

COVER SHEET

FEDERAL ENERGY REGULATORY COMMISSION

DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE HELLS CANYON PROJECT

Docket No. P-1971-079

Appendices
DEIS

APPENDIX A
AGENCY IDENTIFIERS FOR MEASURES
ADDRESSED IN THE EIS

Appendix A. Agency Identifiers for Measures Addressed in the EIS

I-V

Identifier Used in the EIS	Recommending Entity ID	Recommendation Type	Description of Measure
AR/IRU-1	I	comment	Reopen Idaho Power's Mid-Snake Projects and C.J. Strike project licenses.
AR/IRU-2	II.1	comment	Issue the license for a term of 30 years.
AR/IRU-3	II.2	comment	Convene a technical advisory committee to oversee adaptive management in the license.
AR/IRU-4	II.3	comment	Allow for a license reopener in the event that additional measures/modifications are necessary.
AR/IRU-5	III.1	10a	Work with a subgroup of a Technical Advisory Committee on a fish passage and reintroduction plan.
AR/IRU-6	III.2	10a	Design, fund and implement a Fish Passage and Reintroduction Plan.
AR/IRU-7a	III.3.1	10a	Provide passage of spring Chinook and steelhead into Pine and Indian Creeks.
AR/IRU-7b	III.3.1(sic)	10a	Provide passage of spring Chinook and steelhead into Eagle, Daly and Goose Creeks.
AR/IRU-7c	III.3.3	10a	Consider and implement passage and reintroduction efforts in the Weiser and Payette rivers.
AR/IRU-7d	III.3.4	10a	Implement a pathogen risk assessment to understand the pathogen risks from a reintroduction effort
AR/IRU-8a	III.4.1	10a	Conduct water quality studies under a drawdown and full reservoir scenario.
AR/IRU-8b	III.4.2	10a	Evaluate egg to fry survival of fall Chinook using egg boxes.
AR/IRU-8c	III.4.3	10a	Study juvenile and adult fall Chinook migration through project reservoirs and to potential collection points.
AR/IRU-8d	III.4.4	10a	Initiate fall Chinook reintroduction aftersufficient egg survival rates have been demonstrated.
AR/IRU-8e	III.4.5	10a	Design, construct, and test upstream and downstream fish passage facilities.
AR/IRU-8f	III.4.6	10a	Evaluate passage needs at Swan Falls dam and C.J. Strike dam.
AR/IRU-9a	III.5.1, 5.2, 5.3	10a	Construct fish passage facilities at Pine Creek, upgrade the Hells Canyon trap, etc..
AR/IRU-9b	III.5.4	10a	Implement a brook trout eradication program for tributaries into which bull trout will be moved.
AR/IRU-9c	III.5.5	10a	Conduct a fish pathogen risk assessment.
AR/IRU-9d	III.5.6	10a	Conduct long-term monitoring and evaluation of the resident fish passage program.
AR/IRU-10	IV	10a	Undertake a hatchery program consistent with the priority objective of recovery of wild stocks.
AR/IRU-11a	V.1.1	10a	Fund and implement a tributary enhancement program; emphasis on Pine and Indian Creek and Wildhorse River.
AR/IRU-11b	V.1.2	10a	Reintroduce anadromous salmon and steelhead to restore marine-derived nutrients.
AR/IRU-11c	V.1.3	10a	Ensure sufficient flows in the Oxbow bypassed reach to allow fish passage for bull trout.
AR/IRU-11d	V.1.4	10a	Study project effects on bull trout prey base, foraging capability, growth, fecundity and general fitness.
AR/IRU-12a	V.2.1.A	10a	Implement ROR operations at Lower Salmon Falls, Bliss, C.J. Strike projects seasonally for sturgeon.
AR/IRU-12b	V.2.1.C	10a	Monitor success of sturgeon spawning and early life history stages.
AR/IRU-12c	V.2.2	10a	Develop conservation aquaculture program.

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AR/IRU-12d	V.2.3, V.2.6	10a	Study limiting factors in each reach; determine whether passage is necessary to ensure persistence.
AR/IRU-12e	V.2.4, V.2.7	10a	Conduct a white sturgeon passage/connectivity study; implement anti-entrainment and impingement measures.
AR/IRU-12f	V.2.8	10a	Do not undertake sturgeon translocation until limiting factors have been determined and addressed.
AR/IRU-12g	V.2.10	10a	Implement water quality improvement measures elsewhere in the basin to aid in sturgeon recovery.
AR/IRU-13	VI	10a	Implement a Pacific lamprey restoration plan using adaptive management
AR/IRU-14	VII	10a	Require an adaptive management approach to the mitigation of project effects to the benthic community.
AR/IRU-15	VIII.1	10a	Provide a level of suspended fine sediment that mimics naturally occurring levels of turbidity during freshet.
AR/IRU-16	VIII.2	10a	Reduce nutrient and suspended particle delivery from on-land sources instead of providing DO supplementation.
AR/IRU-17a	VIII.3.A	10a	Conduct real time DO monitoring of Brownlee and implement similar systems at Oxbow and Hells Canyon dams.
AR/IRU-17b	VIII.3.B	10a	Increase dissolved oxygen levels by aerating or oxygenating forebay waters and or their outflows.
AR/IRU-17c	VIII.3.B	10a	Use adaptive-management approach in applying this measure.
AR/IRU-18a	VIII.4.1	10a	Monitor TDG in real time during periods of spill or consistent with WQCs to detect TDG violations.
AR/IRU-18b	VIII.4.2	10a	Use an adaptive-management approach using measurements of TDG as an indicator of priority.
AR/IRU-18c	VIII.4.3	10a	Install deflectors to minimize the deep plunge of water immediately downstream of the dam face.
AR/IRU-18d	VIII.4.4	10a	Evaluate if non-plunging discharge should be horizontally separated from plunging over flows.
AR/IRU-18e	VIII.4.6	10a	Develop a compensation program to address losses of aquatic biota when TDG attainment if not feasible.
AR/IRU-19	VIII.5	10a	Continue to investigate installation of a temperature control structure to meet Clean Water Act standards.
AR/IRU-20	VIII.6	10a	Obtain a section 402 CWA permit for any discharges related to turbine operation from the Brownlee project.
AR/IRU-21	IX	10a	Replenish an appropriate portion of the sediments to the Snake River below Hells Canyon dam.
AR/IRU-22	X.1.	10a	Cooperate with BOR to provide flow augmentation.
AR/IRU-23a	X.2.1, 2.2	10a	Implement a ramping rate of 2 inches per hour from Dec. 8 through Oct. 19, and other ramping measures.
AR/IRU-23b	X.2.3	10a	Monitor and identify potential stranding sites and minimize the potential for stranding fall Chinook.
AR/IRU-23c	X.2.4	10a	Measure flows and ramping rates at Hells Canyon dam.
AR/IRU-23d	X.2.5	10a	Study and implement operations with respect to ramping rates to provide an optimal range of benefits.
AR/IRU-24	X.3	10a	Implement a minimum flow that would reduce entrapment during the spring fall Chinook rearing/outmigration.
AR/IRU-25	X.4	10a	Identify and implement restrictions on a range of changes in daily maximum discharge at Hells Canyon dam.
AR/IRU-26	XI.1	10a	Install and operate water quality monitoring stations.
AR/IRU-27	XII	10a	Establish mitigation funds for habitat enhancement and restoration for on and off-site mitigation
AR/IRU-28	XIII.1	10a	Establish a Project Decommissioning Fund.

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AR/IRU-29	XIII.2	10a	Implement conservation programs; non-hydropower renewable energy; demand side management; etc.
BPT-1	G-1	10a	Consult with BPT in a government-to-government relationship regarding activities that affect tribal interests.
BPT-2	G-2	10a	Ensure compliance with all applicable laws, rules and regulations.
BPT-3	G-3	10a	Establish and fund a Resource Coordinating Committee.
BPT-4	G-4	10a	Escalate costs and payment amounts according to the specified formula.
BPT-5	A-1	10a	Fund the acquisition of upland and riparian habitat in the Malheur River Sub-basin.
BPT-6	A-2	10a	Implement a Habitat and Water Quality Restoration Fund in areas where salmon distribution has been blocked.
BPT-7	A-3	10a	Consider the feasibility and practicality of passage and partial restoration of anadromous fish.
BPT-8	A-4	10a	Establish and fund an Aquatic Resources Task Force and implement an Integrated Aquatic Resources Program
BPT-9	T-1	10a	Establish and fund a Terrestrial Resources Task Force.
BPT-10	C-1	10a	Comply with all applicable cultural protection laws.
BPT-11	C-2	10a	Create a Burns Paiute Tribal Education Scholarship.
BPT-12	C-3	10a	Establish a Cultural Education Center.
BPT-13	C-4	10a	Complete studies regarding traditional cultural properties and file a Historic Properties Management Plan.
BPT-14	C-5	10a	Provide law enforcement to protect cultural resources (develop monitoring plan).
BPT-15	C-6	10a	Establish a Cultural Resources Task Force.
BPT-16	C-7	10a	Consult and work with BPT on gathering information about cultural sites (fund).
BPT-17	C-8	10a	Establish a cooperative management area in the Snake River and its tributaries.
BPT-18	R-1	10a	Manage reservoir levels and recreation to preserve and protect cultural and natural resources.
BPT-19	R-2	10a	Prepare an Integrated Comprehensive Recreational Plan, a Visual Resource Mgmt. Plan, and interpretive signage.
Corps-1	2	10a	Determine the flood control draft for Brownlee consistent with the November 1998 Procedure.
Corps-2	3	10a	Handle future winter flood control operations for Brownlee reservoir in conjunction with the Corps.
Corps-3	5.2.1.a	10a	Operate the project in the interest of navigation to maintain flow targets continuously throughout the year.
Corps-4	5.2.1.b	10a	Set the minimum release from Hells Canyon dam when Brownlee Reservoir inflow is less than 8,500 cfs.
Corps-5	5.2.1.c	10a	Seek a temporary variance from the Corps for flow requirements under certain circumstances.
Corps-6	5.2.1.d	10a	Prevent the maximum variation in river stage from exceeding one foot per hour at Johnson's Bar station.
CTUIR-1	II.A	10a	Provide a mitigation and compensation fund for artificial production of fisheries and habitat improvements.
CTUIR-2	II.B	10a	Manage emergency situations that may cause mortality or other harm to fish and wildlife species or their habitats.
CTUIR-3	II.C	10a	Include FERC's standard reopener to reopen the license proceeding if needed.

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CTUIR-4	II.D	10a	Remove or modify Project facilities and restore pre-Project conditions upon project abandonment.
CTUIR-5	II.E	10a	Issue the license for a term of no longer than 20 years.
CTUIR-6	III.1	10a	Timely pass all Upper Snake River water through the project.
CTUIR-7	III.2	10a	Maintain Brownlee reservoir at its upper flood control rule curve from February 28 through April 15 each year.
CTUIR-8	III.3	10a	Shift flood control space from Brownlee reservoir to Lake Roosevelt seasonally in low to average flow years.
CTUIR-9	III.4	10a	Implement actions to make the most efficient use of Brownlee reservoir storage to meet anadromous fish needs.
CTUIR-10	III.5	10a	Restrict ramping rates to 2 inches per hour during fall chinook spawning and certain other conditions.
CTUIR-11a	III.6	10a	Evaluate the feasibility of fish passage technologies for upstream and downstream migration at the project.
CTUIR-11b	III.6	10a	Conduct field tagging studies to determine juvenile and adult lamprey migration times, and other parameters.
CTUIR-11c	III.6	10a	Evaluate effects of reservoir drawdowns on fish passage, water quality, and water velocities.
CTUIR-12a	III.7	10a	Develop and implement a salmon and steelhead reintroduction plan.
CTUIR-12b	III.7.A	10a	Design, construct and operate a juvenile spring Chinook collection facility on Eagle Creek.
CTUIR-12c	III.7.B	10a	Provide a juvenile summer steelhead collection facility on Pine Creek or in the Hells Canyon dam forebay.
CTUIR-12d	III.7.C	10a	Re-introduce spring Chinook in Eagle Creek and summer steelhead in Pine Creek.
CTUIR-12e	III.7.D	10a	Design, construct and operate improved adult collection facilities at Hells Canyon dam.
CTUIR-12f	III.7.F	10a	Design, construct and operate juvenile salmon and steelhead collection facilities in the Weiser and Payette rivers.
CTUIR-12g	III.7.G	10a	Establish an escrow account into which the annualized cost of PME measures is deposited annually.
CTUIR-13	III.8	10a	Develop a plan that promotes rebuilding of white sturgeon populations within the APE.
CTUIR-14	III.9	10a	Maintain a minimum flow of 6,500 cfs immediately below Hells Canyon dam and 13,000 cfs at Lime Point.
CTUIR-15	III.10	10a	Establish and support a single, comprehensive fisheries and aquatic resources management committee
CTUIR-16	III.11	10a	Contribute to the funding of regional evaluations of salmon stocks that are affected by the project
CTUIR-17	III.12	10a	Investigate the status of the Pacific lamprey population in the project area and contribute to research funding.
CTUIR-18	III.13	10a	Ensure passage of juvenile Pacific lamprey through the project and meet downstream passage standards.
CTUIR-19	III.14	10a	Develop a Lamprey Passage Plan
CTUIR-20	III.15	10a	Construct structures on Hells Canyon dam to abate total dissolved gas.
CTUIR-21	III.16	10a	Construct structures on Hells Canyon dam to add dissolved oxygen to the Snake River below the project.
CTUIR-22	III.17	10a	Investigate installation of a temperature control structure at Brownlee reservoir.
CTUIR-23	III.18	10a	Prevent the discharge of point-source pollutants into the Snake River from the project.
CTUIR-24	III.18.C.1	10a	Expand the APE to the confluence of the Snake and Clearwater Rivers and survey the area for cultural resources.

