles, Chairman
PO Box 305
Lapwai, ID 83540-0305

US Fish and Wildlife Service
Pacific Region Director
911 NE 11th Avenue
Portland, OR 97232

National Park Service
US Department of the Interior
Attn: Headquarters Director
1849 C Street NW
Washington, DC 20240

USDA Forest Service
1400 Independence Avenue SW
Washington, DC 20250-1111

Payette National Forest
800 W. Lakeside Avenue
McCall, ID 83638

Idaho Department of Water Resources
PO Box 83720
Boise, ID 83720-0098

Valley County Commissioners
PO Box 1350
Cascade, ID 83611

Ms. Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Appendix B - Big Creek Hydropower Project Special Use Permit

USDA United States
Department of Agriculture

Forest
Service

Payette
National
Forest

500 N. Mission Street
McCall, ID 83638
208-634-6000

File Code: 2720
Date: June 21, 2013

Jim Davies President
J. Curtis Earl Idaho Aviation Foundation, Inc.
PO Box 2016
Eagle, ID 83616-9110

Dear Mr. Davies:

Enclosed is a signed special use permit for the operation and maintenance of the Big Creek Hydropower Project (P-1021). This permit includes a 2'x3' diversion darn in McCorkle Creek and a 4" buried penstock that runs approximately 1340 feet to a 12' x 14' log power house. The permit also includes 350 feet of buried transmission line from the power house to the lodge. The pennit will expire on February 28, 2022.

The Federal Energy Regulatory Commission (FERC) has planned an inspection of this licensed hydropower facility on July 10th at 12pm. Kathy Nash, Special Uses Coordinator, is planning to accompany the FERC inspector on this trip.

If you have questions about the terms and conditions in the permit or attached operating plan, please contact Kathy at (208)634-0416. I appreciate your coordination in getting this permit issued.

Sincerely,



ANTHONY B. BOTELLO
District Ranger

ENCLOSURE

cc: Kathryn S Nash

**U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE**

SPECIAL USE PERMIT

Authority: FEDERAL LAND POLICY AND MGMT ACT, AS AMENDED October 21, 1976

J. CURTIS EARL IDAHO AVIATION FOUNDATION, INC. of PO Box 2016 , Eagle ID 83616-9110 (hereinafter "the holder") is authorized to use or occupy National Forest System lands in the Payette National Forest subject to the terms and conditions of this special use permit (the permit) .

This permit covers .4 acres and is described as being located in T.21 N., R.9E., section 26, ("the permit area"), as shown on the map attached as Appendix A . This permit issued for the purpose of :

Operation and maintenance of the Big Creek Hydropower Project (P-10721). The project includes a water diversion structure , penstock, powerhouse, transmission line and access road associated with the Hydroelectric facilities on National Forest System lands.

The facilities are described below:

A log head-box diverts water from Mccorkle Creek into a 4" buried penstock that runs approximately 1340 feet to a small log building (power house). There is also 350 feet of buried power transmission line from the power house to the lodge.

Access to the diversion structure is by ATV on a two-track dirt road accessed from the lodge area.

The water right for this use is issued to the U.S. Department of Agriculture, Forest Service, as number 77-07334. This right is issued for use of .75 cfs from January 1 through December 31 .

TERMS AND CONDITIONS

I. GENERAL TERMS

A. AUTHORITY. This permit is issued pursuant to Federal Land Policy and Management Act , as amended October 21, 1976 and 36 CFR Part 251, Subpart 8, as amended, and is subject to their provisions.

B. AUTHORIZED OFFICER. The authorized officer is the Forest or Grassland Supervisor or a subordinate officer with delegated authority .

C. TERM. This permit shall expire at midnight on 02/28/2022, 8 years and 9 months from the date of issuance.

D. RENEWAL. This permit is not renewable. Prior to expiration of this permit, the holder may apply for a new permit that would renew the use and occupancy authorized by this permit. Applications for a new permit must be submitted at least 6 months prior to expiration of this permit. Renewal of the use and occupancy authorized by this permit shall be at the sole discretion of the authorized officer. At a minimum, before renewing the use and occupancy authorized by this permit, the authorized officer shall require that (1) the use and occupancy to be authorized by the new permit is consistent with the standards and guidelines in the applicable land management plan; (2) the type of use and occupancy to be authorized by the new permit is the same as the type of use and occupancy authorized by this permit; and (3) the holder is in compliance with all the terms of this permit. The authorized officer may prescribe new terms and conditions when a new permit is issued.

E. AMENDMENT. This permit may be amended in whole or in part by the Forest Service when, at the discretion of the authorized officer, such action is deemed necessary or desirable to incorporate new terms that may be required by law , regulation, directive, the applicable forest land and resource management plan, or projects and activities implementing a land management plan pursuant to 36 CFR Part 215.

F. COMPLIANCE WITH LAWS, REGULATIONS, AND OTHER LEGAL REQUIREMENTS. In exercising the rights and privileges granted by this permit, the holder shall comply with all present and future federal laws and regulations and all present and future state, county, and municipal laws, regulations , and other legal requirements that apply to the permit area, to the extent they do not conflict with federal law, regulation, or policy. The Forest Service assumes no responsibility for enforcing laws, regulations, and other legal requirements that fall under the jurisdiction of other governmental entities.

G. NON-EXCLUSIVE USE. The use or occupancy authorized by this permit is not exclusive . The Forest Service reserves the right of access to the permit area, including a continuing right of physical entry to the permit area for inspection , monitoring, or any other purpose consistent with any right or obligation of the United States under any law or regulation. The Forest Service reserves the right to allow others to use the permit area in any way that is not inconsistent with the holder's rights and privileges under this permit, after consultation with all parties involved. Except for any restrictions that the holder and the authorized officer agree are necessary to protect the installation and operation of authorized temporary improvements , the lands and waters covered by this permit shall remain open to the public for all lawful purposes.

H. ASSIGNABILITY. This permit is not assignable or transferable.

I. TRANSFER OF TITLE TO THE IMPROVEMENTS.

1. **Notification of Transfer.** The holder shall notify the authorized officer when a transfer of title to all or part of the authorized improvements is contemplated .

2. **Transfer of Title.** Any transfer of title to the improvements covered by this permit shall result in termination of the permit. The party who acquires title to the improvements must submit an application for a permit. The Forest Service is not obligated to issue a new permit to the party who acquires title to the improvements. The authorized officer shall determine that the applicant meets requirements under applicable federal regulations.

J. CHANGE IN CONTROL OF THE BUSINESS ENTITY.

1. **Notification of Change in Control.** The holder shall notify the authorized officer when a change in control of the business entity that holds this permit is contemplated .

a. In the case of a corporation , control is an interest, beneficial or otherwise, of sufficient outstanding voting securities or capital of the business so as to permit the exercise of managerial authority over the actions and operations of the corporation or election of a majority of the board of directors of the corporation.

b. In the case of a partnership, limited partnership, joint venture , or individual entrepreneurship , control is a beneficial ownership of or interest in the entity or its capital so as to permit the exercise of managerial authority over the actions and operations of the entity.

c. In other circumstances , control is any arrangement under which a third party has the ability to exercise management authority over the actions or operations of the business.

2. **Effect of Change in Control.** Any change in control of the business entity as defined in paragraph 1 of this clause shall result in termination of this permit. The party acquiring control must submit an application for a special use permit. The Forest Service is not obligated to issue a new permit to the party who acquires control. The authorized officer shall determine whether the applicant meets the requirements established by applicable federal regulations.

II. IMPROVEMENTS

A. LIMITATIONS ON USE. Nothing in this permit gives or implies permission to build or maintain any structure or facility or to conduct any activity , unless specifically authorized by this permit. Any use not specifically authorized by this permit must be proposed in accordance with 36 CFR 251 .54. Approval of such a proposal through issuance of a new permit or permit amendment is at the sole discretion of the authorized officer.

B. PLANS. All plans for development , layout, construction , reconstruction , or alteration of improvements in the permit area, as well as revisions to those plans must be prepared by a professional engineer, architect, landscape architect , or other qualified professional based on federal employment standards acceptable to the authorized officer . These plans and plan revisions must have written approval from the authorized officer before they are implemented. The authorized officer may require the holder to furnish as-built plans, maps, or surveys upon completion of the work .

C. CONSTRUCTION. Any construction authorized by this permit shall commence by n/a and shall be completed by n/a.

III. OPERATIONS.

A. PERIOD OF USE. Use or occupancy of the permit area shall be exercised at least 60 days each year.

B. CONDITION OF OPERATIONS. The holder shall maintain the authorized improvements and permit area to standards

of repair, orderliness, neatness, sanitation, and safety acceptable to the authorized officer and consistent with other provisions of this permit. Standards are subject to periodic change by the authorized officer when deemed necessary to meet statutory, regulatory, or policy requirements or to protect national forest resources. The holder shall comply with inspection requirements deemed appropriate by the authorized officer.

C. OPERATING PLAN. The holder shall prepare and annually revise by as needed an operating plan. The operating plan shall be prepared in consultation with the authorized officer or the authorized officer's designated representative and shall cover all operations authorized by this permit. The operating plan shall outline steps the holder will take to protect public health and safety and the environment and shall include sufficient detail and standards to enable the Forest Service to monitor the holder's operations for compliance with the terms and conditions of this permit. The operating plan shall be submitted by the holder and approved by the authorized officer or the authorized officer's designated representative prior to commencement of operations and shall be attached to this permit as an appendix. The authorized officer may require an annual meeting with the holder to discuss the terms and conditions of the permit or operating plan, annual use reports, or other concerns either party may have.

D. INSPECTION BY THE FOREST SERVICE. The Forest Service shall monitor the holder's operations and reserves the right to inspect the permit area and transmission facilities at any time for compliance with the terms of this permit. The holder's obligations under this permit are not contingent upon any duty of the Forest Service to inspect the permit area or transmission facilities. A failure by the Forest Service or other governmental officials to inspect is not a justification for noncompliance with any of the terms and conditions of this permit.

IV. RIGHTS AND LIABILITIES

A. LEGAL EFFECT OF THE PERMIT. This permit, which is revocable and terminable, is not a contract or a lease, but rather a federal license. The benefits and requirements conferred by this authorization are reviewable solely under the procedures set forth in 36 CFR Part 251, Subpart C, and 5 U.S.C. 704. This permit does not constitute a contract for purposes of the Contract Disputes Act, 41 U.S.C. 601. The permit is not real property, does not convey any interest in real property, and may not be used as collateral for a loan.

B. VALID OUTSTANDING RIGHTS. This permit is subject to all valid outstanding rights. Valid outstanding rights include those derived under mining and mineral leasing laws of the United States. The United States is not liable to the holder for the exercise of any such right.

C. ABSENCE OF THIRD-PARTY BENEFICIARY RIGHTS. The parties to this permit do not intend to confer any rights on any third party as a beneficiary under this permit.

D. SERVICES NOT PROVIDED. This permit does not provide for the furnishing of road or trail maintenance, water, fire protection, search and rescue, or any other such service by a government agency, utility, association, or individual.

E. RISK OF LOSS. The holder assumes all risk of loss associated with use or occupancy of the permit area, including but not limited to theft, vandalism, fire and any fire-fighting activities (including prescribed burns), avalanches, rising waters, winds, falling limbs or trees, and other forces of nature. If authorized temporary improvements in the permit area are destroyed or substantially damaged, the authorized officer shall conduct an analysis to determine whether the improvements can be safely occupied in the future and whether rebuilding should be allowed. If rebuilding is not allowed, the permit shall terminate.

F. DAMAGE TO UNITED STATES PROPERTY. The holder has an affirmative duty to protect from damage the land, property, and other interests of the United States. Damage includes but is not limited to fire suppression costs, damage to government-owned improvements covered by this permit, and all costs and damages associated with or resulting from the release or threatened release of a hazardous material occurring during or as a result of activities of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees on, or related to, the lands, property, and other interests covered by this permit. For purposes of clause IV.F and section V, "hazardous material" shall mean (a) any hazardous substance under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any petroleum product or its derivative, including fuel oil, and waste oils; and (d) any hazardous substance, extremely hazardous substance, toxic substance, hazardous waste, ignitable, reactive or corrosive materials, pollutant, contaminant, element, compound, mixture, solution or substance that may pose a present or potential hazard to human health or the environment under any applicable environmental laws.