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CTUIR-25	III.18.C.2	10a	Finalize the HPMP.
CTUIR-26	III.18.C.3	10a	Remove all time frames for agencies to consult with tribes regarding undertakings taking place on agency land.
CTUIR-27	III.18.C.4	10a	Create a cultural resource work group.
CTUIR-28	III.18.C.5	10a	Clarify that all PME in all categories are undertakings for the purposes of the National Historic Preservation Act.
CTUIR-29	III.18.C.6	10a	Specify what is meant by monitoring.
CTUIR-30	III.18.C.7	10a	Stabilize and protect affected historic properties and maintain any stabilization measures in perpetuity.
CTUIR-31	III.18.C.8	10a	Mitigate sites and clarify that the significance of a given site may be tied to more than its scientific information.
CTUIR-32	III.18.C.9	10a	Clarify that boat wakes on the reservoirs are project-related impacts.
CTUIR-33	III.18.C.10	10a	Ensure that artifacts removed from the APE are reburied on site or curated at a federally recognized repository.
CTUIR-34	III.18.C.11	10a	Clearly delineate roles of other federal agencies that may play a role implementing any part of the HPMP.
CTUIR-35a	III.19	10a	Identify, monitor and mitigate effects to historic properties, and ultimately to better protect those sites.
CTUIR-35b	III.19.A	10a	Develop long-term monitoring framework and plan for archaeological sites.
CTUIR-35c	III.19.B	10a	Develop monitoring plan for rock image sites.
CTUIR-35d	III.19.C	10a	Develop monitoring framework and plan for TCPs.
CTUIR-35e	III.19.D	10a	Enact measures for law enforcement.
CTUIR-35f	III.19.E	10a	Involve public, other agencies, law enforcement in protection efforts.
CTUIR-35g	III.19.F	10a	Discourage use of dispersed recreation sites in the APE.
CTUIR-35h	III.19.G	10a	Conduct sensitivity training for staff.
CTUIR-35i	III.19.H	10a	Resurvey APE every 10 years.
CTUIR-35j	III.19.H	10a	Provide \$1 million to tribes to assist their participation in consultation and coordination.
CTUIR-35k	III.19.H	10a	Develop plan for increasing tribal access to tribal fishing sites in APE.
FS-1	1	4e	Obtain FS approval prior to habitat or ground-disturbing activities on FS lands.
FS-2	2	4e	Prepare a Resource Coordination Plan.
FS-3	3	4e	Prepare a Fire Prevention Plan.
FS-4 (rev.)	4	4e	Establish a mitigation fund for use by the FS for the purpose of restoring and maintaining 14 acres of sandbars.
FS-5 (rev.)	5	4e	Prepare an Integrated Wildlife Habitat Program (IWHP) and Wildlife Mitigation and Mgt. Plan (WMMP).
FS-6 (rev.)	6	4e	Prepare a Land Acquisition and Management Plan to be incorporated into the IWHP and WMMP.
FS-7 (rev.)	7	4e	Prepare and implement a cooperative Integrated Weed Management Plan.
FS-8 (rev.)	8	4e	Prepare a Threatened and Endangered Species Management and Monitoring Strategy.

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FS-9 (rev.)	9	4e	Prepare a Sensitive Species Management Plan to be incorporated into the WMMP.
FS-10	10	4e	Implement the Mountain Quail Habitat Enhancement program.
FS-11	11	4e	Develop a transmission line operation and maintenance plan.
FS-12 (rev.)	12	4e	Finalize the Hells Canyon Complex Comprehensive Recreation Management Plan.
FS-13	13	4e	Develop a site development plan for the Big Bar Recreation Area.
FS-14	14	4e	Implement the Eagle Bar site plan proposed in the draft Recreation Plan.
FS-15	15	4e	Implement the Eckels Creek Dispersed Site plan proposed in the draft Recreation Plan.
FS-16	16	4e	Complete a condition and safety inspection of Deep Creek Stairway/Trail #218 and correct any deficiencies.
FS-17	17	4e	Improve and maintain parking/signing at Allison, Kinney, Eckels, and Deep Creek parking lots.
FS-18	18	4e	Perform O&M necessary to meet FS standards for Eagle Bar, Eckels Creek, Big Bar, and other sites.
FS-19	19	4e	Manage Hells Canyon reservoir levels to minimize impacts on recreation resources during the summer.
FS-20 (rev.)	20	4e	Perform trail maintenance for trails designated by the FS.
FS-21 (rev.)	21	4e	Prepare a plan for improvements of the Hells Canyon Creek Launch Site.
FS-22	22	4e	Develop an aesthetic improvement plan for enhancement of Hells Canyon dam.
FS-23	23	4e	Finalize Idaho Power's proposed Comprehensive Management Plan relating to design standards and landscaping..
FS-24	24	4e	Prepare a Scenery Management Plan for FS lands within the project boundary.
FS-25 (rev.)	25	4e	Finalize a Historic Properties Management Plan for cultural resources.
FS-26	26	4e	Ensure that the project boundary on FS lands is well defined and encompasses necessary land.
FS-27	27	4e	Implement additional measures as necessary.
FS-28			there is no FS-28
FS-29	1	10a	Maintain a minimum flow of 8,500 cfs downstream of Hells Canyon dam to provide for safe navigation.
FS-30	2	10a	Assess the effects of load following downstream of Hells Canyon dam using the Adaptive Management Program.
FS-31	3	10a	Prepare a Gravel Monitoring Plan.
FS-32	4	10a	Develop, fund and implement a fish passage plan for bull trout.
FS-33	5	10a	Establish, fund and implement a Tributary Habitat Mitigation Fund for spring Chinook and steelhead
FS-34	6	10a	Finalize and implement the Hells Canyon Resource Management Plan, IWHP, and WMMP.
IDFG-1a	III.C.1	10j	Continue Idaho Power's fall chinook spawning program, which includes providing stable flows.
IDFG-1b	III.C.1	10j	Develop measures to reduce effects of entrapment on juvenile chinook during the juvenile outmigration period. .
IDFG-2	III.C.2	10j	Continue to conduct shallow redd surveys and monitor temperature.

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IDFG-3	III.C.3	10j	Continue and improve the anadromous fish hatchery facilities and program
IDFG-4	III.C.4	10j	Develop anadromous fish hatchery goals, especially those related to adult return and societal use
IDFG-5	III.C.5	10j	Monitor and evaluate fish hatchery performance and employ an IDFG hatchery evaluation biologist.
IDFG-6	III.C.6	10j	Purchase a new fish marking unit and implement measures to ameliorate whirling disease.
IDFG-7	III.C.7	10j	Purchase and operate an additional transport vehicle for relocating surplus adult fish.
IDFG-8	III.C.8	10j	Improve public angler access to several fisheries.
IDFG-9	III.C.9	10j	Continue monitoring incubation conditions in the historic fall chinook spawning areas in the Marsing reach.
IDFG-10	III.C.10	10j	Monitor Pacific lamprey downstream and participate in the Columbia River Basin Lamprey Work Group.
IDFG-11	III.E.1	10j	Develop and implement a native salmonid plan
IDFG-12	III.E.2	10j	Implement a pathogen risk assessment plan for the Pine Creek, Indian Creek, and Wildhorse River basins.
IDFG-13	III.E.3	10j	Initiate a fish passage program; do not relocate bull trout until adverse effects from brook trout can be addressed.
IDFG-14	III.E.4	10j	Improve facilities at the existing Hells Canyon dam fish trap by implementing a specified alternative.
IDFG-15	III.E.5	10j	Delay construction of a fish trap at Oxbow dam until the Hells Canyon fish trap can be evaluated.
IDFG-16	III.E.6	10j	Implement a tributary habitat enhancement program.
IDFG-17	III.E.7	10j	Supplement nutrients for resident salmonids using only spawned carcasses or carcass analogs (conduct study).
IDFG-18	III.E.8	10j	Conduct surveys for bull trout in the Hells Canyon Complex
IDFG-19	III.E.9	10j	Design, construct, and monitor a weir facility at Pine Creek
IDFG-20	III.E.10	10j	Explore feasibility of methods to control brook trout in Indian Creek
IDFG-21	III.E.11	10j	Use the white sturgeon conservation plan to contribute to the goal of restoring healthy white sturgeon populations
IDFG-22	III.E.12	10j	Conduct an assessment of degraded water quality impacts on early life stages of white sturgeon.
IDFG-23	III.E.13	10j	Conduct feasibility studies prior to the translocation of reproductive-sized white sturgeon.
IDFG-24	III.E.14	10j	Focus initial conservation efforts to benefit white sturgeon on habitat restoration.
IDFG-25	III.E.15	10j	Conduct long-term population assessments of white sturgeon as proposed by Idaho Power
IDFG-26	III.E.16	10j	Implement a genetic monitoring program of white sturgeon as proposed by Idaho Power
IDFG-27	III.G.1	10j	Implement measures to protect warmwater fish.
IDFG-28	III.I.1	10j	Acquire, protect, and enhance lands to mitigate project impacts.
IDFG-29	III.I.2	10j	Acquire and enhance low elevation upland and riparian habitat to replace habitats affected by the project.
IDFG-30	III.I.3	10j	Develop and fund a mountain quail restoration project adjacent to the project reservoirs.
IDFG-31	III.I.4	10j	Enhance habitat on Gold, Huffman, Patch, and Porter Islands with increased funding.

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IDFG-32	III.I.6	10j	Control the establishment and spread of noxious weeds in the project area.
IDFG-33	III.I.7	10j	Protect rare plant sites affected by disturbance activities in Hells Canyon.
IDFG-34	III.I.8	10a	Manage the Big Bar recreation site for wildlife not intensive recreation.
IDPR-1	IV.C.2	10a	Implement Idaho Power's proposed recreation and aesthetic measures.
Interior-1	1	4e	Consult and cooperate with the BLM prior to initiating activities on BLM-administered lands.
Interior-2	2	4e	Provide a report documenting measures necessary to protect project-affected BLMlands and resources.
Interior-3 (rev.)	3	4e	Develop a Travel and Access Management Plan for project and BLM-administered lands affected by the project.,
Interior-4 (rev.)	4	4e	Develop and implement a Law Enforcement and Emergency Services Plan.
Interior-5	5	4e	File a revised final Historic Properties Management Plan.
Interior-6	6	4e	Prepare an integrated Comprehensive Recreation Management Plan.
Interior-7	7	4e	Develop and implement a litter and sanitation plan for the project.
Interior-8	8	4e	Develop a Project Boat Moorage Plan.
Interior-9	9	4e	Develop an enhancement plan for the BLM sites referred to as Airstrip, Bob Creek section C, and Westfall.
Interior-10	10	4e	Develop an enhancement plan for the BLM Swedes Landing Site (Swedes Plan).
Interior-11 (rev.)	11	4e	Develop an enhancement plan for the BLM Spring Recreation Site.
Interior-12 (rev.)	12	4e	Develop an enhancement plan for the BLM site referred to as Steck Recreation Site.
Interior-13	13	4e	Develop an enhancement plan for the BLM site referred to as Jennifer's Alluvial Fan Site.
Interior-14	14	4e	Develop an Idaho Dispersed Sites Plan.
Interior-15	15	4e	Develop an enhancement plan for the BLM site referred to as Carter's Landing and Oxbow Boat Launch.
Interior-16	16	4e	Develop an enhancement plan for the BLM site referred to as Oasis.
Interior-17	17	4e	Develop an enhancement plan for the BLM site referred to as Copper Creek.
Interior-18	18	4e	Develop a Low-Water Boat Launch Plan.
Interior-19	19	4e	Withdrawn
Interior-20	10(a)-1	10a	Coordinate with FWS regarding measures to protect, mitigate damages, and enhance fish and wildlife resources.
Interior-21	10(a)-2	10a	Take appropriate actions to protect fish and wildlife in emergencies or under special conditions.
Interior-22	10(a)-3	10a	Pass BOR flow augmentation water releases that reach Brownlee reservoir prior to August 29.
Interior-23	10(a)-4	10a	Submit a plan for application of pesticides on project or adjacent non-Project lands to the BLM.
Interior-24	10(a)-5	10a	Develop an Interpretation and Education plan.
Interior-25	10(a)-6	10a	Develop a Visual Resource Management Plan for project facilities.

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Interior-26	10(a)-7	10a	Manage reservoir levels to minimize impacts on recreation resources during May, June, and July.
Interior-27	10(a)-8	10a	Conduct a recreation user study at Weiser Sand Dunes and implement and partially fund a Weiser Dune Plan.
Interior-28	10(a)-9	10a	Plan and implement an upgrade of facilities at Heller Bar and develop the Heller Bar Plan.
Interior-29	10(a)-10	10a	Develop and implement a Recreation Land Acquisition and Management Program.
Interior-30	10(a)-11	10a	Modify the Project boundary to include the Airstrip, Steck Park, Swedes Landing, and Westfall recreation sites.
Interior-31	10(a)-12	10a	Establish and convene a Recreation/Aesthetics Resource Work Group.
Interior-32a	10(a)-13	10a	Develop a revised warmwater recreational fisheries plan.
Interior-32b	10(a)-13	10a	Assess access to launch boats; satisfy reservoir-level requirements of Baker County Settlement Agreement.
Interior-33	10(a)-14	10a	Develop a process and schedule for acquiring 14.6 miles of tributary habitat.
Interior-34	10(a)-15	10a	Develop and implement a TES Species Management Plan for BLM-administered lands.
Interior-35	10(a)-16	10a	Fund development and implementation of a Habitat Mitigation and Management Program.
Interior-36	10(a)-17	10a	Evaluate, protect or mitigate any scientifically important paleontological discoveries on BLM lands.
Interior-37a	10(j)-1.1	10j	Develop and implement a plan to improve bull trout habitat conditions in Pine Creek and associated tributaries.
Interior-37b	10(j)-1.2	10j	Operate and maintain a permanent weir structure at the mouth of Pine Creek
Interior-37c	10(j)-1.3	10j	Conduct population monitoring activities, including life history monitoring of bull trout in Pine Creek.
Interior-37d	10(j)-1.4	10j	Determine whether brook trout limit the distribution, numbers, or reproduction of bull trout in Pine Creek.
Interior-38a	10(j)-2.1	10j	Develop and implement a plan to improve bull trout habitat conditions in Indian Creek and associated tributaries.
Interior-38b	10(j)-2.2	10j	Operate and maintain a permanent weir structure at the mouth of Indian Creek
Interior-38c	10(j)-2.3	10j	Conduct population monitoring activities, including life history monitoring of bull trout in Indian Creek.
Interior-38d	10(j)-2.4	10j	Determine whether brook trout limit the distribution, numbers, or reproduction of bull trout in Indian Creek.
Interior-39a	10(j)-3.1	10j	Develop and implement a plan to improve bull trout habitat in the Wildhorse River and associated tributaries.
Interior-39b	10(j)-3.2	10j	Operate and maintain a permanent weir structure at the mouth of the Wildhorse River
Interior-39c	10(j)-3.4	10j	Conduct population monitoring activities, including life history monitoring of bull trout in the Wildhorse River.
Interior-39d	10(j)-3.3	10j	Determine whether brook trout limit bull trout in the Wildhorse River.
Interior-40	10(j)-4.1	10j	Conduct presence absence surveys for bull trout and evaluate habitat conditions within Eagle Creek.
Interior-41	10(j)-5	10j	Implement a program to provide bull trout access to anadromous fish as prey in Pine and Indian Creeks.
Interior-42	10(j)-6	10j	Improve water quality in Oxbow and Hells Canyon reservoirs to meet water quality standards for bull trout.
Interior-43	10(j)-7	10j	Establish a conservation flow in the Oxbow bypass reach sufficient to meet requirements for bull trout.
Interior-44	10(j)-8	10j	Evaluate project effects on bull trout downstream of Hells Canyon dam.

Identifier Used in the EIS	Recommending Entity ID	Recommen- dation Type	Description of Measure
Interior-45	10(j)-9	10j	Conduct activities to provide for the safe and effective passage of bull trout past Hells Canyon dam.
Interior-46a	10(j)-10	10j	Develop and implement a Fish Passage Plan related to the Hells Canyon fish trap and tributary weirs.
Interior-46b	10(j)-10	10j	Design, construct and operate improved adult collection facilities at Hells Canyon dam.
Interior-46c	10(j)-10	10j	Design, construct, and monitor a weir facility at Eagle Creek.
Interior-47a	10(j)-11.a	10j	Evaluate habitat upstream of the project for the reintroduction of naturally spawning fall Chinook salmon.
Interior-47b	10(j)-11.b	10j	Develop and refine plans to provide downstream passage of fall Chinook salmon around the project reservoirs.
Interior-48	10(j)-12	10j	Develop a final set of hatchery production goals.
Interior-49	10(j)-13	10j	Provide put-and-take fisheries in selected rivers.
Interior-50a	10(j)-15.1	10j	Implement water quality improvement measures elsewhere in the basin to aid in sturgeon recovery
Interior-50b	10(j)-14.4	10j	Determine which Idaho Power facilities need to have their trashracks replaced to protect juvenile sturgeon.
Interior-50c	10(j)-14.5	10j	Study the conservation benefits of a seasonal ROR operation at various projects to promote sturgeon spawning.
Interior-51	10(j)-15	10j	Implement the white sturgeon conservation measures proposed in the Final License Application.
Interior-52	10(j)-16	10j	Complete and implement a Final White Sturgeon Conservation and Action Plan.
Interior-53	10(j)-17	10j	Develop and implement a White Sturgeon Conservation Aquaculture Plan.
Interior-54	10(j)-18	10j	Implement seasonal run-of-river operations downstream of Hells Canyon dam for white sturgeon.
Interior-55	10(j)-19	10j	Install protective trash racks at CJ Strike and Bliss dams for the conservation and development of white sturgeon.
Interior-56	10(j)-20	10j	Complete and implement a Pacific Lamprey Management Plan.
Interior-57	10(j)-21	10j	Determine structural measures needed to mitigate for project effects to Pacific lamprey.
Interior-58	10(j)-22	10j	Develop and implement a Native Fish Management Plan for native resident and anadromous fish.
Interior-59	10(j)-23	10j	Implement a schedule to correct fish passage barriers at road crossings and culverts.
Interior-60	10(j)-24	10j	Complete a stock assessment of anadromous and resident fish populations.
Interior-61	10(j)-25	10j	Install a turbine-venting system at the Brownlee development and the units at Hells Canyon dam.
Interior-62a	10(j)-26	10j	Install flow deflectors on Hells Canyon and Brownlee dam spillways.
Interior-62b	10(j)-26	10j	Work with IDEQ and ODEQ to design an effectiveness monitoring plan for the flow deflectors.
Interior-63	10(j)-27	10j	Provide flows and oxygen supplementation to maintain water quality parameters in the Oxbow bypass reach.
Interior-64	10(j)-28	10j	Comply with the terms set forth by IDEQ and ODEQ for water quality certification under CWA section 401.
Interior-65	10(j)-29	10j	Take river flow and stage measurements within one mile below Hells Canyon dam or at USGS gage #13290450.
Interior-66	10(j)-30	10j	Monitor modified operations to determine effects on aquatic species downstream of the Hells Canyon dam.
Interior-67	10(j)-31	10j	Monitor water quality below Hells Canyon dam at numerous locations at a minimum of twice per month

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Interior-68	10(j)-32	10j	Monitor selected beaches, cobble bars, gravel bars, and sand bars to determine rates of depletion.
Interior-69	10(j).33	10j	Monitor quantity and quality of gravel material in the Snake River below Hells Canyon dam.
Interior-70	10(j)-34	10j	Monitor benthic macroinvertebrates to assess changes in the composition of benthic macroinvertebrates.
Interior-71	10(j)-35	10j	Conduct biannual monitoring of benthic macrophytes and algae, emphasizing periphyton.
Interior-72	10(j)-36	10j	Conduct zonal distribution surveys and monitoring of keystone and sensitive benthic species.
Interior-73	10(j)-37	10j	Monitor known colonies of the Hells Canyon rapids snail and the short-faced limpet.
Interior-74	10(j)-38	10j	Establish several experimental populations of Hells Canyon rapids snail and/or the short-faced limpet.
Interior-75	10(j)-39	10j	Establish several experimental populations of the western ridged mussel below Hells Canyon dam.
Interior-76	10(j)-40	10j	Develop a strategy for terrestrial habitat mitigation to mitigate for loss and degradation of terrestrial habitat.
Interior-77	10(j)-41	10j	Develop and implement an Integrated Weed Management Plan incorporated into the IWHP and WMMP.
Interior-78	10(j)-42	10j	Develop and implement a Sensitive Plant Species Management Plan.
Interior-79	10(j)-43	10j	Develop and implement the Hells Canyon Resource Management Plan, IWHP, and WMMP.
Interior-80	10(j)-44	10j	Develop and implement a mountain quail management plan.
Interior-81	10(j)-45	10j	Develop and implement a Bald Eagle Management Plan
Interior-82	10(j)-46	10j	Implement measures to protect Townsend's big-eared bats
Interior-83	10(j)-47	10j	Develop and implement a Southern Idaho Ground Squirrel Management Plan.
Interior-84	10(j)-48	10j	Implement a Northern Idaho Ground Squirrel Management Plan.
Interior-85	10(j)-49	10j	Implement measures to protect amphibians and reptiles
Interior-86	none	Sec18	Reserve authority for Interior to prescribe the construction, operation, and maintenance of fishways at the project.
Interior-87	1.1	Sec18	Continue the trap and haul fishways and monitor permanent weirs and trap and haul fishways.
Interior-87	1.2	Sec 18	Develop and implement a Bull Trout Passage Plan.
ISHS-1	None	10a	Revise the historic properties management plan.
ISHS-2	None	10a	Ensure cost estimated for monitoring cultural sites below Hells Canyon dam is sufficient to complete the work.
ISHS-3	None	10a	Finalize list of sites to be stabilized below Hells Canyon dam.
ISHS-4	None	10a	Establish a fund to support archaeological testing to determine most effective method for stabilizing sites.
ISHS-5	None	10a	Establish a program to survey the reach of the Snake River between the Salmon and Grande Ronde rivers.
ISHS-6	None	10a	Update and revise the NRHP nomination for the Hells Canyon Archaeological District.
ISHS-7	None	10a	Establish an on-going Cultural Resource Work Group.
ISHS-8	None	10a	Provide funding for analyses of existing but unreported archaeological collections from Hells Canyon.

Identifier Used in the EIS	Recommending Entity ID	Recommendation Type	Description of Measure
LVE-1	A	comment	Compensate Wyoming and the Wyoming residents for the use of Wyoming's unused allocation of water.
LVE-2	B	comment	Apportion some of the benefits of project power production to others in the region and the Snake River drainage.
NMFS-1	XII.1	10j	Provide stable flows between 8,500 and 13,500 cfs throughout fall Chinook spawning season.
NMFS-2	XII.2	10j	Provide stable flows throughout the fall Chinook incubation period.
NMFS-3	XII.3	10j	Monitor the construction of fall Chinook salmon redds between Lower Granite reservoir and Hells Canyon dam.
NMFS-4	XII.4	10j	Release flows sufficient to reduce the incidence of juvenile entrapment.
NMFS-5	XII.5	10j	Conduct a juvenile entrapment and stranding study.
NMFS-6	XII.6	10j	Study fall Chinook salmon spawning gravel between Hells Canyon dam and the Salmon River.
NMFS-7	XII.7	10j	Evaluate fall Chinook salmon egg-to-fry survival downstream of Hells Canyon dam.
NMFS-8	XII.8	10j	Refill Brownlee reservoir necessary to meet Corps flood control requirements and coordinate refill with NMFS.
NMFS-9	XII.9	10j	Release 237 kaf of stored water from Brownlee reservoir between June 21 and July.
NMFS-10	XII.10	10j	Design and construct a gas abatement structure at the Hells Canyon dam spillway
NMFS-11	XII.11	10j	Design and construct a gas abatement structure at the Brownlee dam spillway
NMFS-12	XII.12	10j	Increase dissolved oxygen levels in outflows of the Hells Canyon developments during the late summer and fall
NMFS-13	XII.13	10j	Continue funding operation of its Rapid River, Pahsimeroi, Niagara Springs, and Oxbow hatchery facilities.
NMFS-14a	XII.14	10j	Fund water quality improvement projects in the Snake River Basin upstream of Hells Canyon dam.
NMFS-14b	XII.14.d	10j	Monitor water quality upstream of the project and below Brownlee and Hells Canyon dams.
NMFS-14c	XII.14.e	10j	Evaluate fall Chinook salmon egg-to-fry survival downstream of Bliss, C.J. Strike and Swan Falls dams.
NMFS-15	XII.15	10j	Measure flows and ramping rates within 1 mile downstream of Hells Canyon dam.
NMFS-16	XII.16	10j	Conduct passage and reintroduction studies of fall Chinook salmon upstream of the project.
NMFS-17	XII.17	10j	Conduct passage and reintroduction studies of spring/summer Chinook salmon and steelhead in three tributaries.
NMFS-18	XIII.1	10a	Provide shifts in flood control from Brownlee reservoir to Grand Coulee reservoir if requested by the Corps.
NMFS-19	XIII.2	10a	Share excess adult spring Chinook salmon or steelhead hatchery returns with the tribes.
NMFS-20	XIII.3	10a	Design and construct an anadromous fish interpretive display near Brownlee dam.
NMFS-21	X	10a	Include a general reservation of authority for NMFS to prescribe fishways.
NMFS-22	XI	10a	Include a specific ESA reopener provision.
NPPVA-1	none	comment	Continue flows of 8,500 cfs above the Salmon River-Snake River confluence and 11,500 cfs below the Salmon.
NPT-1	II.1	10a	Continue Idaho Power's fall Chinook spawning program which includes providing stable flows.
NPT-2	II.2	10a	Provide passage of water released from USBR reservoirs and natural flow rights acquired for flow augmentation.

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NPT-3	II.3	10a	Limit ramping rate to 2 inches per hour from April through May to protect rearing fall Chinook from stranding.
NPT-4	II.4	10a	Limit ramp rates to 2 in/hour if Lower Granite flows fall below 30,000 cfs during the fall Chinook outmigration.
NPT-5	II.5	10a	Maintain Brownlee reservoir at its upper flood control rule elevation from Feb 28 - April 15 of each year
NPT-6	II.6	10a	Consider shifting flood control requirements from Brownlee reservoir to Lake Roosevelt reservoir.
NPT-7	II.7	10a	Draft and refill Brownlee reservoir by a timetable for summer flow augmentation and for fall Chinook spawning.
NPT-8a	II.8	10a	Fund implementation of the Snake River-Hells Canyon TMDL in lieu of providing fish passage of fall Chinook.
NPT-8b	II.8	10a	Evaluate egg to fry survival of fall Chinook.
NPT-8c	II.8	10a	Fund studies for salmon and steelhead collection in the Payette and Weiser rivers and Pine and Eagle creeks.
NPT-9	II.9	10a	Coordinate Snake River fall Chinook artificial production through U.S vs. Oregon.
NPT-10	II.10	10a	Develop a management agreement for Rapid River spring Chinook production.
NPT-11	II.11	10a	Develop a management agreement for Pahsimeroi summer Chinook production.
NPT-12	II.12	10a	Develop a management agreement for steelhead production from Niagara Springs and Oxbow hatcheries.
NPT-13	II.13	10a	Investigate installation of a temperature control structure at Brownlee reservoir
NPT-14	II.14	10a	Maintain a minimum flow no higher than 6,500 cfs below Hells Canyon dam and 13,000 cfs at Lime Point.
NPT-15	II.15	10a	Construct structures on Hells Canyon and Brownlee dams and develop a plan to abate total dissolved gas.
NPT-16	II.16	10a	Construct structures on Hells Canyon dam to add DO along with injecting oxygen in Brownlee reservoir.
NPT-17	II.17	10a	Develop and implement a plan to prevent the discharge of point source pollutants into the Snake River.
NPT-18	II.18	10a	Implement White Sturgeon conservation Plan.
NPT-19	II.19	10a	Investigate the status of and project effects on the Pacific lamprey population in the project area
NPT-20	II.20	10a	Monitor the movement of sand, silt and gravel from above, through and below the project area.
NPT-21	II.21	10a	Restore sandbars to their pre-project number and size.
NPT-22	II.22	10a	Acquire lands to mitigate for impacts on wildlife habitat caused by the filling of the three project reservoirs.
NPT-23	II.23	10a	Hold lands purchased as open and unclaimed lands that will be open to the Tribe's use under treaty rights.
NPT-24	II.24	10a	Provide a fund to purchase replacement fishing grounds for the Nez Perce Tribe in the Hells Canyon area.
NPT-25	II.25	10a	Conduct and fund additional oral history studies of Nez Perce sites.
NPT-26	II.26	10a	Finalize the Historic Properties Management Plan.
NPT-27	II.27	10a	Update the Hells Canyon National Register District Nomination.
NPT-28	II.28	10a	Monitor all historic properties that may be affected by the project with increased funding.
NPT-29	II.29	10a	Increase the number of sites and funding of site treatment/mitigation/stabilization.