1. The holder shall avoid damaging or contaminating the environment, including but not limited to the soil, vegetation (such as trees, shrubs, and grass), surface water, and groundwater, during the holder's use or occupancy of the permit area. If the environment or any government property covered by this permit becomes damaged during the holder's use or occupancy of the permit area, the holder shall immediately repair the damage or replace the damaged items to the satisfaction of the authorized officer and at no expense to the United States.

2. The holder shall be liable for all injury, loss, or damage, including fire suppression, prevention and control of the spread of invasive species, or other costs in connection with rehabilitation or restoration of natural resources associated with the use or occupancy authorized by this permit. Compensation shall include but not be limited to the value of resources damaged or destroyed, the costs of restoration, cleanup, or other mitigation, fire suppression or other types of abatement costs, and all administrative, legal (including attorney's fees) , and other costs. Such costs may be deducted from a performance bond required under clause IV.I.

3. The holder shall be liable for damage caused by use of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees to all roads and trails of the United States to the same extent as provided under clause IV.F.1, except that liability shall not include reasonable and ordinary wear and tear

G. HEALTH, SAFETY, AND ENVIRONMENTAL PROTECTION. The holder shall promptly abate as completely as possible and in compliance with all applicable laws and regulations any activity or condition arising out of or relating to the authorized use or occupancy that causes or threatens to cause a hazard to public health or the safety of the holder's employees or agents or harm to the environment (including areas of vegetation or timber, fish or other wildlife populations, their habitats, or any other natural resources). The holder shall prevent impacts to the environment and cultural resources by implementing actions identified in the operating plan to prevent establishment and spread of invasive species . The holder shall immediately notify the authorized officer of all serious accidents that occur in connection with such activities. The responsibility to protect the health and safety of all persons affected by the use or occupancy authorized by this permit is solely that of the holder. The Forest Service has no duty under the terms of this permit to inspect the permit area or operations and activities of the holder for hazardous conditions or compliance with health and safety standards.

H. INDEMNIFICATION OF THE UNITED STATES. The holder shall indemnify, defend, and hold harmless the United States for any costs, damages, claims, liabilities, and judgments arising from past, present, and future acts or omissions of the holder in connection with the use or occupancy authorized by this permit. This indemnification provision includes but is not limited to acts and omissions of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees in connection with the use or occupancy authorized by this permit which result in (1) violations of any laws and regulations which are now or which may in the future become applicable, and including but not limited to those environmental laws listed in clause V.A of this permit; (2) judgments, claims, demands, penalties, or fees assessed against the United States; (3) costs, expenses , and damages incurred by the United States; or (4) the release or threatened release of any solid waste, hazardous waste, hazardous materials, pollutant, contaminant, oil in any form, or petroleum product into the environment. The authorized officer may prescribe terms that allow the holder to replace, repair, restore, or otherwise undertake necessary curative actions to mitigate damages in addition to or as an alternative to monetary indemnification.

I. BONDING. The authorized officer may require the holder to furnish a surety bond or other security for any of the obligations imposed by the terms and conditions of this permit or any applicable law, regulation, or order.

V. RESOURCE PROTECTION

A. COMPLIANCE WITH ENVIRONMENTAL LAWS. The holder shall in connection with the use or occupancy authorized by this permit comply with all applicable federal, state, and local environmental laws and regulations, including but not limited to those established pursuant to the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq., the Federal Water Pollution Control Act , as amended, 33 U.S.C. 1251 et seq., the Oil Pollution Act, as amended, 33 U.S.C. 2701 et seq., the Clean Air Act , as amended, 42 U.S.C. 7401 et seq., CERCLA, as amended, 42 U.S.C. 9601 et seq., the Toxic Substances Control Act, as amended, 15 U.S.C. 2601 et seq., the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, 7 U.S.C. 136 et seq., and the Safe Drinking Water Act, as amended, 42 U.S.C. 3001 et seq.

B. VANDALISM. The holder shall take reasonable measures to prevent and discourage vandalism and disorderly conduct and when necessary shall contact the appropriate law enforcement officer .

C. PESTICIDE USE. Pesticides may not be used outside of buildings to control undesirable woody and herbaceous vegetation (including aquatic plants), insects, rodents, fish, and other pests and weeds without prior written approval from the authorized officer. A request for approval of planned uses of pesticides shall be submitted annually by the holder on the due date established by the authorized officer . The report shall cover a 12-month period of planned use beginning 3 months after the reporting date. Information essential for review shall be provided in the form specified. Exceptions to this schedule may be allowed, subject to emergency request and approval , only when unexpected outbreaks of pests or weeds require control measures that were not anticipated at the time an annual report was submitted. Only those materials registered by the U.S. Environmental Protection Agency for the specific purpose planned shall be considered for use on National Forest System lands. Label instructions and all applicable laws and regulations shall be strictly followed in the application of pesticides and disposal of excess materials and containers .

D. ARCHAEOLOGICAL-PALEONTOLOGICAL DISCOVERIES . The holder shall immediately notify the authorized officer of all antiquities or other objects of historic or scientific interest, including but not limited to historic or prehistoric ruins, fossils, or artifacts discovered in connection with the use and occupancy authorized by this permit. The holder shall leave these discoveries intact and in place until directed otherwise by the authorized officer. Protective and mitigative measures specified by the authorized officer shall be the responsibility of the holder.

E. NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION . In accordance with 25 U.S.C. 3002(d) and 43 CFR 10.4, if the holder inadvertently discovers human remains, funerary objects, sacred objects, or objects of cultural patrimony on National Forest System lands, the holder shall immediately cease work in the area of the discovery and shall make a reasonable effort to protect and secure the items. The holder shall immediately notify the authorized officer by telephone of the discovery and shall follow up with written confirmation of the discovery. The activity that resulted in the inadvertent discovery may not resume until 30 days after the authorized officer certifies receipt of the written confirmation, if resumption of the activity is otherwise lawful, or at any time if a binding written agreement has been executed between the Forest Service and the affiliated Indian tribes that adopts a recovery plan for the human remains and objects.

F. PROTECTION OF HABITAT OF THREATENED, ENDANGERED, AND SENSITIVE SPECIES. The location of sites within the permit area needing special measures for protection of plants or animals listed as threatened or endangered under the Endangered Species Act (ESA) of 1973, 16 U.S.C. 1531 et seq., as amended, or identified as sensitive or otherwise requiring special protection by the Regional Forester under Forest Service Manual (FSM) 2670, pursuant to consultation conducted under section 7 of the ESA, may be shown on the ground or on a separate map. The map shall be attached to this permit as an appendix. The holder shall take any protective and mitigative measures specified by the authorized officer. If protective and mitigative measures prove inadequate, if other sites within the permit area containing threatened, endangered, or sensitive species or species otherwise requiring special protection are discovered, or if new species are listed as threatened or endangered under the ESA or identified as sensitive or otherwise requiring special protection by the Regional Forester under the FSM, the authorized officer may specify additional protective and mitigative measures. Discovery of these sites by the holder or the Forest Service shall be promptly reported to the other party.

G. CONSENT TO STORE HAZARDOUS MATERIALS. The holder shall not store any hazardous materials at the site without prior written approval from the authorized officer. This approval shall not be unreasonably withheld. If the authorized officer provides approval, this permit shall include, or in the case of approval provided after this permit is issued, shall be amended to include specific terms addressing the storage of hazardous materials, including the specific type of materials to be stored, the volume, the type of storage, and a spill plan. Such terms shall be proposed by the holder and are subject to approval by the authorized officer.

H. CLEANUP AND REMEDIATION

1. The holder shall immediately notify all appropriate response authorities, including the National Response Center and the authorized officer or the authorized officer's designated representative, of any oil discharge or of the release of a hazardous material in the permit area in an amount greater than or equal to its reportable quantity, in accordance with 33 CFR Part 153, Subpart B, and 40 CFR Part 302. For the purposes of this requirement, "oil" is as defined by section 311(a)(1) of the Clean Water Act, 33 U.S.C. 1321(a)(1). The holder shall immediately notify the authorized officer or the authorized officer's designated representative of any release or threatened release of any hazardous material in or near the permit area which may be harmful to public health or welfare or which may adversely affect natural resources on federal lands.

2. Except with respect to any federally permitted release as that term is defined under Section 101(10) of CERCLA, 42 U.S.C. 9601 (10), the holder shall clean up or otherwise remediate any release, threat of release, or discharge of hazardous materials that occurs either in the permit area or in connection with the holder's activities in the permit area, regardless of whether those activities are authorized under this permit. The holder shall perform cleanup or remediation immediately upon discovery of the release, threat of release, or discharge of hazardous materials. The holder shall perform the cleanup or remediation to the satisfaction of the authorized officer and at no expense to the United States. Upon revocation or termination of this permit, the holder shall deliver the site to the Forest Service free and clear of contamination.

I. CERTIFICATION UPON REVOCATION OR TERMINATION . If the holder uses or stores hazardous materials at the site, upon revocation or termination of this permit the holder shall provide the Forest Service with a report certified by a professional or professionals acceptable to the Forest Service that the permit area is uncontaminated by the presence of hazardous materials and that there has not been a release or discharge of hazardous materials upon the permit area, into surface water at or near the permit area, or into groundwater below the permit area during the term of the permit. This certification requirement may be waived by the authorized officer when the Forest Service determines that the risks posed by the hazardous material are minimal. If a release or discharge has occurred, the professional or professionals shall document and certify that the release or discharge has been fully remediated and that the permit area is in compliance with all federal, state, and local laws and regulations.

VI. LAND USE FEE AND ACCOUNTING ISSUES

A. LAND USE FEES. The use or occupancy authorized by this permit is exempt from a land use fee or the land use fee has been waived in full pursuant to 36 CFR 251 .57 and Forest Service Handbook 2709.11 , Chapter 30.

B. MODIFICATION OF THE LAND USE FEE. The land use fee may be revised whenever necessary to reflect the market value of the authorized use or occupancy or when the fee system used to calculate the land use fee is modified or replaced.

C. FEE PAYMENT ISSUES.

1. Crediting of Payments. Payments shall be credited on the date received by the deposit facility , except that if a payment is received on a non-workday , the payment shall not be credited until the next workday .

2. Disputed Fees. Fees are due and payable by the due date. Disputed fees must be paid in full. Adjustments will be made if dictated by an administrative appeal decision, a court decision, or settlement terms.

3. Late Payments

(a) Interest. Pursuant to 31 U.S.C. 3717 et seq., interest shall be charged on any fee amount not paid within 30 days from the date it became due. The rate of interest assessed shall be the higher of the Prompt Payment Act rate or the rate of the current value of funds to the Treasury (i.e., the Treasury tax and loan account rate), as prescribed and published annually or quarterly by the Secretary of the Treasury in the Federal Register and the Treasury Fiscal Requirements Manual Bulletins. Interest on the principal shall accrue from the date the fee amount is due.

(b) Administrative Costs. If the account becomes delinquent , administrative costs to cover processing and handling the delinquency shall be assessed.

(c) Penalties. A penalty of 6% per annum shall be assessed on the total amount that is more than 90 days delinquent and shall accrue from the same date on which interest charges begin to accrue.

(d) Termination for Nonpayment. This permit shall terminate without the necessity of prior notice and opportunity to comply when any permit fee payment is 90 calendar days from the due date in arrears. The holder shall remain responsible for the delinquent fees.

4. Administrative Offset and Credit Reporting. Delinquent fees and other charges associated with the permit shall be subject to all rights and remedies afforded the United States pursuant to 31 U.S.C. 3711 et seq. and common law. Delinquencies are subject to any or all of the following :

(a) Administrative offset of payments due the holder from the Forest Service.

(b) If in excess of 60 days, referral to the Department of the Treasury for appropriate collection action as provided by 31 U.S.C. 3711(g)(1).

(c) Offset by the Secretary of the Treasury of any amount due the holder, as provided by 31 U.S.C. 3720 et seq.

(d) Disclosure to consumer or commercial credit reporting agencies.

VII. REVOCATION, SUSPENSION, AND TERMINATION

A. REVOCATION AND SUSPENSION. The authorized officer may revoke or suspend this permit in whole or in part:

1. For noncompliance with federal , state, or local law.
2. For noncompliance with the terms of this permit.
3. For abandonment or other failure of the holder to exercise the privileges granted.
4. With the consent of the holder.