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NPT-30	II.30	10a	Extend the Area of Potential Effects downstream from Salmon River confluence to Asotin, Washington.
NPT-31	II.31	10a	Provide the \$1,000,000 FLA funds in a lump sum at the beginning of the license.
NPT-32	II.32	10a	Establish a cultural resources advisory committee.
NPT-33	II.33	10a	Seek to employ qualified Nez Perce Tribal members in all contracts and work performed pursuant to this license.
NPT-34	II.A	10a	Manage emergency situations that may cause harm or mortality to fish and wildlife species or habitats.
NPT-35	II.B	10a	Include FERC's standard reopener to reopen the license to protect and enhance fish and wildlife.
NPT-36	II.C	10a	Remove or modify Project facilities and restore pre-Project conditions upon project abandonment
NPT-37	II.D	10a	Issue the license for a term of no longer than 30 years.
ODFW-1	10(j)-1	10j	Establish and convene a Hells Canyon Project Coordinating Committee upon license issuance.
ODFW-2	10(j)-2	10j	Implement a long-term program to establish sustainable anadromous fish runs above the project.
ODFW-3	10(j)-3	10j	Develop and implement a Fish Passage Plan for native migratory resident and anadromous species.
ODFW-4	10(j)-4	10j	Establish a Fish Passage and Reintroduction Committee.
ODFW-5	10(j)-5	10j	Consult with ODFW in development of fishway and trap designs.
ODFW-6	10(j)-6	10j	Implement an evaluation plan for the construction and modification of the Hells Canyon dam fish trap.
ODFW-7	10(j)-7	10j	Maintain all fishways and traps in proper order.
ODFW-8	10(j)-8	10j	Develop a fishway and trap operation and maintenance plan.
ODFW-9	10(j)-9	10j	Provide ODFW access to the Hells Canyon Project site and project records to inspect fishways and traps.
ODFW-10	10(j)-10	10j	Modify and improve the existing Hells Canyon dam fish trap within 2 years.
ODFW-11	10(j)-11	10j	Design and construct a fish ladder and trap at Oxbow dam within 10 years.
ODFW-12	10(j)-12	10j	Develop, install and maintain a downstream fish passage and collection facility at Hells Canyon dam.
ODFW-13	10(j)-13	10j	Design and implement a study of fish predators in Hells Canyon reservoir
ODFW-14	10(j)-14	10j	Provide for passage of spring Chinook salmon and summer steelhead into Pine Creek.
ODFW-15	10(j)-15	10j	Study production potential, migration behavior, and survival of steelhead and spring Chinook salmon.
ODFW-16	10(j)-16	10j	Study production potential, etc. for fall Chinook salmon in the Swan Falls to Brownlee Reach of the Snake River.
ODFW-17	10(j)-17	10j	Develop a detailed upstream and downstream Passage Plan for Pacific Lamprey.
ODFW-18	10(j)-18	10j	Develop and implement a fish passage plan for bull trout and/or redband trout.
ODFW-19	10(j)-19	10j	Develop and implement a fish passage plan for white sturgeon if this is determined to be feasible
ODFW-20	10(j)-20	10j	Implement measures to address limiting factors if passage and reintroduction efforts are terminated for a reach.
ODFW-21	10(j)-21	10j	Monitor health of upstream and downstream Snake River fish populations.

Identifier Used in the EIS	Recommending Entity ID	Recommen- dation Type	Description of Measure
ODFW-22	10(j)-22	10j	Evaluate anadromous and resident fish populations to pass for reintroduction.
ODFW-23	10(j)-23	10j	Develop and implement a Fish Habitat Protection, Mitigation and Enhancement Plan
ODFW-24	10(j)-24	10j	Evaluate the effects of reintroducing anadromous fish on resident fish populations.
ODFW-25	10(j)-25	10j	Implement a monitoring and evaluation program for all four of Idaho Power's mitigation hatcheries
ODFW-26	10(j)-26	10j	Develop a Hatchery Production Plan
ODFW-27	10(j)-27	10j	Investigate and supply alternative fisheries in Oregon
ODFW-28	10(j)-28	10j	Expand Oxbow Hatchery for fall Chinook salmon broodstock collection, spawning, and rearing
ODFW-29	10(j)-29	10j	Upgrade Oxbow Hatchery facilities
ODFW-30	10(j)-30	10j	Continue hatchery operations at Oxbow, Rapid River, Pahsimeroi, and Niagara Springs hatcheries.
ODFW-31	10(j)-31	10j	Implement project operations to meet specified objectives
ODFW-32	10(j)-32	10j	Cooperate with BOR in providing flow augmentation.
ODFW-33	10(j)-33	10j	Implement ramping rates and minimum flows as described.
ODFW-34	10(j)-34	10j	Implement a Fall Chinook Salmon Spawning and Incubation Protection Program.
ODFW-35	10(j)-35	10j	Fund and participate in annual spawning surveys for fall Chinook salmon downstream of Hells Canyon dam.
ODFW-36a	10(j)-36	10j	Develop, fund and implement a Native Salmonid Plan.
ODFW-36b	10(j)-36-i	10j	Investigate turbine and spill related mortality.
ODFW-37	10(j)-37	10j	Evaluate turbine- and spill-related mortality of native salmonids (entrainment studies).
ODFW-38	10(j)-38	10j	Fund habitat measures in tributaries containing redband trout and bull trout within and above the project.
ODFW-39	10(j)-39	10j	Investigate, fund and implement nutrient supplementation in all tributaries to the project
ODFW-40	10(j)-40	10j	Install and operate a permanent monitoring and collection weir at the mouth of Pine Creek
ODFW-41	10(j)-41	10j	Conduct presence/absence surveys for bull trout in major tributaries associated with the Eagle Creek basin
ODFW-42	10(j)-42	10j	Update and implement measures identified in the White Sturgeon Conservation Plan
ODFW-43	10(j)-43	10j	Evaluate potential impacts to white sturgeon from the bioaccumulation of contaminants.
ODFW-44	10(j)-44	10j	Fund measures to improve water quality and sturgeon habitat within and upstream of the project
ODFW-45	10(j)-45	10j	Conduct white sturgeon stock assessments.
ODFW-46	10(j)-46	10j	Assess factors limiting sturgeon survival through their incubation and larval life stage below Swan Falls dam.
ODFW-47	10(j)-47	10j	Investigate opportunities for sturgeon translocation to increase production in the Swan Falls to Brownlee reach.
ODFW-48	10(j)-48	10j	Monitor the genotypic frequencies of Snake River white sturgeon between Swan Falls and Lower Granite Dams.
ODFW-49	10(j)-49	10j	Develop, fund and implement Pacific lamprey habitat enhancement measures.

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ODFW-50	10(j)-50	10j	Monitor warmwater fish populations and conduct annual creel surveys in all three project reservoirs.
ODFW-51	10(j)-51	10j	Maintain Brownlee reservoir at specified levels with a target refill date of June 30.
ODFW-52	10(j)-52	10j	Conduct studies of food habits of Brownlee reservoir warmwater fish species.
ODFW-53	10(j)-53	10j	Implement a Gravel Monitoring Program to assess spawning gravel for fall Chinook salmon.
ODFW-54	10(j)-54	10j	Develop and implement a plan to meet the TDG allocation for the project.
ODFW-55	10(j)-55	10j	Ensure that the project does not contribute to violation of Oregon's DO standard within or below the project.
ODFW-56	10(j)-56	10j	Develop and implement a temperature management plan.
ODFW-57	10(j)-57	10j	Conduct a study to determine mercury, Dieldrin, and DDT/DDE levels in Brownlee reservoir fish.
ODFW-58	10(j)-58	10j	Implement water quality monitoring measures.
ODFW-59	10(j)-59	10j	Develop and implement a Terrestrial Resources Management and Mitigation Plan.
ODFW-60	10(j)-60	10j	Establish a Terrestrial Resource Work Group.
ODFW-61	10(j)-61	10j	Fund development and implementation of a Land Acquisition and Management Program.
ODFW-62	10(j)-62	10j	Establish a fund to maintain habitat values on Patch, Porter, Huffman and Gold islands.
ODFW-63	10(j)-63	10j	Fund and participate in cooperative mountain quail reintroduction program.
ODFW-64	10(j)-64	10j	Develop a Bald Eagle Management Strategy (monitor, fund, complete surveys).
ODFW-65	10(j)-65	10j	Develop a Sensitive Species Management Plan.
ODFW-66	10(j)-66	10j	Develop an Integrated Weed Management Plan and establish a Noxious Weed Advisory Board.
ODFW-67	10(j)-67	10j	Develop and implement an integrated Transmission Line Operation and Maintenance Plan.
ODFW-68	10(j)-68	10j	Prepare and implement a riparian and riverine vegetation management plan along the Imnaha River.
ODFW-69	10(j)-69	10j	Monitor for bird electrocution mortalities along transmission lines.
ODFW-70	10(j)-70	10j	Minimize risks of bird collisions with transmission lines.
ODFW-71	10(j)-71	10j	Study the effects of harsh winters on mule deer.
ODFW-72	10(j)-72	10j	Avoid road O&M activities on crucial winter range during winter months (road closures).
ODFW-73	10(j)-73	10j	Develop and implement a public Information and Education program regarding human disturbance of wildlife.
ODFW-74	10(j)-74	10j	Prevent further loss of fish and wildlife if project operations suddenly cause detrimental effects on these species.
ODFW-75	1	10a	Implement a Recreation Adaptive Management Plan and form a Recreation Stakeholder Group.
ODFW-76	2	10a	Develop a road management plan.
ODFW-77	3	10a	Continue, fund and enhance the Litter and Sanitation Plan.
ODFW-78	4	10a	Develop and implement an Information and Education Plan.

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ODFW-79	5	10a	Consult with state and federal agencies regarding proposed changes to Hells Canyon Park.
ODFW-80	6	10a	Develop site plans for Westfall; Bob Creek Section A, B and C; and Airstrip A&B.
ODFW-81	7	10a	Develop site plans for Copperfield, Oxbow Launch, Carters/Old Carters Landing, Spring, and McCormick Park.
ODFW-82	8	10a	Develop and implement a site plan for enhancement of Hewitt and Holcomb Parks.
ODFW-83	9	10a	Develop a low-water boat launch on the Oregon side of Brownlee reservoir at or near Swedes Landing.
ODFW-84	10	10a	Improve access to the Stud Creek Trail.
ODFW-85	11	10a	Fund law enforcement officers for project lands and waterways and form a Safety Committee.
ODFW-86	12	10a	Remove or modify Project facilities and restore pre-Project conditions upon project abandonment.
ODSL-1	none	comment	Obtain a lease from ODSL to occupy the state-owned submerged and submersible land.
ODSL-2	none	comment	Obtain authorization from ODSL for project facilities or structures located on state of Oregon lands.
OPRD-1	1	10a	Apply a bank stabilization treatment to Farewell Bend State Park.
OPRD-2	2	10a	Develop and fund a maintenance plan to address sediment buildup at Farewell Bend State Park.
OPRD-3	3	10a	Implement a maintenance operation to remove sediment build-up at Farewell Bend State Park.
OPRD-4	1	10a	Form a Recreation Stakeholder Group.
OPRD-5	2	10a	Fund, develop and implement a Recreation Adaptive Management Plan.
OPRD-6	3	10a	Develop and implement a Comprehensive Recreation Plan with the Recreation Stakeholder Group.
OPRD-7	4	10a	Implement the Comprehensive Recreation Plan.
OPRD-8	5	10a	Fund construction, O&M and monitoring efforts found within the Comprehensive Recreation Plan.
OPRD-9	1	10a	Increase and improve low water access to project reservoirs.
OPRD-10	2	10a	Install moorages for recreational watercraft.
OPRD-11	3	10a	Include moorages for shore access and composting toilets in site development.
OSHPO			No measures in this letter.
OSMB-1	1	10a	Provide salaries and expenses for two full-time seasonal Baker County marine deputies.
OSMB-2	2	10a	Provide an effective marine enforcement and safety presence on the Snake River below Hells Canyon dam.
OSMB-3	3	10a	Facilitate biannual law enforcement proceedings.
OSMB-4	4	10a	Implement a Recreation Adaptive Management Plan in consultation with a Recreation Stakeholders Group.
OSMB-5	5	10a	Include human waste disposal in litter and sanitation planning.
OSMB-6	6	10a	Incorporate education and outreach materials to prevent the introduction or spread of aquatic invasive species.
OWRD			No measures in this letter.

Identifier Used in the EIS	Recommending Entity ID	Recommendation Type	Description of Measure
SBT-1a	1	10a	Develop and implement a water quality improvement program to improve habitat conditions for anadromous fish.
SBT-1b	1	10a	Implement anadromous fish passage; but not until protection from the ESA is secured.
SBT-2	2	10a	Arrange for the construction maintenance and operation of two hatcheries in the Yankee Fork and Panther Creek.
SBT-3	3A, 3B	10a	Develop a cultural resources center and a HPMP for all cultural sites on lands near and upstream of the project.
SBT-4	4	10a	Consult on a government-to-government basis on all issues that may affect Tribal interests.
SPT-1	A.1	10a	Conduct studies to examine project effects on the diet and health of tribal members.
SPT-2	A.2	10a	Place adult Chinook and steelhead in the Owyhee River where it flows through the Duck Valley Reservation.
SPT-3	A.3	10a	Reintroduce Chinook and steelhead into the Owyhee, Bruneau, and Snake rivers to Upper Salmon Falls.
SPT-4	A.4	10a	Convene an Aquatic Resource Task Force
SPT-5	TR.1	10a	Acquire lands to benefit the Tribes and their fish, wildlife and botanical resources.
SPT-6	TR.2	10a	Convene a Terrestrial Resource Task Force.
SPT-7	TR.3	10a	Utilize standardized Habitat Evaluation Procedures to determine suitable habitat units for mitigation.
SPT-8	TR.4	10a	Fund the development and implementation of Wildlife Management Strategies.
SPT-9	C.1	10a	Undertake a multi-year ethnographic research project with specified objectives.
SPT-10	C.2	10a	Establish and fund a Cultural Center upstream of the Hells Canyon Complex.
SPT-11	C.3	10a	Include in the APE all lands to the confluence of the Snake and Salmon Rivers upstream to Shoshone Falls.
SPT-12	C.4	10a	Fund the Tribes' participation in and establish a Cultural Resources Task Force.
SPT-13	C.5	10a	Develop procedures for draw downs and other maintenance requirements to protect cultural resources.
SPT-14	C.6	10a	Provide law enforcement to protect cultural resources.
SPT-15	D	10a	Allocate \$10,000,000 to the Tribes for Native American Programs.
SPT-16	E	10a	Complete studies to examine environmental and human health risks from the project.
SPT-17	F	10a	Comply with federal laws dealing with tribal sovereignty, religious freedom, and cultural resource protection.

Note: AR/IRU – American Rivers-Idaho Rivers United

BPT – Burns Paiute Tribe

Corps – U.S. Army Corps of Engineers

CTUIR – Confederated Tribes of the Umatilla Indian Reservation

FS – Forest Service

IDPR – Idaho Department of Parks and Recreation

Interior – Department of the Interior

ISHS – Idaho State Historical Society

LVE – Lower Valley Energy

NMFS – National Marine Fisheries Service

NPPVA – Northwest Professional Passenger Vessel Association

NPT – Nez Perce Tribe

ODFW – Oregon Department of Fish and Wildlife

ODSL – Oregon Department of State Lands

OPRD – Oregon Parks and Recreation Department

OSHPD – Oregon State Historic Preservation Office

OSMB – Oregon State Marine Board

OWRD – Oregon Water Resources Department

SBT – Shoshone-Bannock Tribes

SPT – Shoshone-Paiute Tribes

APPENDIX B
AGENCY 4(e) CONDITIONS

Forest Service Section 4(e) Conditions

TERMS AND CONDITIONS

License articles contained in the Federal Energy Regulatory Commission's (Commission) Standard Form L-1 issued by Order No. 540, dated October 31, 1975, cover those general requirements that the Secretary of Agriculture, acting by and through the USDA Forest Service, considers necessary for adequate protection and utilization of the land and related resources of the Payette and Wallowa-Whitman National Forests. Under authority of section 4(e) of the Federal Power Act (16 U.S.C. 797(e)), the following terms and conditions are deemed necessary for adequate protection and utilization of National Forest System (NFS) lands and resources. These terms and conditions are based on those resources enumerated in the Organic Administration Act of 1897 (30 Stat. 11), the Multiple-Use Sustained Yield Act of 1960 (74 Stat. 215), the National Forest Management Act of 1976 (90 Stat. 2949), and any other law specifically establishing a unit of the National Forest System or prescribing the management thereof, including the Hells Canyon National Recreation Area Act and the Wild and Scenic Rivers Act, as such laws may be amended from time to time, and as implemented by regulations and approved Land and Resources Management Plans prepared in accordance with the National Forest Management Act. Therefore, pursuant to section 4(e) of the Federal Power Act, the following conditions covering specific requirements for protection and utilization of the NFS lands shall also be included in any license issued for the Hells Canyon Complex Hydroelectric Project (Project).

Condition No. 1 – Implementation of Activities on National Forest System Lands

The Licensee shall not commence implementation of habitat or ground-disturbing activities on National Forest System (NFS) lands until the USDA Forest Service has approved site-specific project designs and issued a notice to proceed.

Additional NFS Lands

If additional NFS lands are included within the Project boundary, the Licensee shall obtain a special-use authorization for occupancy and use of NFS lands added to the Project area boundary from the USDA Forest Service. Within six months of License issuance and before any habitat or ground-disturbing activities, the Licensee shall obtain from the USDA Forest Service and file with the Commission a special-use authorization for occupancy and use of NFS lands added to the Project area boundary in the License.

Additional lands authorized for use by the Licensee in a new special-use authorization shall be subject to laws, rules, and regulations applicable to the NFS. The terms and conditions of the USDA Forest Service special-use authorization are enforceable by the USDA Forest Service under the laws, rules, and regulations applicable to the NFS. The special-use authorization shall also be subject to applicable sanctions and enforcement procedures of the Commission at the request of the USDA Forest Service. Should additional NFS lands be needed for this Project over the License term, the special-use authorization shall be amended to include any additional NFS lands.

Approval of Changes on NFS Lands after License Issuance

Notwithstanding any License authorization to make changes to the Project, the Licensee shall receive written approval from the USDA Forest Service prior to making changes in the location of any constructed Project features or facilities, or in the uses of Project land and waters on or affecting NFS lands and resources, or any departure from the requirements of any approved exhibits for Project facilities located on NFS lands filed by the Licensee with the Commission. Following receipt of such approval from the USDA Forest Service, and at least 60 days prior to initiating any such changes or departure, the Licensee shall file a report with the Commission describing the changes, the reasons for the changes, and

showing the approval of the USDA Forest Service for such changes. The Licensee shall file an exact copy of the report with the USDA Forest Service at the time it is filed with the Commission.

Coordination with Other Authorized Uses on NFS Lands

In the event that portions of the Project area are under federal authorization for other activities and permitted uses, the Licensee shall consult with the USDA Forest Service to coordinate such activity with authorized uses before starting any activity on NFS land that the USDA Forest Service determines may affect another authorized activity.

Site-Specific Plans

The Licensee shall prepare site-specific plans subject to review and approval by the USDA Forest Service for habitat and ground-disturbing activities on NFS lands required by the License, including activities contained within resource management plans required by the License prepared subsequent to License issuance. The Licensee shall prepare site-specific plans for activities one year in advance of implementation dates required by the License.

Site-specific plans shall include:

1. A map depicting the location of the proposed activity and GPS coordinates.
2. A description of the USDA Forest Service land management area designation for the location of the proposed activity and applicable standards and guidelines.
3. A description of alternative locations, designs and mitigation measures considered, including erosion control and implementation and effectiveness monitoring designed to meet applicable standards and guidelines.
4. Draft biological evaluations or assessments including survey data as required by regulations applicable to ground or habitat disturbing activities on NFS lands in existence at the time the plan is prepared.
5. An environmental analysis of the proposed action consistent with USDA Forest Service National Environmental Policy Act (NEPA) policy in existence at the time the plan is prepared for FERC licensed projects on NFS lands.

Cost Reimbursement

The Licensee shall provide funding to the USDA Forest Service for all costs associated with the analysis, review, inspection, and monitoring required to implement habitat and ground-disturbing activities on NFS lands required by the License, including activities contained within resource management plans required by the License prepared subsequent to License issuance. Funding for the analysis, review, inspection, and monitoring of site-specific projects on NFS lands required by the License shall be through the use of a Collection Agreement or other instrument consistent with USDA Forest Service regulations in effect at the time the project is proposed and shall be executed by the Licensee and the Payette National Forest and/or the Wallowa-Whitman National Forest, as appropriate.

Condition No. 2 – Resource Coordination

Within one year of License issuance, the Licensee shall, in consultation with and approval by the USDA Forest Service, prepare a Resource Coordination Plan (RCP) and file the plan with the Commission for approval. The RCP shall establish a process for information exchange and coordinate efforts for implementation of License conditions and ongoing Project operations and maintenance activities potentially affecting NFS lands and resources. The RCP shall provide for coordination of the implementation of the various management plans required under the License, such as but not limited to:

visual resource management, cultural resource management, integrated weed management, aquatic plant management, fish and wildlife management, sensitive species management, recreation resource management, monitoring, erosion control and other resource protection plans. The plan shall require the Licensee to:

1. Consult with the USDA Forest Service each year during the 60 days preceding the anniversary of the License, or as agreed to by USDA Forest Service, to evaluate the past year's activities and develop a proposed implementation schedule for the upcoming year's activities and measures required by the License for NFS lands. Within 60 days following such consultation, the Licensee shall file with the Commission evidence of the consultation with any recommendations made by the USDA Forest Service.
2. Document the requirements, tasks and methods and reports related to monitoring the effects of Project operations and facilities on natural and/or social resources and effectiveness of protection, mitigation, and enhancement measures where the monitoring is required by USDA Forest Service terms and conditions or plans.
3. Provide a mechanism for revising implementation strategies and methods to reflect improvement in sampling procedures and/or changes in regulations or environmental conditions.
4. Identify practices for record keeping and annual reporting.
5. Include provisions for the routine updating of the implementation plan, including incorporation of monitoring measures identified in site-specific plans prepared under the requirements of USDA Forest Service Condition No. 1 (Implementation of Activities on NFS lands).
6. Develop a field manual identifying standard operating procedures, including cultural resource identification and reporting procedures that the Licensee and its contractors shall follow while conducting activities on NFS lands.
7. Develop a process to resolve disagreements regarding the implementation of the RCP.
8. Designate an Environmental Coordinator to coordinate the implementation of the RCP and Licensee activities with the USDA Forest Service.

Condition No. 3 – Fire Prevention Plan

Within one year of License issuance, the Licensee shall, in consultation with and approval by the USDA Forest Service and in consultation with appropriate State and local fire agencies, prepare a Fire Prevention Plan and file the plan with the Commission for approval. The plan shall require the Licensee to:

1. Analyze fire prevention needs to ensure that prevention equipment and personnel are available.
2. Identify fire hazard reduction measures (e.g., eliminating ladder fuels, reducing fuel loading).
3. Provide the USDA Forest Service a list of the location of available fire-prevention equipment and the location and availability of fire-prevention personnel.

Condition No. 4 – Sandbar Maintenance and Restoration

For the purposes of restoring and maintaining 14 acres of sandbars on or adjacent to National Forest System lands between Hells Canyon Dam and the confluence of the Snake and Salmon Rivers that may be affected by the existence and/or operation of the HCC over the term of the new license (including

any annual licenses issued thereafter), the Licensee shall establish a Mitigation Fund for use by USDA Forest Service to fund restoration and maintenance activities, which may include:

1. Development of a list of sites to be maintained, and a list of sites to be restored through managed sand supply based on the inventory of existing sandbars and potential restoration sites (Term and Condition Exhibit 1 attached hereto).
2. Restoration efforts by supplying sand to establish sufficient depth over designated areas between appropriate flow elevations. Maintenance will be implemented when average sand depths on treated sandbars fall below established criteria.
3. Distribution of sand on National Forest System lands above appropriate flow elevation contours to minimize annual sand loss attributable to ordinary high water.
4. Monitoring of existing sandbars and restoration areas on a five-year interval to evaluate whether maintenance and restoration objectives are being met.

Fund Administration. The Licensee shall, in a fiduciary capacity with the USDA Forest Service as the beneficiary, establish and maintain an independent interest-bearing account for the purpose of funding mitigation and enhancement projects undertaken pursuant to this Condition. The financial institution where the interest-bearing account shall be established must be insured by the Federal Deposit Insurance Corporation (FDIC) and the terms of the escrow agreement shall be approved in advance by the USDA Forest Service, Chief Financial Officer. The Fund's principal shall be invested in interest-bearing securities of the U.S. Treasury. The Licensee shall bear the cost of all reasonable administrative, legal, and overhead costs associated with the management of the account and shall not assess any such costs against the account or against the USDA Forest Service. The USDA Forest Service will designate an official with the authority to direct payment to the USDA Forest Service for specific project work in furtherance of the purposes of the Fund. The account shall be administered at the sole discretion of the USDA Forest Service. The Licensee and the USDA Forest Service will collaborate on development of public information to communicate the benefits of the projects being completed under this Fund.

Quarterly Reports. The financial institution shall provide quarterly reports, at a minimum, to the USDA Forest Service, Chief Financial Officer, showing account activity during the period, the amounts of principal and interest income.

Annual Reports. The Licensee shall submit to FERC and the USDA Forest Service, Chief Financial Officer written annual reports that reflect the amounts of payments deposited into and disbursed from the Fund. On each anniversary of the Mitigation Fund's establishment, and every year thereafter, the Licensee shall provide an annual independent audit of the Fund and submit the results of the audit to the USDA Forest Service, Chief Financial Officer. The USDA Forest Service will provide information to the Licensee annually concerning how funds have been expended in furtherance of the purposes of the Fund.

Timing and Schedule of the Licensee's Contributions to the Fund. Within one year of the order issuing the new license, the Licensee shall establish the Mitigation Fund and shall contribute \$937,000.00 annually (in 2006 dollars adjusted for inflation in accordance with Exhibit 2 attached hereto) to the Fund for the first 10 years of the license. The USDA Forest Service may begin to draw from the Fund on the date of the first anniversary of the new license. The Licensee shall be responsible for no further contributions to the Fund. The contributions shall be nonrefundable, except that any balance resulting from the Licensee's contributions: including any accrued interest, remaining in the Fund on the date that the next license order for the Project is issued shall be returned to the Licensee. A final independent audit of the Fund shall be made by the Licensee to determine the final principal and interest remaining in the Fund to be returned to the Licensee. Based on the results of the audit, USDA Forest Service shall make the final disbursement to the Licensee.