5. For specific and compelling reasons in the public interest.

Prior to revocation or suspension, other than immediate suspension under clause VJ.8, the authorized officer shall give the holder written notice of the grounds for revocation or suspension. In the case of revocation or suspension based on clause VII.A.1, 2, or 3, the authorized officer shall give the holder a reasonable time, typically not to exceed 90 days, to cure any noncompliance.

B. IMMEDIATE SUSPENSION. The authorized officer may immediately suspend this permit in whole or in part when necessary to protect public health or safety or the environment. The suspension decision shall be in writing. The holder may request an on-site review with the authorized officer's supervisor of the adverse conditions prompting the suspension. The authorized officer's supervisor shall grant this request within 48 hours. Following the on-site review, the authorized officer's supervisor shall promptly affirm, modify, or cancel the suspension.

C. APPEALS AND REMEDIES. Written decisions by the authorized officer relating to administration of this permit are subject to administrative appeal pursuant to 36 CFR Part 251, Subpart C, as amended. Revocation or suspension of this permit shall not give rise to any claim for damages by the holder against the Forest Service.

D. TERMINATION. This permit shall terminate when by its terms a fixed or agreed upon condition, event, or time occurs without any action by the authorized officer. Examples include but are not limited to expiration of the permit by its terms on a specified date and termination upon change of control of the business entity. Termination of this permit shall not require notice, a decision document, or any environmental analysis or other documentation. Termination of this permit is not subject to administrative appeal and shall not give rise to any claim for damages by the holder against the Forest Service.

E. RIGHTS AND RESPONSIBILITIES UPON REVOCATION OR TERMINATION WITHOUT RENEWAL. Upon revocation or termination of this permit without renewal of the authorized use, the holder shall remove all structures and improvements, except those owned by the United States, within a reasonable period prescribed by the authorized officer and shall restore the site to the satisfaction of the authorized officer. If the holder fails to remove all structures and improvements within the prescribed period, they shall become the property of the United States and may be sold, destroyed, or otherwise disposed of without any liability to the United States. However, the holder shall remain liable for all costs associated with their removal, including costs of sale and impoundment, cleanup, and restoration of the site.

VIII. MISCELLANEOUS PROVISIONS

A. MEMBERS OF CONGRESS. No member of or delegate to Congress or resident commissioner shall benefit from this permit either directly or indirectly, except to the extent the authorized use provides a general benefit to a corporation.

B. CURRENT ADDRESSES. The holder and the Forest Service shall keep each other informed of current mailing addresses, including those necessary for billing and payment of land use fees.

C. SUPERSEDED PERMIT. This permit supersedes a special use permit designated BIG CREEK LODGE AND OUTFITTERS, INC., KRL104, dated 08/31/2004.

D. SUPERIOR CLAUSES. If there is a conflict between any of the preceding printed clauses and any of the following clauses, the preceding printed clauses shall control.

E. Surveys, Land Corners (04). The holder shall protect, in place, all public land survey monuments, private property corners, and Forest boundary markers. In the event that any such land markers or monuments are destroyed in the exercise of the privileges permitted by this authorization, depending on the type of monument destroyed, the holder shall see that they are reestablished or referenced in accordance with (1) the procedures outlined in the "Manual of Instructions for the Survey of the Public Land of the United States," (2) the specifications of the county surveyor, or (3) the specifications of the Forest Service.

Further, the holder shall cause such official survey records as are affected to be amended as provided by law. Nothing in this clause shall relieve the holder's liability for the willful destruction or modification of any Government survey marker as provided at 18 U.S.C. 1858.

F. Water Facilities and Water Rights (D-24).

1. **Water Facilities.** No ditch, reservoir, well, spring, seepage, or other facility to pump, divert, store, or convey water (hereinafter "water facilities") for which the point of diversion, storage, or withdrawal is on National Forest System lands may be initiated, developed, certified, or adjudicated by the holder unless expressly authorized in this permit. The authorization of any water facilities in the permit area is granted to allow use of water only in connection with the [recreation residence, resort, marina, or other use] authorized by this permit. If the use of any water facilities in connection with this [recreation residence, resort, marina, or other use] ceases, the authorization to use any associated water

facilities also ceases. The United States may place conditions on installation, operation, maintenance, and removal of water facilities that are necessary to protect public property, public safety, and natural resources on National Forest System lands in compliance with applicable law. Any change in a water facility, including a change in the ownership or beneficial use of water or location of use of water from a water facility, that is not expressly authorized in this permit shall result in termination of the authorization for that water facility.

2. Water Rights. This permit does not confer any water rights on the holder. The term "water rights" includes all authorizations, such as certificates, reservations, decrees, or permits, for water use issued under state, local, or other law and all water rights otherwise recognized under state law. Any necessary water rights must be acquired and maintained by the holder in accordance with State law and the terms of this permit. After this permit is issued, all water rights obtained by the holder for facilities that divert or pump water from sources located on National Forest System lands for use on National Forest System lands, whether authorized or unauthorized, are for the benefit of the United States and shall be acquired in the name of the United States. Any expenses for acquiring water rights shall be the responsibility of the holder and not the responsibility of the United States.

G. HYDRO ONLY Esthetics (K6). The holder shall conserve the scenic and esthetic values of the area under this permit during construction, operation, and maintenance of the project improvements.

H. HYDRO ONLY Signs (K11). The holder shall erect no signs or advertising devices on the area covered by this permit without prior approval of the Forest Service as to location, design, size, color, and message. The holder shall maintain or renew erected signs as necessary to neat and presentable standards.

I. HYDRO ONLY Project Safety (K13). The holder shall carry out all operations in a skillful manner, having due regard for the safety of employees and the public, and shall safeguard unsafe areas. The holder shall regularly inspect its facilities and provide further effective safety measures as needed for safety protection.

J. HYDRO ONLY Pollution (K19). The holder shall discharge no waste or byproduct if it contains any substances in concentrations that would result in violation of water quality standards set forth by the State; would impair present or future beneficial uses of water; would cause pollution, nuisance, or contamination; or would unreasonably degrade the quality of any waters. During the construction and operation of the project, the holder shall protect project water quality by using the existing best management practices mutually agreed to by the Forest Service and the State.

K. HYDRO ONLY Improvement Relocation (K29). The Forest Service grants this permit with the express understanding that should future location of government improvements or road rights-of-way require the relocation or adjustment of the holder's linear-type improvements (such as transmission lines, penstocks, pipelines, ditches, or roads), the holder shall relocate at the holder's expense within 180 days following written request to relocate.

L. HYDRO ONLY Fees, Licensed Projects (K31). The holder shall pay annually, in advance, a sum determined by the Forest Service to be the fair market value of the use rights granted by this permit. As long as the holder makes payments, in accordance with Section 10(e) of the Federal Power Act, to the Federal Energy Regulatory Commission (FERG) for the use of this land in an amount determined to be the approximate fair market rental of the lands, the fee for this permit is waived in its entirety. In the event the Forest Service determines that payments to FERG are significantly less than fair market rental or if the holder discontinues such payments, the Forest Service reserves the right to establish an appropriate fee and appropriate conditions of payment. Any fees paid by the holder to FERG shall be credited toward the fee due from the holder for this permit.

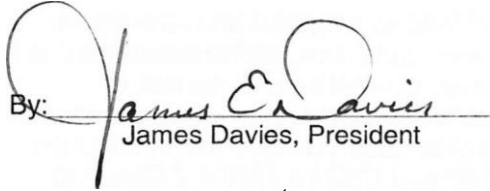
M. HYDRO ONLY Permit Term, Licensed Project (K32). Unless sooner canceled or terminated by the authorized officer, in accordance with the provisions of the permit, the term of this permit shall be concurrent with the Federal Energy Regulatory Commission (FERG) license No. P-10721 and become void on February 28, 2022; but the Forest Service may grant a new permit to occupy and use the same National Forest System land, provided that FERG grants a new license under the Federal Power Act. The new permit must comply with the laws and regulations governing the occupancy and use of National Forest System lands at that time.

N. HYDRO ONLY Hazard Analysis (K33). Avalanches, rising waters, high winds, falling limbs or trees, and other hazards are natural phenomena in the forest that present risks to the holder's property that the holder hereby assumes. The holder is responsible for inspecting its site, right-of-way, and the immediate adjoining area for dangerous conditions, hanging limbs, and other evidence of hazardous conditions and, after securing permission from the Forest Service, is responsible for removing such hazards.

This permit is accepted subject to the conditions set out above.

Date May 21, 2013

J Curtis Earl Idaho Aviation Foundation, Inc.

By: 
James Davies, President

(CORPORATE SEAL)

1

ATTEST :

The following certificate shall be executed by the Secretary or Assistant Secretary of the Corporation:

I, Nadine Burak, certify that I am the Secretary of the Corporation that executed the above permit; that James Davies who signed said permit on behalf of said Corporation was then President of said Corporation; that I know his signature on said permit is genuine; and that said permit was duly signed, sealed, and attested to for and on behalf of said Corporation by authority of its governing body


(Assistant) Secretary

**U. S. DEPARTMENT OF AGRICULTURE
Forest Service, Payette National Forest**

By: J: -----c-----: : : —
(Authorized Officer Signature)

Keith B. Lannom, Forest Supervisor
(Name and Title)

06/07/13
(Date)

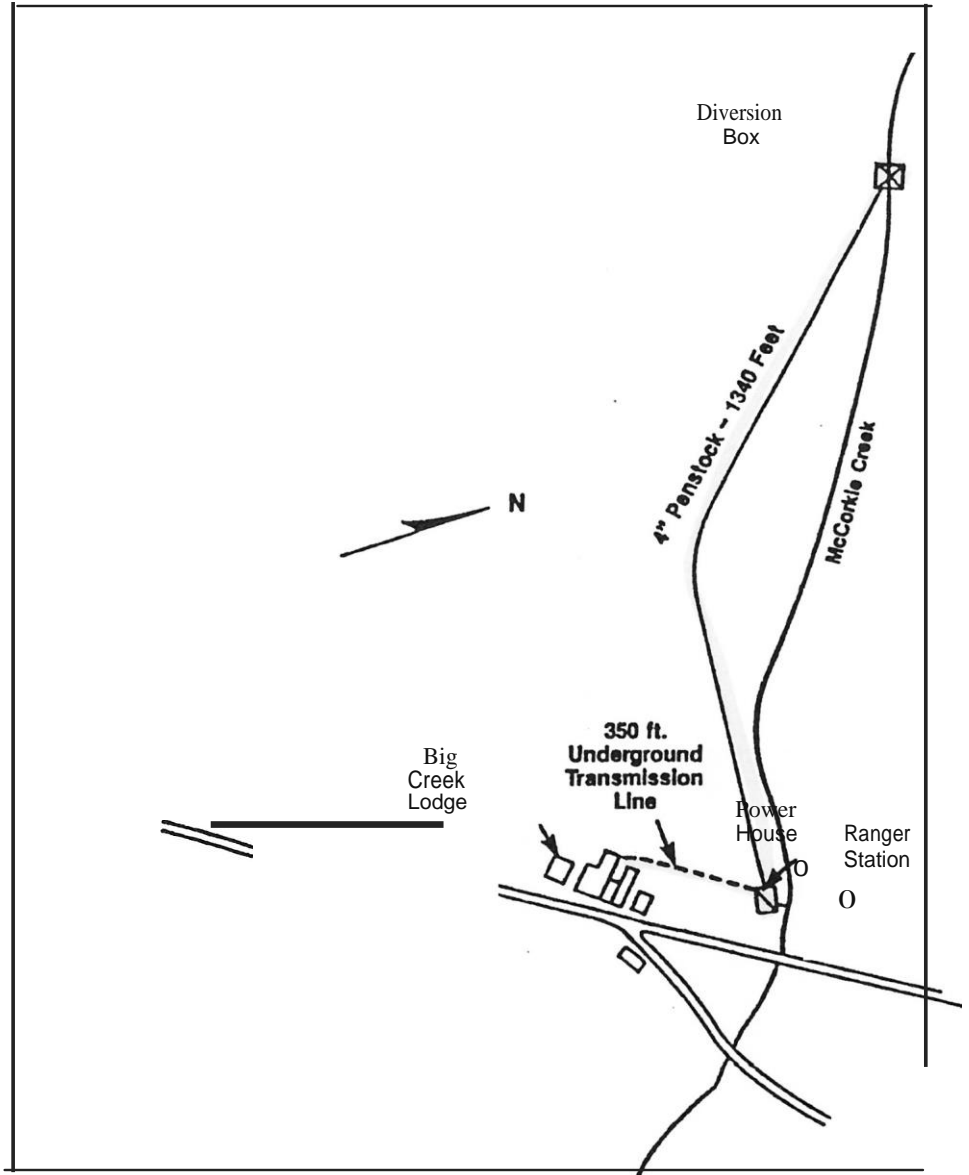


Figure 2. Location of the project features of the Big Creek Project, FERC No. 10721, Idaho (Source: Big Creek Lodge and outfitters, Inc., 1991, amended application, as modified by the staff).

Big Creek Hydropower Operation and Maintenance Plan

1. Diversion will be screened with a mesh size of 3/32" to avoid entrainment of fish and eggs.
2. Any ground disturbance due to maintenance of diversion equipment will be mitigated with a high level of erosion control to prevent erosion and subsequent sediment deposition into streams. All maintenance is assumed to be hand maintenance .
3. Any leakage due to malfunctioning diversion equipment will be repaired as soon as possible to prevent stream bank washout or erosion and avoid sediment deposition in streams.
4. Provisions of the water right (ie, maximum diversion rate, period of use, place of use, etc.) associated with the water system shall be adhered to.
5. The permittee will ensure a continuous minimum flow of at least equal to 50 percent of the instantaneous flow in the stream, remains in McCorkle Creek. (FERC License condition).
6. The use authorized by this permit and by the Tenn Permit issued for operation of Big Creek Lodge on May 3, 2013, are interdependent and neither will be allowed to be operated or transferred to a separate entity.

Appendix C - Big Creek Resort Term Special Use Permit

Authorization ID: KRL218
Contact ID: 508515010602
Expiration Date: 06/01/2043 Use
Code: 133

FS-2700-5c
(10/09)
OMB No.
0596-0082

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE

RESORT/MARINA TERM SPECIAL USE PERMIT

Authority: OCCUPANCY PERMITS, AS AMENDED March 4, 1915

J CURTIS EARL IDAHO AVIATION FOUNDATION (dba Idaho Aviation Foundation), PO BOX 2016, EAGLE, ID 83616-9110, (hereafter "holder") is hereby authorized to use and occupy National Forest System lands and waters on the Payette National Forest, for the purposes of constructing, operating, and maintaining a resort/marina, including food service, retail sales, and other ancillary facilities described herein, known as the BIG CREEK LODGE resort/marina, and subject to the provisions of this resort/marina term special use permit (hereafter "permit"). This permit, within Sec. 26, T. 21 N., R. 9 E., BOISE MERIDIAN, covers 14.83 acres described here and as shown on the attached map as Exhibit A.

The following site improvements and uses are authorized, all as detailed by an accepted Master Development Plan (MDP) as specifically provided per clauses I.D. & II.A. of this permit.

- Lodge: 3500 square feet (two story) facility, providing full service "Family Style" restaurant with seating for up to 25 guests & containing a commercial kitchen, dining room, guest & employee lodging (with guest rooms capable of providing over-night lodging for 10 adults), with living room area, storage, root cellar/storage basement & covered porch. [as per approved design & construction plans]
- Duplex: Two units, 225 square feet each with front porch, each with 1/2 bath and capable of sleeping 3 adults. [facility currently in place]
- Gas Station / Storage Building: 540 square feet used for storage. [currently in place, projected for heavy maintenance & upgrade, replacement, improvement or removal per approved MDP]
- Tack Shed: 300 square feet for tack, feed and trash storage. [facility currently in place]
- Hydro-Plant: 160 square feet with hydroelectric unit. [authorized by a separate Permit & Federal Energy Regulatory License - currently in place, operation & maintenance in support of the Resort's operation]
- Water system: culinary & irrigation. [currently in place, operation & maintenance to support the Resort's operation]
- Septic Drain field: [currently in place, operation & maintenance to support the Resort's operation]
- Corral and Pasture: fenced by native buck and rail [ref Pasture Management Plan, Exhibit BJ]
- Recreation Amenities: Horseshoe pit, Fire pit, Bar B Q Pit, Volley ball court, tent camping (platforms)

conditions to incorporate land use allocation decisions made as a result of revision to Forest Land and Resource Management Plans.

2. At the sole discretion of the authorized officer, this term permit may be amended to remove authorization to use any National Forest System lands not specifically covered in the Master Development Plan and/or not needed for the use and occupancy authorized by this permit.

II. IMPROVEMENTS

A. Master Development Plan. In consideration of the privileges authorized by this permit, the holder agrees to prepare and submit changes in the Master Development Plan encompassing the entire commercial resort/marina presently developed within the National Forest lands authorized by this permit, and in a form acceptable to the Forest Service. Additional construction beyond maintenance of existing improvements shall not be authorized until this plan has been amended. Planning should encompass all the area authorized for use by this permit. The accepted Master Development Plan shall become a part of this permit.

B. Permit Limitations. Nothing in this permit allows or implies permission to build or maintain any structure or facility, or to conduct any activity unless specifically provided for in this permit. Any use not specifically identified in this permit must be approved by the authorized officer in the form of a new permit or permit amendment.

C. Site Development Schedule. As part of this permit, a schedule for the progressive development of the permitted area and installation of facilities shall be prepared jointly by the holder and the Forest Service. Such a schedule shall set forth an itemized priority list of planned improvements and the due date for completion. This schedule shall be made a part of this permit and may be incorporated as part of the Master Development Plan. The holder may accelerate the scheduled date for installation of any improvement authorized, provided the other scheduled priorities are met; and provided further, that all priority installation authorized are completed to the satisfaction of the Forest Service and ready for public use prior to the schedule due date.

1. All required plans and specifications for site improvements, and structures included in the development schedule shall be properly certified and submitted to the Forest Service at least 45 days before the construction date stipulated in the development schedule.

2. In the event there is agreement with the Forest Service to expand the facilities and services provided on the areas covered by this permit, the holder shall jointly prepare with the Forest Service a development schedule for the added facilities prior to any construction and meet the requirements of clause II.E. Such schedule shall be made a part of this permit.

D. Plans. All plans for development, layout, construction, reconstruction or alteration of improvements on the site, as well as revisions of such plans, must be prepared by a licensed engineer, architect, and/or landscape architect (in those states in which such licensing is required) or other qualified individual acceptable to the authorized officer. Such plans must be accepted by the authorized officer before the commencement of any work. A holder may be required to furnish as-

timber to others than the holder at no stumpage cost to the holder. Unmerchantable material shall be disposed of as directed by the authorized officer. Trees, shrubs, and other plants may be planted in such manner and in such places about the premises as approved by the authorized officer.

E. Signs. Signs or advertising devices erected on National Forest lands shall have prior approval by the Forest Service as to location, design, size, color, and message. Erected signs shall be maintained or renewed as necessary to neat and presentable standards, as determined by the Forest Service.

F. Nondiscrimination.

1. The holder and its employees shall not discriminate against any person on the basis of race, color, sex (in educational activities), national origin, age, or disability or by curtailing or refusing to furnish accommodations, facilities, services, or use privileges offered to the public generally. In addition, the holder and its employees shall comply with the provisions of Title VI of the Civil Rights Act of 1964 as amended, Section 504 of the Rehabilitation Act of 1973, as amended, Title IX of the Education Amendments of 1972, as amended, and the Age Discrimination Act of 1975, as amended.

2. The holder shall include and require compliance with the above nondiscrimination provisions in any third-party agreement made with respect to the operations authorized under this permit.

3. The Forest Service shall furnish signs setting forth this policy of nondiscrimination. These signs shall be conspicuously displayed at the public entrance to the premises and at other exterior or interior locations, as directed by the Forest Service.

4. The Forest Service shall have the right to enforce the foregoing nondiscrimination provisions by suit for specific performance or by any other available remedy under the laws of the United States or the State in which the violation occurs.

G. Equal Access To Federal Programs. In addition to the above nondiscrimination policy, the holder agrees to insure that its programs and activities are open to the general public on an equal basis and without regard to any non-merit factor.

IV. RIGHTS AND LIABILITIES

A. Legal Effect Of The Permit. This permit is not real property, does not convey any interest in real property, and may not be used as collateral for a loan.

B. Third-Party Rights. This permit is subject to all valid rights and claims of third parties. The United States is not liable to the holder for the exercise of any such right or claim.

C. Absence Of Third-Party Beneficiary Rights. The parties to this permit do not intend to confer any rights on any third party as a beneficiary under this permit, including any party who has responsibility for any day-to-day activities authorized by this permit, if approved by the authorized officer under clause VIII.

CERCLA, 42 U.S.C. § 9601(33); (c) any petroleum product or its derivative, including fuel oil, and waste oils; and (d) any hazardous substance, extremely hazardous substance, toxic substance, hazardous waste, ignitable, reactive or corrosive materials, pollutant, contaminant, element, compound, mixture, solution or substance that may pose a present or potential hazard to human health or the environment under any applicable environmental laws.

1. The holder shall avoid damaging or contaminating the environment, including but not limited to the soil, vegetation (such as trees, shrubs, and grass), surface water, and groundwater, during the holder's use and occupancy of the site. If the environment or any government property covered by this permit becomes damaged during the holder's use and occupancy of the site, the holder shall immediately repair the damage or replace the damaged items to the satisfaction of the authorized officer and at no expense to the United States.

2. The holder shall indemnify the United States for any damages arising out of the holder's use and occupancy authorized by this permit. The holder shall be liable for all injury, loss, or damage, including fire suppression, or other costs associated with rehabilitation or restoration of natural resources, associated with the holder's use or occupancy. Compensation shall include but is not limited to the value of resources damaged or destroyed, the costs of restoration, cleanup, or other mitigation, fire suppression or other types of abatement costs, and all administrative, legal (including attorney's fees), and other costs in connection therewith. Such costs may be deducted from the performance bond required under clause XIV.G.

3. With respect to roads, the holder shall be liable for damages to roads and trails of the United States open to public use caused by use of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees to the same extent as provided under clause IV.F.1, except that liability shall not include reasonable and ordinary wear and tear.

G. Risks. The holder assumes all risk of loss of the property. Loss to the property may result from, but is not limited to, theft, vandalism, fire and any firefighting activities (including prescribed burns), avalanches, rising waters, winds, falling limbs or trees, and acts of God. If the authorized improvements are destroyed or substantially damaged, the authorized officer shall conduct an analysis to determine whether the improvements can be safely occupied in the future and whether rebuilding should be allowed. If rebuilding is not allowed, the permit shall terminate.

H. Hazards. The holder has a continuing responsibility to identify and abate hazardous conditions in the permit area which could affect the improvements or pose a risk of injury to individuals. The holder shall consult with the authorized officer before taking any action to abate such hazards.

I. Insurance. The holder shall have in force public liability insurance covering property damage and damage to persons in the event of death or injury in the minimum amount of combined single limits (CSL). These minimum amounts and terms are subject to change at the sole discretion of the authorized officer on the annual anniversary date of this authorization. The coverage shall extend to property damage, bodily injury, or death arising out the holder's activities under the permit including, but not limited to, occupancy or use of the land and the construction, maintenance, and operation of the structures, facilities, or equipment authorized by the permit. Such insurance shall

the break -even point using 150 percent of the rate base. Calculate the fee on sales above twice the break-even point using the balance of sales rate.

2. The minimum annual fee for this use, which is due in advance and is not subject to refund, shall be equal to the fee that would result when sales are 40 percent of the break-even point. This fee shall be calculated and billed by the Forest Service during the final quarter of the holder's fiscal year, using the most recent GFA figure and previously reported sales data for the current year, plus, if the operating season is still active, estimated sales for the remainder of the year.

C. Definitions Of Sales Categories and GFA.

1. For purposes of recording and reporting sales, and sales-related information including the cost of sales, the activities of the concessionaire are divided into:

(a) Grocery. Includes the sale of items usually associated with grocery stores such as staple foods, meats, produce, household supplies. Includes the sale of bottled soft drinks, beer and wine, when included in the grocery operation.

(b) Service, Food. Includes the serving of meals, sandwiches, and other items either consumed on the premises or prepared for carry out. Snack bars are included.