EXHIBIT 1. SANDBAR INVENTORY

River Mile	Bar Type		1964 (1000s ft²)	1973 (1000s ft²)	1982 (1000s ft²)
246.91	CM	HCD-Launch	5		
246.9	CM	HCD-Launch	5		
246.9	CM	HCD-Launch	5		
245.8	CM	(Stud Ck)	15	5	
245.7	CM	Lamont Spr.	15		
245.3	CM	Square Beach	15	5	5
244.7	S	Brush Creek	25	15	15
244.6	CM		5	5	
244.2	CM	Fawn Bar	5		
244	CM		5	5	5
243.4	CM	Chimney Bar (Moose)	5		
243.3	R	Cactus Camp	15		
243.1	CM	Warm Springs	15		
242.91	CM		5		
242.9	R		5		
242.5(6)	CM	(Daily Bar)	5	5	5
242.2(1)	R	Battle Creek	15		
241.9(.8)	CM	Sand Dunes	5		
241.6	CM	Birch Springs	0	5	
241.3	R	Wild Sheep	5		
241	CM		5		
240.7	CM		5	5	
240	S		5		
238.7	CM		5		
238.5	CM		5		
238.3	CM		5		
237	CM	Dry Gulch	5		
236.6	R	Hastings	5		
236.4	CM		5		
236.3	CF		5	5	
236(.2)	CM	Saddle Creek	5		
235.8	R		5		
235.5	CM		5		

River Mile	Bar Type		1964 (1000s ft ²)	1973 (1000s ft ²)	1982 (1000s ft ²)
235.1	CM	Bernard Creek	5	5	
234.02	CM		5		
234.01	CM		5		
234	CM		5		
231.3(.4)	CM	Rush Creek	5		
230.9	CM		5		
230.5	CM		5		
229.8	R	Johnson Bar Landing	35	25	15
229.7	CM		5		
229.3	CF		5		
229.2(.3)	S	Sheep Creek Cabin	5		
229.1	R		5		
229	S	Steep Creek	5	5	
228.8	R		15		
228.7	CF		15	5	5
228.6	CM	Yreka Bar	5		
228.5	CM	Upper Yreka Bar	5		
228.4	CM		5		
228.1	R	(Upper Sand Ck)	15		
228.01	CM		5		
228			10		
227.8	CF	Sand Creek	5		
227S	R		5		
227.6	CM		5	5	
227.5	R	Pine Bar	35	35	25
227.4	CF		5		
227.3	CF		5		
226.8	R		5		
226(.2)	R	(Lower Quartz Ck)	15	5	5
225.9	CM		5		
224.6	R	No Name	5		
224.4	R		15	5	
224.3	CM	Dry Gulch	5	5	

River Mile	Bar Type		1964 (1000s ft ²)	1973 (1000s ft ²)	1982 (1000s ft ²)
223.6(.8)	CM	Temperance	5		
223.1	CM		5		
223	CF		5		
222.9	CM	Hominy Bar 1	25		
222.8	CF	Hominy Bar 2	15		
222.4 (.6)	R	Salt Creek	35	35	35
222.2	CM	Two Corral	25		
222.1	R	(road Bar)	15	5	
222	CM	Gracie Bar	5	5	
221.7	CM		5	5	5
221.6	S		5		
221.5(.4)	R	Half Moon Bar	25	5	
220.8	R	Kirkwood Ranch	35	25	25
220.6	CM		5		
220	CM	Yankee Bar	5	5	5
219.9(.6)	R	(Russell Bar)	25		
218.6	CM		15		
218.5	CM		5		
218.3	CM	Car Gulch	5		
218.2	CM		5	5	
218.1	CM		5		
217.9	CM		5	5	
217.4(.2)	CM	(Corral Ck)	15		
216.9(.7)	R	(Trail Ck)	25		
216.4	R	Fish Trap Bar	35	35	35
216.2	R	Upper Pittsburg	15		
215.7	R	Klopton Ck	5		
215.6	CM	Wilson Eddy/Tin Shed	15		
215.3	CM		15		
214.71(.8)	S	Pittsburg Admin	25	35	25
214.7	R	Pittsburg Admin	35	15	25
213.91	MC		5		
213.9	CM		15	15	5
213.2	CM		5		
213.11	CM		5		

River Mile	Bar Type		1964 (1000s ft ²)	1973 (1000s ft ²)	1982 (1000s ft ²)
213.1	CM		5		
212.6	CM		5	5	5
212.5	S		5		
212.4	R		15	5	
212.3	CM		5		
211.91	CM		5	5	5
211.9	CM	McCarty Creek	25	15	5
211.8	CF		5		
211.7	CM		5		
211.6	CM		5		
211.4	CF		5	5	5
211.2	CM		5	5	
210.7(.8)	CM	(Big Canyon)	5		
210.6(.4)	CM	(Lower Big Canyon)	5		
210.21	CF		5	5	
210.5	CM	(Elk Calf Camp)	5	5	
210.4(0)	CM	Somers Range	5	5	
210.3	CM		15	5	5
209.9	CM	Camp Creek	15	5	5
209.7	CM		5		
209.2	CF		15	5	5
208.3	R	Jones Creek	15	5	5
208.2	R	Lookout Creek	25		
206.9	CM		5	5	
206.8	CM		5	5	
205.9	CM		5	5	
205.51	CF		5	5	
205.5	CM		5	5	
205.3	R		15		
204.8	CF		5	5	
204.6	CM		5		
204.5	CM	Bob Creek	5	5	5
203.4	CF		15		
203.1	CM		5		
202.81	R		5		

River Mile	Bar Type		1964 (1000s ft ²)	1973 (1000s ft ²)	1982 (1000s ft ²)
202.41	CM		5	5	
201.9	S	Bar Creek	15	5	5
200.7	CM		5		
200.1	CM		5	5	5
199.5	CF		5		
199.2	CM		5		
199.1	CF		5		
199	S	Deep Creek Camp	5	5	5
198.5(.4)	CM	Robinson Gulch	5	5	5
198.3(.1)	CF	Dug Creek	15	5	
197.7	CF		5		
197.4	R		15		5
194.9	CM		5		
194.1	CM		5		
194	CM		5	5	5
193.8(.6)	R	(Mary Camp)	25	15	5
192.7	CM		5	5	5
192.4	CF	China Bar	15	15	15
192.2	CM		5	5	5
192.1	CM		5	5	5
190.9	CM		35	25	15
190.3	CM		5		
190.2	CM		5		
189.6	CM		5	5	5
189.2	CF		5		
188.7	CM		5		
188.5	CF		5	5	5
188.4	CF		5		

Private Land on Idaho Side of River

River Mile	Bar Type		1964 (1000s ft ²)	1973 (1000s ft ²)	1982 (1000s ft ²)
218.8	CM	Kirby Creek Lodge	35	35	35
207.8	CM		5	5	
207.5	S	Marlboro B	5	5	5
207.4	CF		5		
207.3	S		5	5	5
206.7	S		5	5	5
206.3(.1)	R	High Range	25		
206	R		5	5	
205.8	CF	Gelta Creek	5	5	5
205.7	R		5	5	
205.1(.0)	CF	(Ragtown Bar)	25	15	15
204.81	CM		35	35	
204.4	CF		5		
204.2(.0)	S	Cat Ck	15	15	
203.9	S		15	5	5
203.5	CM		5	5	5
202.9	CM	Wolf Creek Camp	5		
202.8	S		5	5	5
202.5	CM		5	5	5
202.4	CM		5	5	
201.61	CM		5		
201.6	CM		5		
201.5	R		15	5	5
201.2	CM	(Hitchcock Ranch)	35	25	25
201.1	CM		15	15	5
201	R	(Hitchcock Ranch)	15	5	5
200.9	R	Dry Cr Camp	15		
200.3	CM		5	5	5
199.4	CF		5		
199.3	CF		5		
199.21	CM	Deep Creek	5	5	
199.13	CF		5		
199.12	CF		5		

River Mile	Bar Type		1964 (1000s ft²)	1973 (1000s ft²)	1982 (1000s ft²)
198.7	CM		15	5	
197.3	CM		5		
195.3	CM	Warm Springs Rapids	15	15	15
195	CM		5	5	5
194.7	CM		5		
194.31	CM		5		
194.3	CM		5		
194.2	CM		5		
194.11	CM		5	5	5
194.01	CM		5	5	5
193.5	CM		5	5	
193.3	CM		5	5	
192.21	CM		5	5	
190.8	CF		5	5	
190	CM		5	5	5
189.8	CM		5		
189.7	CM		5		
189.3	CM		5	5	5
188.6	CM		5		
188.4	CF				
188.3	CM	Salmon Mouth			

EXHIBIT 2. ADJUSTMENT FOR INFLATION

Escalation of Costs. Unless otherwise indicated, all costs or payment amounts specified in dollars shall be deemed to be stated as of the year 2006, and IPC shall escalate such sums as of January 1 of each following year (starting in January 2007) according to the following formula:

$$AD = D \times \frac{(NGDP)}{IGDP}$$

WHERE:

- AD = Adjusted dollar amount as of January 1 of the year in which the adjustment is made.
- D = Dollar amount prior to adjustment.
- IGDP = GDP-IPD for the third quarter of the year before the previous adjustment date (or, in the case of the first adjustment, the third quarter of the year before the Effective Date).
- NGDP = GDP-IPD for the third quarter of the year before the adjustment date.
- GDP-IPD = The value published for the Gross Domestic Product Implicit Price Deflator by the U.S. Department of Commerce, Bureau of Economic Analysis in the publication *Survey of Current Business*, Table 7.1 (being on the basis of 1987 = 100), in the third month following the end of the applicable quarter. If that index ceases to be published, any reasonably equivalent index published by the Bureau of Economic Analysis may be substituted by the Parties. If the base year for GDP-IPD is changed or if publication of the index is discontinued, the Parties shall promptly make adjustments or, if necessary, select an appropriate alternative index to achieve the same economic effect.

Condition No. 5 – Integrated Wildlife Habitat Program and Wildlife Mitigation and Management Plan

Within one year of License issuance, the Licensee shall, in coordination with the USDA Forest Service, prepare an Integrated Wildlife Habitat Program (IWHP) and Wildlife Mitigation and Management Plan (WMMP) as defined in FERC AIR TR-1, for lands within the Project boundary and NFS lands adjacent to the Project boundary that are impacted by the Project, and file the plan with the Commission for approval. The goal of the IWHP and WMMP is to specify programmatic and stewardship goals and measurable objectives, policies, guidelines and administrative procedures, including monitoring and adaptive management that provide terrestrial and botanical resource protection, mitigation and enhancement measures to lands as described above. The Licensee shall be responsible to implement the IWMP and WMMP. In addition to incorporating all USDA Forest Service terrestrial and botanical conditions approved by FERC, the IWMP and WMMP shall require the Licensee to:

1. Develop and implement a monitoring program to estimate the status and trends of the terrestrial habitats being managed and determine whether management practices support those resources goals or should be changed. The monitoring program shall include a process to establish baseline biological conditions for the resources that will be managed and monitored.
2. Develop and implement an adaptive management process, including protocols and schedules to monitor implementation and effectiveness of the terrestrial and botanical resource protection, mitigation and enhancement measures, and adapt implementation

measures as needed to meet resource-specific goals and objectives. Adaptive management shall be based on periodic monitoring cycles tailored to each resource objective related to a specific mitigation or management action.

3. The IWHP and WMMP shall be prepared in coordination with the USDA Forest Service. The Licensee shall include with the plans documentation of coordination, copies of comments and recommendations on the completed plans after they have been prepared and provided to the USDA Forest Service, and specific descriptions of how the USDA Forest Service comments are addressed by the plans. The Licensee shall allow a minimum of 60 days for the USDA Forest Service to comment and to make recommendations prior to filing the plans with the Commission for approval. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on Project-specific information.

Condition No. 6 – Land Acquisition and Management Plan

Within one year of License issuance, the Licensee shall in coordination with the USDA Forest Service prepare a Land Acquisition and Management Plan (LAMP) that shall be incorporated into the Licensee's Integrated Wildlife Habitat Program (IWHP) and Wildlife Mitigation and Management Plan (WMMP) and file the LAMP with the Commission for approval.

1. The purpose of the LAMP is to describe the Licensee's land acquisition and management of habitat mitigation parcels as described in the FLA, FERC's AIR TR-1 and other License conditions. The LAMP shall include but not be limited to the following elements:
Program goals and objectives (TR-1 Sections 1.2: #1)
 - a. Parcel and conservation easement acquisition criteria (TR-1 Appendix 1) and/or new criteria developed by the IWHP Work Group (TR-1)
 - b. Implementation schedule for land (habitat) acquisition and improvement (TR-1 Sections 1.2: #4)
 - c. Desired habitat conditions (TR-1 Sections 1.2: #2)
 - d. Comprehensive best management practices and programs (TR- 1 Sections 1.2: #6)
 - e. Priorities and procedures for habitat restoration of parcels in degraded condition (TR-1 Sections 1.2: #4)
 - f. Priorities and procedures for maintaining functioning habitat on the acquired parcels (TR-1 Sections 1.2: #4)
 - g. Procedures for effectiveness monitoring in determining whether the desired habitat conditions and trends are being achieved (TR-1 Sections 1.2: #7)
 - h. Apply adaptive management practices when objectives and trends are not achieved (TR-1 Sections 1.2: #9)
 - i. Provision for the program's periodic review and revision, as necessary (TR-1 Sections 1.2: #11)
2. The LAMP shall be prepared in coordination with the USDA Forest Service. The Licensee shall include with the LAMP documentation of coordination, copies of comments and recommendations on the completed LAMP after it has been prepared and provided to the USDA Forest Service, and specific descriptions of how the USDA Forest Service comments are addressed by the plan. The Licensee shall allow a minimum of 60 days for the USDA Forest Service to comment and to make recommendations prior to filing the

LAMP with the Commission for approval. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on Project-specific information.

3. The Licensee shall acquire 56.3 acres of riparian habitat to mitigate continuing Project impacts to riparian vegetation on the Snake River below Hells Canyon dam. The Licensee shall include the above riparian habitat mitigation into its land acquisition program.
4. Within two years of License issuance, the Licensee shall, in coordination with the USDA Forest Service, assess the shoreline erosion sites identified in the FLA, Technical Report E.3.2-42 and, where warranted and feasible, design and install control measures to correct active shoreline erosion problems at its source, including planting the sites with native riparian vegetation, maintaining the control measures in a functioning condition and monitor control measure effectiveness. For those sites where control measures are deemed infeasible, the acreage of these sites shall be added to IPC's riparian acquisition program. In addition, the Licensee shall survey for new shoreline erosion sites every 5 years, and implement control measures when deemed warranted and feasible.

Condition No. 7 – Exotic and Invasive Vegetative Management

Within one year of License issuance, the Licensee shall prepare and implement a cooperative Integrated Weed Management Plan (IWMP) with the goal of prevention, suppression, containment, eradication and control of invasive non-native plant species, including noxious weeds in and adjacent to the Project area. The intent of this plan is to enhance and promote the coordinated management of noxious weeds with entities responsible for weed management in Hells Canyon.

1. The IWN'IP shall be developed cooperatively with a Licensee established Noxious Weed Advisory Board. The Board shall be comprised of entities responsible for weed management, including the USDA Forest Service. The Licensee shall include provisions to update the plan in 5 year intervals to keep the plan contemporary with new weed management science and practices.
2. The IWMP shall require the Licensee to (FLA E.3.3.3.2.1.2 pages E.3-690 & E.3-691):
 - a. Develop communication and coordination protocols for the Licensee and the Noxious Weed Advisory Board members, including:
 - 1) Defining participants roles and responsibilities
 - 2) Schedules for annual reports and work plan, meeting, review and updates
 - b. Define the geographic scope of the plan's implementation efforts
 - c. Identify noxious weed management goals and objectives
 - d. Develop weed species and habitat overview/descriptions
 - 1) Location description mapping of populations using Geographic Information Systems
 - 2) Current site (habitat) condition
 - 3) Data gap; identify and implement needed site-specific surveys and methodology, as appropriate
 - e. Create the Hells Canyon Cooperative Weed Management Area (CWMA)
 - f. Describe the desired conditions

- g. Make recommendations for site-specific management consistent with federal state and county laws and regulations
 - h. Schedule for periodic inventory using common inventory and mapping protocols
 - i. Develop Best Management Practices (BMP) that pertain to all ground disturbing
 - j. Projects and proactive prevention measures to stop new infestations, consistent with Federal and State initiatives
 - k. Develop and implement an effectiveness monitoring program
 - l. Modify practices when objectives and trends are not achieved
3. The IWMP shall be prepared in coordination with the USDA Forest Service. The Licensee shall include with the plan documentation of coordination, copies of comments and recommendations on the completed IWMP after it has been prepared and provided to the USDA Forest Service, and specific descriptions of how the USDA Forest Service comments are addressed by the IWMP. The Licensee shall allow a minimum of 60 days for the USDA Forest Service to comment and to make recommendations prior to filing the IWMP with the Commission for approval. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on Project-specific information.

Condition No. 8 – Terrestrial Threatened and Endangered Species

Within one year of License issuance, the Licensee shall, in coordination with the USDA Forest Service, and USFWS, if appropriate, prepare a Threatened and Endangered Species Management and Monitoring Strategy for the long-term protection, management and enhancement of Threatened and Endangered species and their habitats on NFS lands affected by the Project. The strategy shall be incorporated into the WMMP and filed with Commission for approval. The strategy shall address those measures required by the USFWS as a result of consultation under the Endangered Species Act (ESA) for the protection, management, enhancement and monitoring of Threatened and Endangered species and their habitats.

The USDA Forest Service shall be provided the opportunity to participate in the ESA consultation process. To the extent that any such measures shall be implemented on NFS lands, the Licensee shall coordinate with the USDA Forest Service on such implementation.

Condition No. 9 – Sensitive Species Management

Within one year of License issuance, the Licensee shall, in coordination with the USDA Forest Service prepare a Sensitive Species Management Plan (SSMP) that shall be incorporated into the WMMP and filed with the Commission for approval. The goal of the WMMP is to provide for the protection, management, enhancement and monitoring of currently identified and any new (per paragraph 1 below) Sensitive species and their habitat on NFS lands affected by the Project. The SSMP shall require the Licensee to:

- 1. In consultation with USDA Forest Service, conduct additional Sensitive species surveys when new species are listed on the Regional forester Sensitive Species list that are known to exist in the Hells Canyon Project area. When there are Project-related activities that may have an impact on the newly listed species or their habitat, surveys will be conducted. The Licensee shall prepare a draft biological evaluation for Regional Forester Sensitive Species as per USDA Forest Service Condition No. 1.

2. Conduct monitoring every two years for all Sensitive confirmed sites for the first six years of the License term and at three-year intervals thereafter to determine habitat condition and trend. The need for continued monitoring will be evaluated after year six of the new License term.
3. Protect and/or restore Sensitive sites/habitats that are declining in condition, as a result of Project-related impacts, as determined through monitoring as set out in paragraph 2 above.
4. Update the Sensitive Species Management Plan to address revisions to the Regional Forester sensitive species list over the License term.

Condition No. 10 – Mountain Quail Habitat Enhancement

The Licensee shall implement the Mountain Quail Habitat Enhancement program proposed in the Final License Application (FLA, 2003). Measures proposed for NFS lands shall be subject to Condition No. 1 (Implementation of Activities on NFS lands).

Condition No. 11 – Transmission Line Management

Within one year of License issuance, the Licensee shall, in consultation with and approval by the USDA Forest Service, develop a transmission line operation and maintenance plan which shall be incorporated into the WHMMP and filed with the Commission for approval. The goal of the plan is to provide communication and coordination between the Licensee and the USDA Forest Service in implementing, monitoring, and adapting all resource specific restoration, protection, and management actions associated with the transmission line occupying NFS lands.

Condition No. 12 – Recreation Management

Within one year of License issuance, the Licensee shall finalize the Hells Canyon Complex Comprehensive Recreation Management Plan (Recreation Plan) and file the Recreation Plan with the Commission for approval. The Recreation Plan shall be inclusive of appropriate License requirements and also address Project-related recreation resources located on NFS lands within the existing Project boundary or as otherwise ordered by the Commission. The Recreation Plan shall include provisions for adaptive management to address changing recreation needs and preferences and shall be updated as appropriate every six years in conjunction with filing the Commission Form 80. The Licensee shall implement the Recreation Plan.

The Recreation Plan shall be prepared in coordination with the USDA Forest Service and other appropriate entities. The Licensee shall include with the Recreation Plan documentation of coordination, copies of comments and recommendations on the completed Recreation Plan after it has been prepared and provided to the USDA Forest Service, and specific descriptions of how the USDA Forest Service comments are addressed by the Recreation Plan. The Licensee shall allow a minimum of 60 days for the USDA Forest Service to comment and to make recommendations prior to filing the Recreation Plan with the Commission for approval. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on Project-specific information.

The Recreation Plan shall include an annual implementation schedule, consultation, and approval procedures and include:

1. Measures to adequately address USDA Forest Service resource concerns and standards of quality (e.g. Meaningful Measures) throughout the License term.
2. The following measures proposed by the Licensee in the Draft Recreation Plan (FLA, 2003):
 - a. Litter and Sanitation Plan (E.5.4.3.1, E.5.4.4.1.2)

- b. Public Safety Program (E.5.4.3.1.2)
 - c. Local Law Enforcement (E.5.4.3.1.3, E.5.4.4.1.4)
 - d. Road Maintenance (E.5.4.3.1.4, E.5.4.4.1.6)
 - e. Boat Moorage on HCC Reservoirs (E.5.4.4.1.1)
 - f. Information and Education (I&E) Plan (E.5.4.4.1.3)
 - g. Recreation Adaptive Management Plan (E.5.4.4.1.5)
 - h. Performance of Operation and Maintenance at Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites (E.5.4.4.1.7)
 - i. Enhancement of Eagle Bar Dispersed Recreation Site (E.5.4.4.2.1)
 - j. Development of Site Plan for Big Bar Recreation Site (E.5.4.4.2.1)
 - k. Enhancement of Boat Ramp and Associated Facilities at Big Bar Recreation Site (E.5.4.4.2.2)
 - l. Development of Site Plan and Enhancement of Eckels Creek Dispersed Recreation Site (E.5.4.4.2.4)
3. The Licensee shall implement the Comprehensive Road Management Plan proposed in the FLA as it pertains to NFS lands to meet the existing standards, designs and operations and maintenance plan guidelines established in the Hells Canyon Scenic Byway Management Plan (USFS, 1993). The Licensee shall maintain Hells Canyon Dam (HCD) Road for safe and reasonable use by the public including access to Hells Canyon Creek Visitor Center, parking lot, and boat launch and also including dispersed parking between the HCD and the visitor center.
4. To address adaptive management the Licensee shall:
- a. Develop a comprehensive recreation monitoring plan that includes evaluation of recreation use, preferences and trends.
 - b. Report recreation use information to the USDA Forest Service and other interested entities as it becomes available, including annual reporting of use occurring at Licensee fee parks.
 - c. Coordinate with the USDA Forest Service to establish trigger points that indicate a need for additional development or improvements at USDA FS sites identified in the Recreation Plan.
 - d. Provide for appropriate expansion of existing recreation facilities or development of new Project-related recreation facilities and for other recreational opportunities on NFS lands commensurately with Project-related use pursuant to the Recreation Plan
5. The Licensee shall develop and implement a Vegetation Management Plan for all developed sites on NFS lands identified in the Recreation Plan. The Vegetation Management Plan shall include a schedule and procedures for maintenance, including planting, fertilizing, mulching, watering, thinning, staking, mowing, trimming, spraying and/or weeding, etc., for each developed site.
6. The Licensee shall every six years in conjunction with FERC Form 80 requirements conduct visitor satisfaction surveys in the HCC. Details of the survey content and implementation will be coordinated with the USDA Forest Service and other applicable entities to ensure that the level of detail and applicability of information is consistent with

previous surveys and analysis. When practicable these surveys should endeavor to duplicate the survey protocols developed by Whittaker and Shelby, 2002, and presented in the Licensee's Technical Report E.5-4, FLA 2003) during the first survey periods.

Condition No. 13 – Big Bar

Within three years of License issuance the Licensee shall, in consultation with and approval by the USDA Forest Service, develop a site development plan for the Big Bar Recreation Area and file the plan with the Commission for approval. The site plan shall address specific facility elements needed at Big Bar Section C as well as possible future expansion opportunities on other sections of Big Bar. The Licensee shall implement the plan.

The plan shall require the Licensee to develop a campground facility on the southern portion of Big Bar Section C within five years of License issuance. The campground shall be development level "3" which is characterized by moderate site modification with design of improvements generally based on use of native materials. (FSM 2300, 2330) Primary development at Big Bar shall include, but not be limited to, approximately 15 to 20 universal campsites with parking spurs, picnic tables and fire rings, centrally located vault toilets, potable water, hardened access roads, xeric landscaping and meeting accessibility (ADA) requirements. The Licensee shall be responsible for all costs associated with the campground development, including site plan development, environmental analysis work, site improvements, and facility development.

The Licensee shall perform operations and maintenance (O&M) at this facility as described in Condition No. 18 (Operations and Maintenance).

Condition No. 14 – Eagle Bar

Within three years of License issuance, the Licensee shall implement the site plan proposed in the draft Recreation Plan (FLA 2003), for Eagle Bar. Elements of the site plan include reconstructing the boat ramp, designating parking for boat ramp use and trailhead access, designating campsites with picnic shelters and fire rings, constructing a vault toilet, constructing a fishing pier using ADA guidelines and standards, and providing potable water.

The Licensee shall perform O&M at this facility as described in Condition No. 18 (Operations and Maintenance).

Condition No. 15 – Eckels Creek

Within three years of License issuance, the Licensee shall implement the site plan proposed in the draft Recreation Plan (FLA 2003), for the Eckels Creek Dispersed Site. Designated sites shall be established to limit resource damage to the site, and shall be delineated using boulders and other natural features. The site shall be graveled and contain two to three single unit picnic/camp sites. Sites shall include one fire ring each (ADA) and one table each (ADA). A single-vault toilet shall be installed near the roadside that can be used by both overnight campers and by trail users parking to access Eckels Creek Trail across the road.

The Licensee shall perform O&M at this facility as described in Condition No. 18 (Operations and Maintenance).

Condition No. 16 – Deep Creek Stairway

Within one year of License issuance, the Licensee shall, in consultation with and approval by the USDA Forest Service, complete a condition and safety inspection of Deep Creek Stairway/Trail #218. Based on the results of the condition/safety inspection, the Licensee shall correct any deficiencies noted in the inspection.

The Licensee shall develop and implement an O&M Plan and implementation schedule approved by the USDA Forest Service which provides for O&M and replacement as necessary at this facility.

The Licensee shall perform O&M at this facility as described in Condition No. 18 (Operations and Maintenance).

Condition No. 17 – Parking Areas

Within two years of License issuance, the Licensee shall develop or improve and maintain parking and signing at four USDA Forest Service roadside parking areas along the Hells Canyon Reservoir. The parking areas are located adjacent to the paved Hells Canyon Road that connects Oxbow and Hells Canyon Dam. The four locations are Allison Creek, Kinney Creek, Eckels Creek, and Deep Creek. The improvement work includes developing surfaced parking lots large enough for two to four vehicles and providing information/interpretive signing.

The Licensee shall perform O&M at this facility as described in Condition No. 18 (Operations and Maintenance).

Within five years of License issuance, the Licensee shall replace the toilet at Deep Creek.

Condition No. 18 – Operations and Maintenance

For the term of the License, the Licensee shall perform the operations and maintenance necessary to meet USDA Forest Service Standards (Meaningful Measures as amended over the license term) for Eagle Bar, Eckels Creek, Big Bar, parking areas along Hells Canyon Reservoir, Black Point Viewpoint, and dispersed areas pursuant to the Recreation Plan.

Condition No. 19 – Hells Canyon Reservoir Drawdown

For the term of the License, the Licensee shall manage reservoir levels to minimize impacts on recreation resources during the summer. Maximum draw down during the recreation season is presently limited to five feet from full pool elevation. If, based on operational modifications ordered by the Commission or system emergencies, the reservoir is drawn down for protracted periods below five feet from full pool elevation, the Licensee shall reconstruct or modify boat launching facilities to provide access to the reservoir.

Condition No. 20 – Reservoir Trail Maintenance

Within one year of License issuance and over the remaining term of the License, the Licensee shall perform trail maintenance for the USDA Forest Service trails as shown in the table below.