(c) Service, Cars. Includes servicing and the sale of fuels, lubricants, and all kinds of articles used in servicing and repairing autos, boats, jet skis, and aircraft.

(d) Merchandise. Includes the sale of clothing, souvenirs, gifts, ski and other sporting equipment. Where a "Service, Cars" category of business is not established by this permit, the sale of auto accessories is included in this category.

(e) Service, Liquor. Includes the sale of alcoholic drinks for consumption on the premises and other sales ordinarily a part of a bar or cocktail lounge business. Where a bar is operated in conjunction with a restaurant or overnight accommodations, liquor, beer and wine sales shall be accounted for consistent with holder's normal business practice. The sale of alcoholic beverages for consumption off the premises is also included in this item, except as indicated in "Grocery."

(f) Outfitting/Guiding. Includes all activities or commercial guiding services regardless of mode of travel, when associated with a resort or marina with a mixture of business. All fees charged are considered sales.

(g) Lodging. Includes lodging where daily maid service is furnished.

(h) Rentals and Services. Includes lodging where daily maid service is not furnished by the holder; the rental of camping space, ski equipment and other equipment rentals and services. Also included are services such as barbershops, and amusements

- (2) Land.
- (3) Expendable or consumable supplies.
- (4) Intangible assets, such as goodwill, permit value, organization expenses, and liquor licenses.
- (5) Improvements not related to the operation.
- (6) Luxury assets, to the extent their design and cost exceed functional need.
- (7) The prorata share of GFA assets in off-site activities not directly associated with the authorized use.
- (8) Expensed assets.
- (9) Operating leases.

(d) As of the date of this permit, the initial GFA under this ownership has been determined to be as shown in detail on Schedule A attached to this permit. If an error is found in the GFA amount, it shall be changed to the correct amount retroactive to the date the error occurred and fees adjusted accordingly.

D. Change Of GFA Upon Sale Or Change In Controlling Interest. Upon change of ownership, effective dominion or controlling interest or upon sale of assets or common stock which results in a change of ownership, effective dominion, or controlling interest, the value of GFA shall be established applying GAAP.

E. Determining Sales And Other Revenue. Sales and GFA shall be derived from all improvements and facilities, including those of applicable third parties, which constitute a logical single overall integrated business operation regardless of the land ownership. A map shall be prepared designating the development boundary and may be augmented by narrative or table and shall become a part of this permit.

1. Fees shall be assessed against all receipts from sales unless specifically exempted. Sales for the purpose of fee calculation include; (1) all revenue derived from goods and services sold which are related to operations under this permit and all revenue derived within the development boundary, unless otherwise excluded; (2) the value of goods and services traded-off for goods and services received (bartering); and (3) the value of gratuities.

(a) Definitions.

(1) Gratuities. Goods, services or privileges that are provided without charge or at deep discount to such individuals as employees, owners, and officers, or immediate families of employees, owners and officers, and not available to the general public.

(4) Employee discounts in excess of 30 percent of market price. These discounts are exclusively given or provided to employees, owners, officers or immediate families of employees, owners or officers are gratuities and are included in sales at 70 percent of market price. Employee discounts less than 30 percent are recorded at transaction price.

(5) Value of bartered goods and services (trade-offs)

(6) Gross sales of third parties. Includes sales of State controlled liquor stores.

(7) Fifty percent of franchise receipts.

(8) All other revenue items not specifically excluded below shall be included as sales.

(c) The following items shall be excluded from gross receipts or revenue to arrive at sales:

(1) Value of goods and services provided to employees, agents, contractors or officials to facilitate the accomplishment of their assigned duties or work-related obligation or to others for educational or technical competence related to the type of permitted use such as boat operation, ski patrol, water safety, etc. Similarly, local, State and Federal government officials including Forest Service employees who in the course of their oversight responsibilities or otherwise on official business use goods or services. The holder is not required to report the value of such duty-related or official use as sales for fee calculation purposes.

(2) The value of meals and lodging furnished by an employer to an employee for the employer's convenience if, in the case of meals, they are furnished on the employer's business premises. The fact that the employer imposes a partial charge for or that the employee may accept or decline meals does not affect the exclusion if all other conditions are met. If employer imposes a charge for meals and lodging it shall be included at transaction price. The holder need not keep records of employee meals and lodging more detailed than those required by the Internal Revenue Service.

(3) Refunds from returned merchandise and receipts from sales of real and nonrental personal property used in the operation.

(4) Rents paid to the holder by third parties, even if based on sales.

(5) Taxes collected on site from customers, accounted for as such in the holder's accounting records, and that were paid or are payable to taxing authorities. Taxes included in the purchase price of gasoline, tobacco and other products, but paid to the taxing authority by the manufacturer or

5. Within 30 days of receipt of a statement from the Forest Service, pay any additional fee required to correct fees paid for the past year's operation.
6. All fee calculations and records of sales and GFA are subject to periodic audit. Errors in calculation or payment shall be corrected as needed for conformance with those audits. Additional fees and interest due as a result of such audits shall be in accordance with item 4, paragraph 2.
7. Correction of errors includes but is not limited to any action necessary to establish the cost of gross fixed assets to the current holder, including sales, or other data required to accurately assess and calculate fees. For fee calculation purposes, error may include:
 - (a) Misreporting or misrepresentation of amounts.
 - (b) Arithmetic mistakes.
 - (c) Typographical mistakes.
 - (d) Variation from GAAP, when such variations are inconsistent with the terms and conditions of this permit.

Correction of errors shall be made retroactively to the date the error was made or to the previous audit period, whichever is more recent, with past fees adjusted accordingly. Changes effected by agency policy, including definition of assets included in GFA, shall only be made prospectively.

G. Fee Payment Issues.

1. Payments shall be credited on the date received by the deposit facility, except that if a payment is received on a non-workday, the payment shall not be credited until the next workday.
2. Fees are due and payable by the due date. Disputed fees must be paid in full. Adjustments will be made if dictated by settlement terms or an appeal decision.
3. Late Payments:
 - (a) Pursuant to 31 U.S.C. 3717 et seq., interest shall be charged on any fee amount not paid within 30 days from the date it became due. The rate of interest assessed shall be the higher of the Prompt Payment Act rate or the rate of the current value of funds to the Treasury (i.e., the Treasury tax and loan account rate), as prescribed and published annually or quarterly by the Secretary of the Treasury in the Federal Register and the Treasury Fiscal Requirements Manual Bulletins. Interest on the principal shall accrue from the date the fee amount is due.

accounting system shall include:

1. Systematic internal controls and recording by kind of business the gross receipts derived from all sources of business conducted under this permit. Receipts should be recorded daily and, if possible, deposited into a bank account without reduction by disbursements. Receipt entries shall be supported by source documents such as cash register tapes, sale invoices, rental records, and cash accounts from other sources.
2. A permanent record of investments in facilities (depreciation schedule) current source documents for acquisition costs of capital items.
3. Preparation and maintenance of such special records and accounts as may be specified by the authorized officer.
4. Bank accounts will be maintained separately for the businesses conducted under this permit and not commingled with those for other businesses of the holder.

VI. TRANSFER OF TITLE TO THE IMPROVEMENTS

A. Notification Of Transfer. The holder shall notify the authorized officer when a transfer of title to the improvements is contemplated.

B. Transfer Of Title. Any transfer of title to the improvements covered by this permit, with the exception of boats owned by the holder, shall result in termination of the permit. The party who acquires title to the improvements must submit an application for a permit. Issuance of a new permit to the party who acquires title to the improvements shall be at the sole discretion of the authorized officer. The authorized officer shall determine that the applicant meets requirements under Federal regulations.

VII. CHANGE IN CONTROL OF THE BUSINESS ENTITY

A. Notification Of Change In Control. The holder shall notify the authorized officer when a change in control of the business entity that holds this permit is contemplated. If the holder is a corporation, change of control means the sale or transfer of at least 50 percent of the corporate stock. If the holder is a partnership, change of control means the sale or transfer of a 50 percent or greater interest in the partnership. If the holder is an individual, change of control means the sale or transfer of the business to another party.

B. Change in Control. Any change in control of the business entity as defined in clause VII.A. shall result in termination of this permit. The party acquiring control of the business entity must submit an application for a special use permit. Issuance of a new permit shall be at the sole discretion of the authorized officer. The authorized officer shall determine whether the applicant meets the requirements established by Federal regulations.

the denominator the total number of months in the original term of this permit.

D. Suspension. The authorized officer may immediately suspend this permit, in whole or in part, when necessary to protect public health, safety, or the environment. The suspension decision must be in writing. Within ten days of the request of the holder, the superior of the authorized officer shall arrange for an on-the-ground review of the adverse conditions with the holder. Following this review the superior shall take prompt action to affirm, modify, or cancel the suspension.

X. RENEWAL

This permit does not provide for renewal. Prior to termination of this permit, the holder may apply for a new permit that would renew the use and occupancy authorized by this permit. Renewal of the use and occupancy authorized by this permit shall be at the sole discretion of the authorized officer. At a minimum, before renewing the use and occupancy authorized by this permit, the authorized officer shall require that: (1) the use and occupancy to be authorized by the new permit is consistent with the standards and guidelines in the Forest Land and Resource Management Plan; (2) the type of use and occupancy to be authorized by the new permit is the same as the type of use and occupancy authorized by this permit; and (3) the holder is in compliance with all the terms of this permit.

XI. RIGHTS AND RESPONSIBILITIES UPON REVOCATION OR TERMINATION WITHOUT RENEWAL

Except as provided in clause IX.C., upon revocation of this permit or termination of this permit without renewal of the authorized use, the authorized officer has the discretion to require the holder to sell or remove all structures and improvements, except those owned by the United States, within a reasonable time prescribed by the authorized officer and to restore the site to the satisfaction of the authorized officer. If the holder fails to sell or remove all structures or improvements within the prescribed period, they shall become the property of the United States and may be sold, destroyed, or otherwise disposed of without any liability to the United States. However, the holder shall remain liable for all cost associated with their removal, including costs of sale and impoundment, cleanup, and restoration of the site.

XII. HEALTH AND SAFETY

A. Sanitation. The operation and maintenance of all sanitation, food service, and water-supply methods, systems, and facilities shall comply with the standards of the State, local health departments and water control agencies.

B. Refuse Disposal. The holder shall comply with all applicable Federal, State, and local requirements related to the disposal of refuse resulting from the use and occupancy authorized by this permit, including waste materials, garbage, and rubbish of all kinds.

C. Construction Safety. The holder shall carry on all operations in a skillful manner, having due regard for the safety of employees; and shall safeguard with fences, barriers, fills, covers, or other effective devices, pits, cuts, and other excavations which otherwise would unduly imperil the life, safety, or property of other persons.

vegetation, aquatic plants, insects, rodents, trash fish, etc., without the prior written approval of the Forest Service. A request for approval of planned uses of pesticides shall be submitted annually by the holder on the due date established by the authorized officer. The report shall cover a 12-month period of planned use beginning 3 months after the reporting date. Information essential for review shall be provided in the form specified. Exceptions to this schedule may be allowed, subject to emergency request and approval, only when unexpected outbreaks of pests require control measures which were not anticipated at the time an annual report was submitted.

Only those materials registered by the U.S. Environmental Protection Agency for the specific purpose planned shall be considered for use on National Forest System lands. Label instructions and all applicable laws and regulations shall be strictly followed in the application of pesticides and disposal of excess materials and containers.

F. Archaeological -Paleontological Discoveries. The holder shall immediately notify the authorized officer of any and all antiquities or other objects of historic or scientific interest. These include, but are not limited to, historic or prehistoric ruins, fossils, or artifacts discovered as the result of operations under this permit, and shall leave such discoveries intact until authorized to proceed by the authorized officer. Protective and mitigative measures specified by the authorized officer shall be the responsibility of the permit holder.

G. Native American Graves Protection and Repatriation (NAGPRA). In accordance with 25 U.S.C. 3002 (d) and 43 CFR 10.4, if the holder inadvertently discovers human remains, funerary objects, sacred objects, or objects of cultural patrimony on National Forest System lands, the holder shall immediately cease work in the area of the discovery and shall make a reasonable effort to protect and secure the items. The holder shall immediately notify the authorized officer by telephone of the discovery and shall follow up with written confirmation of the discovery. The activity that resulted in the inadvertent discovery may not resume until 30 days after the authorized officer certifies receipt of the written confirmation, if resumption of the activity is otherwise lawful, or at any time if a binding written agreement has been executed between the Forest Service and the affiliated Indian tribes that adopts a recovery plan for the human remains and objects.

H. Protection Of Habitat Of Endangered , Threatened, And Sensitive Species. Location of areas needing special measures for protection of plants or animals listed as threatened or endangered under the Endangered Species Act (ESA) of 1973, 16 U.S.C. 531 et seq., as amended, or as sensitive by the Regional Forester under authority of FSM 2670, derived from ESA Section 7 consultation, may be shown on a separate map, hereby made a part of this permit, or identified on the ground. Protective and mitigative measures specified by the authorized officer shall be the responsibility of the permit holder.

If protection measures prove inadequate, if other such areas are discovered, or if new species are listed as Federally threatened or endangered or as sensitive by the Regional Forester, the authorized officer may specify additional protection regardless of when such facts become known. Discovery of such areas by either party shall be promptly reported to the other party .

I. Consent To Store Hazardous Materials. The holder shall not store any hazardous materials at the site without obtaining the prior written approval of the authorized officer, and this approval shall not

copy of them to the authorized officer. For new wells, this information shall be provided prior to disturbing National Forest System lands for the purpose of water use or development.

2. For new or reconstruction of existing wells, the holder shall prepare a well construction and development plan and submit it to the authorized officer for approval. The well development and construction plan must have prior written approval from the authorized officer before well construction or development is initiated. The holder shall follow applicable federal, state, and local standards for design, construction, and development of new wells or reconstruction of existing wells. If such standards do not exist, the holder shall follow applicable standards issued by the American Society for Testing and Materials (ASTM), American Water Works Association (AWWA), or National Ground Water Association (NGWA). The construction and development plan must identify all potential sources for any proposed water injection during well construction or development. Only non-chlorinated, potable water may be injected during construction or development of wells to be used for monitoring or water withdrawal. Copies of all documentation for drilling, constructing, or developing wells, including all drilling, boring, and well construction logs, shall be provided to the authorized officer within 60 days of completion of work.

3. The holder shall prepare and submit for written approval by the authorized officer a water conservation plan utilizing appropriate strategies to limit the amount of water removed from National Forest System lands.

4. The holder shall properly decommission and abandon all wells that are no longer needed or maintained in accordance with applicable federal, state, and local standards for water well abandonment. If such standards do not exist, the holder shall follow applicable standards issued by the ASTM, AWWA, or NGWA. At least 30 days prior to initiation of well decommissioning, the holder shall submit a well decommissioning plan to the authorized officer. The well decommissioning plan shall have written approval from the authorized officer before well decommissioning is initiated. All documentation of well decommissioning shall be provided to the authorized officer within 60 days of completion of work.

XIV. MISCELLANEOUS PROVISIONS

A. Members Of Congress. No member of or delegate to Congress or Resident Commissioner shall benefit from this permit either directly or indirectly, except when the authorized use provides a general benefit to a corporation.

B. Regulating Services and Rates. The Forest Service shall have the authority to check and regulate the adequacy and type of services provided the public and to require that such services conform to satisfactory standards. The holder may be required to furnish a schedule of prices for sales and services authorized by the permit. Such prices and services may be regulated by the Forest Service: Provided, that the holder shall not be required to charge prices significantly different than those charged by comparable or competing enterprises.

C. Advertising. The holder, in advertisements, signs, circulars, brochures, letterheads, and like materials as well as orally, shall not misrepresent in any way, either the accommodations provided,

provision thereof and any of the following clauses or any provision thereof, the preceding printed clauses shall control.

Liability Waiver (R4-B2). The permit holder will not request or require persons served to sign a liability waiver for activities authorized by this permit. The permit holder may, however, advise such persons of the risks involved and have them sign a Visitor's Acknowledgement of Risk, provided a copy of the proposed form has been submitted to and approved by the issuing Forest Officer.

<p>THIS PERMIT IS ACCEPTED SUBJECT TO ALL OF ITS TERMS AND CONDITIONS:</p>		
<p>ACCEPTED:</p>		
<p><i>Y#E-5 £:'7) £S</i> J CURTIS EARL IDAHO AVIATION FOUNDATION</p>	<p><i>e, Q</i></p>	<p><i>Ir1)3</i></p>
<p>HOLDER NAME</p>	<p>SIGNATURE</p>	<p>DATE</p>
<p>APPROVED:</p>		
<p><i>K E:trt-i B. LA./Jt./ (IM</i> FOREST SUPERVISOR PAYETTE NATIONAL FOREST</p>	<p><i>J</i></p>	<p><i>06/3 J/t J</i></p>
<p>AUTHORIZED OFFICER</p>	<p>SIGNATURE</p>	<p>DATE</p>

SCHEDULE A
GROSS FIXED ASSETS

Land-Based :

Water-Based:

Total value of assets = \$ _____

SCHEDULE C
AUTHORIZED FACILITIES

The following facilities are authorized, as they exist as of the date of this permit or as provided for an accepted MDP: As described by page 1 of the Permit.

EXHIBIT B

Big Creek Lodge Pasture Management Plan

- A. This permit authorizes operation and maintenance of a public use pasture. No individual shall be allowed to pasture horses or mules for a period exceeding ten days. Ten AM's of pasture will be reserved and available for this public use. (Ten AM's equals 300 animal use days = 1 animal for one month / 30 days = 1 AM)

A sign will be displayed stating the length of stay and fee with wording similar to "Pasture operated for convenience of the public. Charge \$10.00 per day, per head of stock, ten day limit."

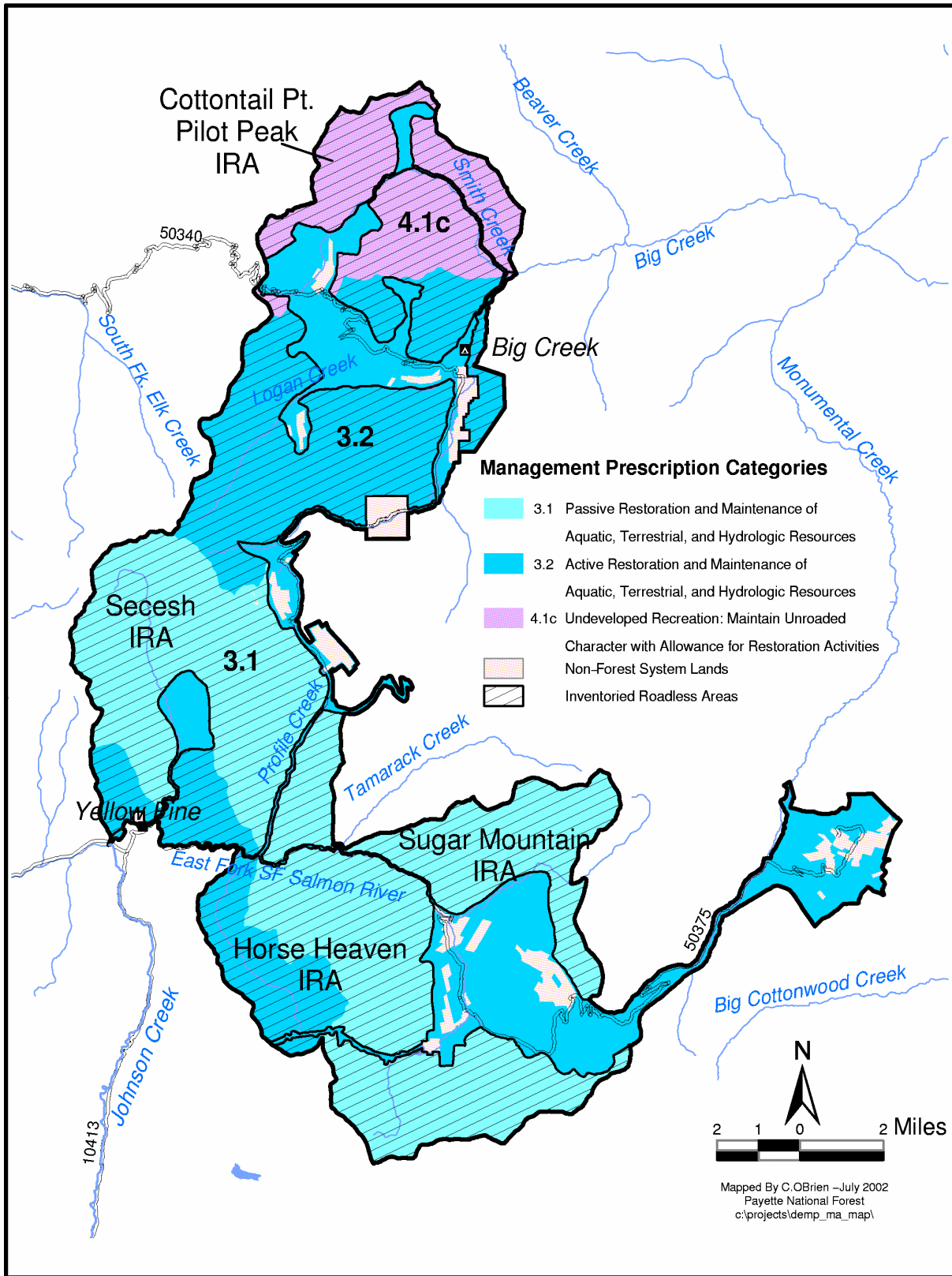
Any Change in this daily fee must be approved by the Forest Service.

- B. Up to twelve head of stock to serve guests of Big Creek Lodge may be grazed in the Big Creek Lodge pasture during the summer season (July 1 thru August 31). Stock may be grazed amounting to no more than ten AM's (AM = animal month, ten AM's is the equivalent of twelve head of stock grazed for twenty five days). Any feed requirements outside these parameters will be supplemented with the use of weed free feed.
- C. During the period September 1 thru November 20, an additional 10 AM's of grazing for stock held in Big Creek Lodge pasture in the fall to serve guests of Big Creek Lodge is approved. Additional stock may be held and supplement ally fed in the corral.

Note: stock held and fed in the pasture are not considered as being supplement ally fed.

- D. The Forest Service reserves the right to graze pack and saddle stock intermittently during the period of June 1 thru July 15 and September 1st to November 1st not to exceed 8 animal months of total use.

Management Area 13 –Big Creek/Stibnite –Location Map



Management Area 13

Big Creek/Stibnite

MANAGEMENT AREA DESCRIPTION

Management Prescriptions - Management Area 13 has the following management prescriptions (see map on preceding page for distribution of prescriptions).

Management Prescription Category (MPC)	Percent of Mgt. Area
3.1 – Passive Restoration and Maintenance of Aquatic, Terrestrial & Hydrologic Resources	43
3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial & Hydrologic Resources	47
4.1c – Undeveloped Rec.: Maintain Unroaded Character with Allowance for Restoration	10

General Location and Description - Management Area 13 is comprised of lands administered by the Payette National Forest within the upper Big Creek, East Fork South Fork Salmon River, Monumental Creek, and Marble Creek drainages (see map, preceding page). The area lies in Valley and Idaho Counties, and is part of the Krassel Ranger District. The management area is an estimated 104,500 acres, which includes numerous mining-related private inholdings that, together, make up about 4 percent of the area. This area is adjacent to but has been excluded from the Frank Church-River of No Return Wilderness because of past mining activity and current mining potential. About 17 percent (24,000 acres) of this management area is comprised of Boise National Forest lands that are administered by the Payette. The Boise National Forest borders the area to the west, the Payette National Forest lies to the north, and the Frank Church-River of No Return Wilderness Area borders to the east and south. The primary uses or activities in this management area have been mining, dispersed recreation, and watershed restoration.

Access - The main access to the Stibnite and Thunder Mountain area is by Forest Road 412 from Yellow Pine to Stibnite, and Forest Road 375 from Stibnite to Thunder Mountain. The main access route to the Big Creek area is the native-surfaced, Forest Road 340, the Warren-Profile Gap Road. This road is usually open from July through early November. Roads were originally constructed to access mining areas, and are narrow, winding, and native-surfaced. A public airstrip at Big Creek also serves local landowners and recreationists. The density of classified roads for the area is an estimated 0.7 mile per square mile. Total road density for management area subwatersheds ranges between 0 and 2.2 miles per square mile. Several trails provide access to the roadless portions of the area.

Special Features - The management area lies adjacent to the Frank Church--River on No Return Wilderness, and trailheads in the area access trails that lead to Big Creek, Chamberlain Basin, Cougar Basin, Monumental Creek, and Missouri Ridge. Prominent landmarks in this area include the Stibnite and Thunder Mountain mining districts, and the Yellow Pine Pit (Glory Hole) on the East Fork South Fork Salmon River, and numerous mine ruins in the Big Creek area. The unincorporated community of Edwardsburg-Big Creek has residents during the summer recreation season. Big Creek Guard Station and Airstrip are also in this area.

An estimated 75 percent of the management area is inventoried as roadless, including all of the Sugar Mountain, Smith Creek, Placer Creek, and Big Creek Fringe Roadless Areas, and portions of the Secesh, Meadow Creek, Horse Heaven, Cottontail Point/Pilot Peak Roadless Areas.

This management area has a rare and significant fish species mix of chinook salmon, steelhead, bull trout, and westslope cutthroat trout, the first three of which are listed as Threatened species under the Endangered Species Act, and the latter is a Region 4 Sensitive species. Some streams or portions of streams within the management area are designated critical habitat and Essential Fish Habitat for chinook salmon.

Air Quality - Portions of this management area lie within Montana/Idaho Airsheds ID-15 and ID-16 and Valley County. Particulate matter is the primary pollutant of concern related to Forest management. There are two ambient air monitors located within Airshed ID-15 to evaluate current background levels, trends, and seasonal patterns of particulate matter. These are in McCall and Garden Valley. Airshed ID-16 contains no monitors. Three Class I areas are within 100 kilometers of this management area: the Hells Canyon, Selway-Bitterroot, and Sawtooth Wildernesses. Visibility monitoring has been expanded for these areas.

Between 1995 and 1999, emissions trends in Valley County improved for PM 10, while PM 2.5 emissions remained constant. The most common sources of particulate matter within the county were wildfire, prescribed fire, and fugitive dust from unpaved roads. In addition to Forest management activities, crop residue and ditch burning may contribute to particulate matter emissions, although the amount of agricultural-related burning was very low in Valley County (less than 600 acres). There were no point sources within the county.

Soil, Water, Riparian, and Aquatic Resources - Elevations range from 5,250 feet on the East Fork South Fork River to 9,233 feet atop Greeley Mountain. The dominant landforms in this area are glaciated mountains and uplands, frost-churned uplands, fluvial mountains, and depositional lands. Slope gradients average 10 to 80 percent in the glaciated mountains, 15 to 40 percent in the frost-churned uplands, 30 to 80 percent in the fluvial mountains, and 0 to 20 percent in the depositional lands. The area is predominantly underlain by granites of the Idaho batholith and associated metamorphic roof pendants, mostly quartzite, marble and calc-silicates. Soils generally have moderate to high surface erosion potential, and low to moderate productivity. Subwatershed vulnerability ratings range from low to high, with the majority being moderate (see table below). Geomorphic Integrity ratings for the subwatersheds vary from high (functioning appropriately) to moderate (functioning at risk) to low (not functioning appropriately) (see table below). The Upper East Fork South Fork Watershed has impacts from past mining operations and roads. Impacts include accelerated sediment, chemical contamination, and channel modification. Big Creek and Upper Monumental Creek Watersheds also have impacts from past mining operations and roads. Impacts are accelerated sediment and channel modification.

The management area comprises portions of four watersheds that extend across three subbasins. Part of the management area is in the Upper East Fork South Fork Watershed of the South Fork Salmon River Subbasin. However, the area also includes a long cherry stem into the Upper Monumental Creek Watershed of the Lower Middle Fork Salmon Subbasin, with a small portion

in the Upper Marble Creek Watershed of the Upper Middle Fork Salmon Subbasin. The Big Creek area comprises a portion of the Upper Big Creek Watershed in the Lower Middle Fork Salmon Subbasin. The major streams in the area are the East Fork South Fork Salmon River, Big Creek, Profile Creek, and Monumental Creek. Several high mountain lakes occur in the upper reaches of area streams, but none has road or trail access. No Mans-Boulder subwatershed is considered part of the state-regulated public water system for the community of Yellow Pine.

Water Quality Integrity ratings for the subwatersheds vary from high (functioning appropriately) to moderate (functioning at risk) to low (not functioning appropriately) (see table below). The Upper East Fork South Fork Watershed has localized impacts from past mining operations and roads. Impacts include accelerated sediment, chemical contamination, and channel modification. Big Creek and Upper Monumental Creek Watersheds also have localized impacts from past mining operations and roads. Impacts are accelerated sediment and channel modification. Five of the 14 subwatersheds in this area were listed in 1998 as having impaired water bodies under Section 303(d) of the Clean Water Act. These subwatersheds are Upper Monumental Creek, No Mans-Boulder, Sugar Creek, and Upper East Fork South Fork Salmon River. The pollutants of concern are sediment and metals. There are currently no TMDL-assigned subbasins associated with this management area.

Subwatershed Vulnerability			Geomorphic Integrity			Water Quality Integrity			No. 303(d) Subs	No. Subs With TMDLs	No. Public Water System Subs
High	Mod.	Low	High	Mod.	Low	High	Mod.	Low			
4	8	2	8	3	3	4	6	4	4	0	1

Native cutthroat trout are found in nearly every subwatershed, and redband trout and steelhead are found throughout this management area. The upper East Fork South Fork Salmon River is occupied by chinook salmon, steelhead, bull trout, and westslope cutthroat trout. Introductions of brook trout, mining activities and roads have reduced habitat quality for native fishes. Brook trout, sedimentation, chemical contamination, passage barriers, and large wood depletion all cause habitats to be functioning at risk.

In the Upper Big Creek, Upper Monumental Creek, and Upper Marble Creek Watersheds, localized accelerated sediment impacts have occurred primarily from mining, roads, and recreation, but the area still provides spawning and rearing habitat for chinook salmon, steelhead trout, bull trout, and westslope cutthroat trout. The incidence of introduced brook trout is low, with a corresponding low risk for genetic contamination of bull trout populations.

The Sugar Creek, Upper East Fork of the South Fork Salmon River, Upper Marble Creek, Upper Big Creek, and Smith Creek subwatersheds are identified as important to the recovery of listed fish species, and as high-priority areas for restoration.

Vegetation - Vegetation at lower elevations is typically Douglas-fir on south and west aspects, and Douglas-fir, lodgepole pine, and grand fir forests on north and east aspects. Mid elevations are dominated forest communities of lodgepole pine, grand fir, and subalpine fir, with pockets of aspen. Subalpine fir and whitebark pine are found at upper elevations.

The dominant potential vegetation groups in this area are Warm Dry Subalpine Fir (40 percent), Persistent Lodgepole Pine (17 percent), High Elevation Subalpine Fir (17 percent), Cool Moist Douglas-Fir (5 percent) and Warm Douglas-fir/Moist Ponderosa Pine (5 percent). Grasslands, shrublands, rock, and water comprise an estimated 10 percent of the area.

The High Elevation Subalpine Fir and Persistent Lodgepole Pine groups are generally at or near properly functioning condition, but they are moving toward the upper end of their successional cycle throughout much of the management area. Whitebark pine is starting to experience mortality from blister rust. In the Warm Dry Subalpine Fir group, stand densities and fuel loadings have reached the point where stands are at low but increasing risk to insect or disease outbreaks or stand-replacing fire. The Cool Moist Douglas-fir and Warm Douglas-fir/Moist Ponderosa Pine groups are in a similar condition. Some aspen occurs, but stands are generally declining and being replaced by mixed conifer.

Although riparian vegetation is at or near properly functioning condition for much of the area, localized areas have received impacts from mining, roads, and recreation. These localized areas are functioning at risk (moved from aquatic section).

Botanical Resources – Bent-flowered milkvetch and Borsch’s stonecrop, proposed Region 4 Sensitive species, occur within this management area. Currently, no federally listed or proposed plant species are known to occur in the area, but potential habitat for Ute ladies’-tresses and slender moonwort may exist. Ute ladies’-tresses, a Threatened orchid species, may have moderate to high potential habitat in riparian/wetland areas up to 7,000 feet. Slender moonwort, a Candidate species, may occur in moderate to higher elevation grasslands, meadows, and small openings in spruce and lodgepole pine.

Non-native Plants - A number of noxious weeds and exotic plants have been introduced into the management area, particularly along main travel ways. An estimated 7 percent of the area is highly susceptible to weed invasion and spread. The main weed of concern is spotted knapweed, a highly invasive species that currently occurs in small, scattered populations.

Wildlife Resources - Because most of this management area lies above 5,500 feet, the terrestrial and avian wildlife to be found are generally high-elevation species. The shrublands and forests provide big game summer range but are generally too high for winter range. Douglas-fir and grand fir forests at lower elevations provide habitat for Region 4 sensitive species, goshawk, and great gray owl. Peregrine falcon and mountain goats can be found in isolated areas with rocky bluffs. High-elevation subalpine fir forests provide habitat for boreal owl, three-toed woodpecker, wolverine, lynx, as well as summer range for mammals such as deer, elk, black bear, and mountain lion. Habitat for threatened lynx has been mapped in Lynx Analysis Units. Management Area 13 is in the Central Idaho Wolf Recovery Area, and wolves are known to occur here. The entire area provides habitat for migratory land birds. Overall, terrestrial wildlife habitat is near properly functioning condition in the high-elevation vegetation groups, but at low but increasing risk in the lower-elevation groups due to insect or disease outbreaks or stand-replacing fire.

Recreation Resources - Recreation is a major use in the Big Creek area. Activities include hunting, fishing, sightseeing, and pack trips from several trailheads into the adjacent Wilderness. Two resorts operate out of Big Creek during the summer and fall seasons, and there is a small campground next to the airstrip. The remainder of the management area receives low to moderate dispersed use associated mainly with the Big Creek/Edwardsburg area, Missouri Ridge and Monumental Creek Trails into the Wilderness, and with high mountain lakes in the upper Profile Creek drainage. Most use in this area is local, though users come through the area from all over the country to use the adjacent Wilderness, especially during big-game hunting seasons. The area is in Idaho Fish and Game Management Unit 25 and 26.

The recreation emphasis is on providing dispersed opportunities.

Scenic Environment – Visually sensitive routes and use areas represent locations from which the scenic environment is considered especially important. These routes or areas generally have a more restrictive VQO assigned to them than areas not seen from such locations. The following is a list of visually sensitive routes or use areas with this management area. There may also be sensitive routes or use areas in adjacent management areas that could be affected by actions taken in this management area.

Route or Area Type	Sensitivity Level	Name of Route or Area
Roads	1	Warren-Profile Gap 340, Big Creek-Smith Creek 371, McCall-Stibnite 412
Roads	2	Logan Creek 343
Trails	1	Mosquito Ridge 003, Big Creek 196, Cougar Basin 004
Trails	2	None
Use Areas	1	Fish Lake, Yellow Pine, Middle Lake, Crater Lake, Logan Lake
Use Areas	2	Edwardsburg

Cultural Resources – Cultural themes in this area include Prehistoric, Mining, and Settlement. This area received intermittent prehistoric use from ancestors of American Indian tribes. Historically, the dominant use in the area has been mining, represented by numerous mining sites and communities in the Stibnite, Yellow Pine, Big Creek, and Thunder Mountain Mining Districts.

Timberland Resources - Of the estimated 71,900 tentatively suited acres in this management area, there are no identified suited timberlands. Lands in MPCs 3.1, 3.2, and 4.1c have been identified as not suited for timber production. Forest vegetation management actions may be undertaken to support the achievement of vegetation desired conditions or other resource objectives in areas allocated to MPCs 3.1, 3.2 and 4.1c. Any timber production that may result from forest vegetation management actions will not count toward the allowable sale quantity but will contribute toward the Forest's Total Sale Program Quantity (TSPQ).

Past timber management has been relatively low and localized, consisting mainly of harvest related to mining or town construction, small salvage sales, and collection of Forest products such as fuelwood, posts, and poles.

Rangeland Resources - This area is managed for pack and saddle stock, and has no sheep or cattle allotments. There are only 9 acres that are considered capable rangeland.

Mineral Resources - Several hundred mining claims exist in Management Area 13. This area has a long history of mineral development, and the potential for small-scale and large-scale mineral development is high. This is the most active mining development area on the Forest. Due to anadromous fisheries and proximity to wilderness, management sensitivity is very high. Mining at Stibnite ended in 1997, and operations ceased in 1998. Reclamation began in 1998 and continued through 2000.

Fire Management – There has been little use of prescribed fire in this area. Recent large wildland fires include the Bishop Creek Fire (1990, 100 acres) and the Indian Point Fire (2000, 9,370 acres).

Yellow Pine and Edwardsburg-Big Creek are National Fire Plan communities, and Upper Big Creek and No Mans-Boulder are considered wildland-urban interface subwatersheds due to residential development adjacent to the Forest. No Mans-Boulder and Quartz Creek are also considered to pose risks to life and property from potential post-fire floods and debris flows. Historical fire regimes for the area are estimated to be: 17 percent lethal, 69 percent mixed1 or 2, and 8 percent non-lethal. Only 7 percent of the area regimes have vegetation conditions that are highly departed from their historical range, although most of this change is in the historically non-lethal fire regimes, where wildfire would likely be much larger and more intense and severe than historically. In addition, 35 percent of the area regimes have vegetation conditions that are moderately departed from their historical range. Wildfire in these areas may result in larger patch sizes of high intensity or severity, but not to the same extent as in the highly departed areas in non-lethal fire regimes.

Lands and Special Uses - Special-use authorizations include a designated utility corridor containing the Emmett-Stibnite power transmission line, Big Creek Airstrip, several access roads to private property, four domestic water diversions, two irrigation ditches, three FERC hydropower permits, and a power line right-of-way to Stibnite.

MANAGEMENT DIRECTION

In addition to Forest-wide Goals, Objectives, Standards, and Guidelines that provide direction for all management areas, the following direction has been developed specifically for this area.

MPC/Resource Area	Direction	Number	Management Direction Description
MPC 3.1	General Standard	1301	Management actions, including salvage harvest, may only degrade aquatic, terrestrial, and watershed resource conditions in the temporary time period (up to 3 years), and must be designed to avoid resource degradation in the short term (3-15 years) and long term (greater than 15 years).

MPC/Resource Area	Direction	Number	Management Direction Description
MPC 3.1 Passive Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources	Vegetation Standard	1302	Mechanical vegetation treatments, excluding salvage harvest, may only occur where: a) The responsible official determines that wildland fire use or prescribed fire would result in unreasonable risk to public safety and structures, investments, or undesirable resource affects; and b) They maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species; or c) They maintain or restore habitat for native and desired non-native wildlife and plant species.
	Fire Standard	1303	Wildland fire use and prescribed fire may only be used where they: a) Maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species, or b) Maintain or restore habitat for native and desired non-native wildlife and plant species.
	Road Standard	1304	Road construction or reconstruction may only occur where needed: a) To provide access related to reserved or outstanding rights, or b) To respond to statute or treaty, or c) To address immediate response situations where, if action is not taken, unacceptable impacts to hydrologic, aquatic, riparian or terrestrial resources, or health and safety, would result.
	Fire Guideline	1305	The full range of fire suppression strategies may be used to suppress wildfires. Emphasize suppression strategies and tactics that minimize impacts on aquatic, terrestrial, or watershed resources.
MPC 3.2 Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources	General Standard	1306	Management actions, including salvage harvest, may only degrade aquatic, terrestrial, and watershed resource conditions in the temporary (up to 3 years) or short-term (3-15 years) time periods, and must be designed to avoid degradation of existing conditions in the long-term (greater than 15 years).
	Vegetation Standard	1307	Vegetation restoration or maintenance treatments—including wildland fire use, mechanical, and prescribed fire—may only occur where they: a) Maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species; or b) Maintain or restore habitat for native and desired non-native wildlife and plant species; or c) Reduce risk of impacts from wildland fire to human life, structures, and investments.
	Fire Standard	1308	Wildland fire use and prescribed fire may only be used where they: a) Maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species; or b) Maintain or restore habitat for native and desired non-native wildlife and plant species; or c) Reduce risk of impacts from wildland fire to human life, structures, and investments.

MPC/Resource Area	Direction	Number	Management Direction Description
MPC 3.2 Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources	Road Standard	1309	Road construction or reconstruction may only occur where needed: a) To provide access related to reserved or outstanding rights, or b) To respond to statute or treaty, or c) To support aquatic, terrestrial, and watershed restoration activities, or d) To address immediate response situations where, if action is not taken, unacceptable impacts to hydrologic, aquatic, riparian or terrestrial resources, or health and safety, would result.
	Fire Guideline	1310	The full range of fire suppression strategies may be used to suppress wildfires. Emphasize suppression strategies and tactics that minimize impacts on aquatic, terrestrial, or watershed resources.
MPC 4.1c Undeveloped Recreation: Maintain Unroaded Character with Allowance for Restoration Activities	General Standard	1311	Management actions—including mechanical vegetation treatments, salvage harvest, wildland fire use, prescribed fire, special use authorizations, and road maintenance—must be designed and implemented in a manner that would be consistent with the unroaded landscape in the temporary, short term, and long term. Exceptions to this standard are actions in the 4.1c road standard, below.
	Road Standard	1312	Road construction or reconstruction may only occur where needed: a) To provide access related to reserved or outstanding rights, or b) To respond to statute or treaty.
	Fire Guideline	1313	The full range of fire suppression strategies may be used to suppress wildfires. Emphasize tactics that minimize impacts of suppression activities on the unroaded landscape.
Soil, Water, Riparian, and Aquatic Resources	Goal	1314	Maintain or restore habitat for threatened species in the Sugar Creek and Upper East Fork South Fork Watershed, and to maintain habitat for listed fish species in the Upper Big Creek, Upper Monumental Creek, Smith Creek, and Upper Marble Creek subwatersheds.
	Objective	1315	Restore or maintain riparian area composition, structure, and function in localized areas of the Upper East Fork South Fork Salmon River drainage by improving riparian vegetation and hydrologic function through decommissioning or obliterating roads within riparian areas and returning road surfaces, cuts, and fills to productivity.
	Objective	1316	Improve water quality by reducing impacts from accelerated sediment and chemical contamination in the Upper East Fork South Fork Salmon River drainage, including the Sugar Creek and Upper East Fork South Fork Salmon River subwatersheds.
	Objective	1317	Reduce impacts to riparian areas from recreation sites or uses. Identify recreational campsites, parking areas, or trails that are contributing unacceptable levels of accelerated sediment, compaction, or vegetation loss. Rehabilitate, relocate, or harden sites where needed to reduce impacts.
	Objective	1318	Restore fish habitat degraded from past mining activities in the Upper East Fork South Fork Salmon River drainage, including the Sugar Creek and Upper East Fork South Fork Salmon River subwatersheds.
	Objective	1319	Assist in de-listing the East Fork South Fork of Salmon River from the State of Idaho's impaired water bodies list by applying appropriate and active watershed restoration to reduce sediment and metals contamination, which are the identified pollutants of concern.
	Objective	1320	Eliminate the effects to fish habitat from the Big Creek ford in the Upper Big Creek subwatershed.

MPC/Resource Area	Direction	Number	Management Direction Description																
Vegetation	Objective	1321	Use a combination of prescribed and wildland fire and mechanical treatments to restore or maintain vegetative composition and structure, and to reduce fuel loadings.																
Botanical Resources	Objective	1322	Maintain or restore known populations and occupied habitats of TEPCS plant species, including bent-flowered milkvetch and Borsch's stoncrop to contribute to the long-term viability of these species.																
Non-native Plants	Objective	1323	To reduce impacts on native plants and other resources, eradicate or control infestations of spotted knapweed. Prevent the establishment and spread of new noxious weed infestations.																
Recreation Resources	Objective	1324	Continue to provide access to popular Wilderness Area recreation destinations to maintain recreation opportunities and experiences.																
	Objective	1325	Maintain or improve trailheads for Big Creek, Mosquito Ridge, Cougar Basin, Missouri Ridge, and Monumental Creek during the planning period to promote trail access opportunities.																
	Objective	1326	Achieve or maintain the following ROS strategy: <table border="1" data-bbox="699 772 1406 989"> <thead> <tr> <th rowspan="2">ROS Class</th> <th colspan="2">Percent of Mgt. Area</th> </tr> <tr> <th>Summer</th> <th>Winter</th> </tr> </thead> <tbody> <tr> <td>Semi-Primitive Non-Motorized</td> <td>58%</td> <td>17%</td> </tr> <tr> <td>Semi-Primitive Motorized</td> <td>1%</td> <td>71%</td> </tr> <tr> <td>Roaded Natural</td> <td>34%</td> <td>1%</td> </tr> <tr> <td>Roaded Modified</td> <td>7%</td> <td>11%</td> </tr> </tbody> </table> <p>The above numbers reflect current travel regulations. These numbers may change as a result of future travel regulation planning</p>	ROS Class	Percent of Mgt. Area		Summer	Winter	Semi-Primitive Non-Motorized	58%	17%	Semi-Primitive Motorized	1%	71%	Roaded Natural	34%	1%	Roaded Modified	7%
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Cultural Resources	Objective	1327	Prepare management plans for properties listed on the National Register of Historic Places, including Big Creek Commissary (PY-797) to meet federal requirements for management of historic properties.																
	Objective	1328	Maintain fences and markers at burial sites, including Logan Creek Burial (PY-1131), Napier A. Edwards (PY-1449), Varnes Memorial Marker (PY-1513), Roosevelt Cemetery (PY-51), Grant U. Smith (PY-1132), and MacDonald (PY-1320) to meet state and federal legal requirements for protection of historic properties.																
	Objective	1329	Conduct a cultural resource inventory of the Smith Creek Mining District to identify and document important cultural resources.																
	Objective	1330	Continue inventory and documentation of Thunder Mountain Mining District to identify and document important cultural resources.																
Mineral Resources	Objective	1331	Provide interpretive information about historic mining sites and activities in the Stibnite, Thunder Mountain, and Edwardsburg areas to provide education opportunities for Forest visitors.																
	Objective	1332	Reduce toxic hazards from the Cinnabar Mine site by completing HAZMAT cleanup of mine site.																
	Objective	1333	Identify and rehabilitate abandoned mined lands within this management area to reduce impacts to water quality and fish habitat for listed and native fish species.																
Fire Management	Objective	1334	Identify areas appropriate for Wildland Fire Use, emphasizing Inventoried Roadless Areas. Use wildland fire to restore or maintain vegetative desired conditions and to reduce fuel loadings.																

MPC/Resource Area	Direction	Number	Management Direction Description
Fire Management	Objective	1335	Use prescribed fire and mechanical treatments within and adjacent to wildland-urban interface areas and Forest Service administrative sites to manage fuels to reduce wildfire hazards. Develop and prioritize vegetation treatment plans for wildland-urban interface in coordination with local and tribal governments, agencies, and landowners.
	Objective	1336	Coordinate and emphasize fire education and prevention programs with private landowners to help reduce wildfire hazards and risks. Work with landowners to increase defensible space around structures.
	Guideline	1337	Coordinate with the Boise NF to develop compatible wildland fire suppression and wildland fire use strategies.
Lands and Special Uses	Objective	1338	Work with landowners in the Lick Creek Trailhead area to find an alternative crossing site of Big Creek to avoid impacts to threatened fish and their habitat.
Facilities and Roads	Standard	1339	<p>Do not reopen classified roads in Level 1 maintenance status or Level 2 roads that have become impassable unless it can be demonstrated through the project-level NEPA analysis and related Biological Assessment that:</p> <ul style="list-style-type: none"> a) For resources that are within their range of desired conditions, reopening these roads for use shall not result in degradation to those resources unless outweighed by demonstrable short- or long-term benefits to those resource conditions; and b) For resources that are already in a degraded condition, reopening these roads shall not further degrade nor retard attainment of desired resource conditions unless outweighed by demonstrable short- or long-term benefits to those resource conditions; and c) Adverse effects to TEPC species or their habitats are avoided unless outweighed by demonstrable short- or long-term benefits to those TEPC species or their habitats. <p>Where reopening these roads cannot meet these constraints, consider decommissioning. An exception to this standard is where reopening Level 1 or 2 classified roads is required to respond to reserved or outstanding rights, statute or treaty, or respond to emergency situations (e.g., wildfires threatening life or property, or search and rescue operations).</p>

View from Lightning Peak