USDA Forest Service Trails to be Maintained by Idaho Power

Trail Name	Beginning at	Ending at
Deep Creek Trail to Oxbow Creek (Trail #219)	Eagle Bar	Deep Creek
Kinney Creek Trail (Trail #221)	Road 545	Junction of Trail #222
Mid-Slope Trail (Trail #222)	Junction of Trail #221	Eckels Creek
Eckels Creek Trail (Trail #223)	Road 545	Junction of Trail #222
Allison Creek Trail (Trail #514)	Road 545	Junction of Trail #222
Stud Creek Trail (Trail #1781)	Hells Canyon Creek	Stud Creek
McGraw Creek Trail Loop (Trail #1879)	Junction of Trail #1890	Junction of Trails #1884

Bench Trail to McGraw Creek Trail Junction (Trail #1884)	Junction of Trail #1879	Milepost 2
HC Reservoir Trail to Leep Creek (Trail #1890)	Copper Creek TH	Leep Creek

The Licensee shall maintain the trails according to Forest Service standards (Trail and Specification Handbook EM7720.103 specifications for trails) or as otherwise mutually agreed upon.

Within one year of License issuance, the Licensee in coordination with the USDA Forest Service shall develop a plan that addresses the future management of the HC Reservoir Trail (Trail #1890) from Leep Creek mile 4.3 to its terminus mile 8.1.

Within five years of License issuance, the Licensee in coordination with the USDA Forest Service and the DOI-Bureau of Land Management shall develop a plan that addresses the future management of the McGraw Creek trail (#1879A 3.9 miles).

The HC Reservoir Trail and McGraw Creek plans shall be prepared in coordination with the USDA Forest Service and other appropriate entities. The Licensee shall include with the plans documentation of coordination, copies of comments and recommendations on the completed plans after they have been prepared and provided to the USDA Forest Service, and specific descriptions of how the USDA Forest Service comments as addressed by the plans. The Licensee shall allow a minimum of 60 days for the USDA Forest Service to comment and to make recommendations prior to filing the plans with the Commission for approval. If the Licensee does not adopt a recommendation, the filing shall include the Licensee’s reasons, based on Project-specific information.

Condition No. 21 – Hells Canyon Creek Launch Site and Reservoir Facilities

Within one year of License issuance, the Licensee shall prepare a plan for the USDA Forest Service site referred to as HC Creek Launch Site (HCCLS) and file the HCCLS Plan with the Commission for approval.

The HCCLS Plan shall be prepared in coordination with the USDA Forest Service. The Licensee shall include with the HCCLS Plan documentation of coordination, copies of comments and recommendations on the completed HCCLS Plan after it has been prepared and provided to the USDA Forest Service, and specific descriptions of how the USDA Forest Service comments are addressed by the HCCLS Plan. The Licensee shall allow a minimum of 60 days for the USDA Forest Service to comment and to make recommendations prior to filing the HCCLS Plan with the Commission for approval. If the Licensee does not adopt a recommendation, the filing shall include the Licensee’s reasons, based on Project-specific information.

The HCCLS Plan will address the items listed below:

1. Develop potable water and associated grey water disposal system at the Hells Canyon Creek Visitor Center if the proposed potable water/grey water disposal system is not developed at the Eagle Bar Site. The Licensee shall perform 100% of the O&M of these items as described in Condition No. 18 Operations and Maintenance.
2. The Licensee shall lead a cooperative effort with the USDA Forest Service and other partners to provide a sanitary cleaning system (SCAT) capable of cleaning portable human waste carry out systems within the Hells Canyon Reservoir area. The Licensee’s responsibility will consist of providing a location on or within their lands/parks for the device and annual O&M for these items for the term of the License.
3. Elements of the HCCLS Plan will address safety issues at the boat launch and may include modifying the existing ramp and/or evaluating the possibility of relocating it. The Licensee

shall be responsible for costs associated with the boat launch enhancement and a schedule for implementation and maintenance.

4. The Licensee shall within one year of License issuance repair the footing on the ramp at the launch site.
5. Upon License issuance and for the remaining term of the License, the Licensee shall maintain the existing level of Licensee staffing (as referenced in MOU No. 99-Mu-11061600-556 with Modification No. 001) at the Hells Canyon Creek Launch site and Visitor Center.
6. The Licensee shall be 100% responsible for the maintenance of the following items upon License issuance: the road to, parking areas, vault toilets, and ramps associated with the area know as the Hells Canyon Creek Launch for the life of the License.

Condition No. 22 – Aesthetic Improvements to the Hells Canyon Dam Site and Recreation Portal

Within one year of License issuance, the Licensee shall, in consultation with and approval by the USDA Forest Service, develop an aesthetic improvement plan for enhancing the upper deck, and entrance and egress areas of Hells Canyon Dam and file the plan with the Commission for approval. Alterations may include changes in fencing material, color of materials, screening of stop blocks, parking, restroom facilities, signage, pedestrian walkways, interpretation, viewing areas and landscaping. The Licensee shall implement the plan.

Condition No. 23 – Design Standards for Physical Structures and Landscaping

Within one year of License issuance, the Licensee shall, in consultation with and approval by the USDA Forest Service, finalize those portions of the Licensee’s proposed Comprehensive Management Plan relating to design standards and landscaping for project zones on NFS lands and file the plan with the Commission for approval. The Licensee shall implement the plan.

The plan shall include standards and guidelines to ensure that the desired landscape character is achieved and maintained. Standards and guides shall include site and structural design principles, standards for use of materials for roofing, bases, walls, paving, barriers, signage, plantings, etc. Guidelines shall include principles of scale, proportion and mass, colors, and design style.

Condition No. 24 – Scenery Management Plan

Within one year of License issuance, the Licensee shall, in consultation with and approval by the USDA Forest Service, prepare a Scenery Management Plan (SMP) for NFS lands within the Project boundary and file the plan with the Commission for approval. The plan shall address all Project facilities and Project maintenance operations on NFS lands within the Project boundary that affect scenery resources, and describe how all elements will be managed to meet high scenic integrity standards. The plan shall require the Licensee to use design and mitigation measures to protect and conserve scenery resources. The plan shall include a monitoring strategy utilizing all identified key observation points and access routes to insure that Licensee facilities and operations maintain the landscape character, meet high scenic integrity standards and meet scenic stability standards.

Condition No. 25 – Cultural Resource Management

Within one year of License issuance, the Licensee shall, in coordination with the USDA Forest Service, Idaho SHPO, Oregon SHPO, Bureau of Land Management, and appropriate Native American Tribes, will finalize a Historic Properties Management Plan (HPMP) for cultural resources within the area of potential effect (APE) for the Project, which is defined as extending from the high water-mark line to

0.1 mile inland on the reservoirs within the Project boundaries and from the river shoreline to 100 meters inland on the free flowing section of the Snake River below Hells Canyon Dam to the confluence of the Salmon River, and file the HPMP with the Commission for approval.

The HPMP shall be prepared in coordination with the USDA Forest Service. The Licensee shall include with the HPMP documentation of coordination, copies of comments and recommendations on the completed HPMP after it has been prepared and provided to the USDA Forest Service, and specific descriptions of how the USDA Forest Service comments are accommodated by the HPMP. The Licensee shall allow a minimum of 60 days for the USDA Forest Service to comment and to make recommendations prior to filing the HPMP with the Commission for approval. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on Project-specific information.

The HPMP will provide for the protection, management, and interpretation of historic properties within the HCC Project area and for the mitigation of Project-related impacts to historic properties.

The HPMP will include the following:

1. Provisions for an adaptive management strategy that will allow the HPMP to accommodate unforeseen challenges and changes in conditions that may affect historic properties. The HPMP will also include an evaluation and amendment process to insure that the document can be updated and revised as necessary to respond to changing technology and conditions, including changes in site eligibility as defined by regulation 36 C.F.R. 800 as amended.
2. Explanation of how consultation and the other requirements of 36 C.F.R. 800 as amended will be met.
3. Provisions for the evaluation of all future Project-related developments, including PM&E measures, for the compliance with the requirements of Section 106 of the National Historic Preservation Act (NHPA). The HPMP will provide a process to allow for revisions to the Project APE for future undertakings.
4. Provisions for a process for determining when and under what circumstances new survey, or resurvey of previously examined areas may be required. Recognizing the longevity of the license, the HPMP will provide for opportunities to conduct additional survey, if necessary, over the course of the license. Following the requirements of Section 106, the document will also provide guidelines for determining when archaeological inventories may be necessary on new Project lands added to the Project boundary.
5. Conduct additional inventories on newly exposed lands from shoreline erosion or increased reservoir draw down on NFS lands as circumstances allow or in cases where planned draw downs will occur over an extended period of time.
6. Provisions for the development of a detailed monitoring plan that will implement regular monitoring and assessment of all historic properties (cultural resources determined eligible or potentially eligible for the NRHP) within the APE to monitor site condition and assess the possible need for the implementation of mitigation or protection measures on historic properties being adversely affected by Project operations. The monitoring program will commence within 1 year of approval of the HPMP, and will be the primary vehicle to collecting the additional data necessary to identify sites that may be adversely affected by Project operations, so that appropriate mitigation measures can be initiated.
7. Documentation shall, at a minimum, consist of a detailed description of the current site condition with accompanying photos and specific attention to determining adverse effects and possible needs for immediate protection or mitigation. If it is determined that the original site recordation is deficient, then the following elements will be added to the site

monitoring protocol, as appropriate: mapping (GPS, hand drawn site map, clearly defined site boundaries), updating or completion of the appropriate SHPO form(s) and a detailed narrative describing the site, its contents and archaeological context.

8. The monitoring plan shall include a provision to use an established and recognized photographic protocol on some select rock art sites to be determined through coordination with the USDA Forest Service.
9. Provisions for the development of site specific treatment plans (treatment plans) and an implementation schedule for any sites that may need mitigation or treatment as a result of adverse effects from Project-related operations to sites on NFS lands within the APE. Treatment plans will be completed in consultation with the USDA Forest Service, appropriate agencies, Tribes and SHPOs for sites located on NFS lands within a mutually agreed upon timeframe. The treatment plans will employ archaeologically/scientifically sound methods of testing, oral histories, remote sensing, excavation, preservation, and stabilization. The treatment plans will emphasize site conservation and preservation oriented ethic that stress in-place protection and preservation over data recovery. Treatment plans will also provide for flexible mitigation alternatives that are responsive to the specific qualities for which a site is eligible, and which recognize the traditional archaeological data recovery may not always be the only or best mitigation alternative.
10. Make all collected data related to cultural resources on NFS lands available to the Payette and Wallowa-Whitman National Forests consistent with 36 C.F.R. 800 as amended, subject to provisions of any ARPA permit issued for study or inventory purposes.
11. Provisions for the establishment of a Cultural Resources Advisory Group (CRAG) that will provide an organized forum for continued consultation and coordination between the Licensee and agencies, Tribes and the SHPOs, in the implementation of the HPMP.
12. Provisions for the curation of any artifacts recovered during 1PC-sponsored research conducted in conjunction with testing, mitigation, or treatment, in a facility that meets the requirements of 36 C.F.R. 79.
13. The revised HPMP will include all the provisions previously specified within the draft HPMP submitted as part of the Final License Application (Hells Canyon FLA Technical Report Appendix E.14-15), unless otherwise replaced or modified by the provisions listed above.

Condition No. 26 – Project Boundary Modification

Within two years of License issuance, the Licensee shall ensure that any part of the Project boundary on National Forest System land is 1) agreed to by the USDA Forest Service, 2) located on the ground with monuments tied to known corners of the Public Land Survey System, and 3) encompasses necessary land for Project purposes such as public recreation, shoreline control, and environmental resource protection.

Condition No. 27 – Reservation of Authority

The Licensee shall implement, upon order of the Commission, such additional measures as may be identified by the Secretary of Agriculture, pursuant to the authority provided in Section 4(e) of the Federal Power Act, as necessary to ensure the adequate protection and utilization of the public land reservations under the authority of the USDA Forest Service.

Interior Section 4(e) Conditions

The Department of the Interior (Department) has reviewed the notice of application Ready for Environmental Analysis and Soliciting Comments, Recommendations, Terms and Conditions, and Prescriptions for the Hells Canyon Hydroelectric Project, FERC Project No. 1971-079, located on the Snake River in Wallowa and Baker Counties, Oregon, and Adams and Washington Counties, Idaho. Because a Draft Environmental Impact Statement (DEIS) or Draft Environmental Assessment (DEA) has not yet been issued by the Federal Energy Regulatory Commission (Commission), this response contains preliminary comments, recommendations, terms and conditions, and prescriptions only. The Department reserves the right to amend these preliminary comments, recommendations, terms and conditions, and prescriptions, if warranted, based on the results of new information and conclusions developed during the Commission's environmental analysis.

The preliminary comments, recommendations, terms and conditions, and prescriptions herein are provided in accordance with the provisions of the Fish and Wildlife Coordination Act (16 U.S.C. §661 *et seq.*), the Federal Power Act (FPA), (16 U.S.C. § 791 *et seq.*), the Endangered Species Act (ESA), (16 U.S.C. §1531 *et seq.*), the Federal Land Management and Policy Act (FLPMA), (43 U.S.C. § 1701 *et seq.*), and the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 *et seq.*). The Department does not intend to object to the issuance of a new license for the Hells Canyon Hydroelectric Project (Project), provided our comments, recommendations, terms and conditions, and prescriptions are incorporated into the new license.

SECTION 4(E) MANDATORY TERMS AND CONDITIONS

BLM “Reservations”

The Bureau of Land Management (BLM) manages federal lands within and near the project boundaries of the Hells Canyon Complex that are “reservations” as defined by the Federal Power Act. Specifically, BLM lands within the Oregon Grazing Districts 3 and 6 and Idaho Grazing District 1 were reserved by the United States in 1936. Pursuant to the Taylor Grazing Act, Pub. L. No. 73-482, Ch. 865, 48 Stat. 1269 (codified as amended at 43 U.S.C. §§ 315-315r), the public notices establishing these grazing districts meant that these public lands were “withdrawn, reserved or withheld from private appropriation and disposal under public lands laws.” 16 U.S.C. § 796(2) (FPA definition of “reservation”); *see also* Opinion of the Solicitor, M-37005 (January 19, 2001); documents dated August 25, 1936 [Taylor Grazing District 3 – State of Oregon (1653000B)]; November 7, 1935 [Taylor Grazing District 6 – State of Oregon (109010)]; and, April 20, 1935 [Taylor Grazing District 1 – State of Idaho (159791)].

Partially overlapping these Taylor Grazing Act withdrawals, the BLM has also manages two designated Wilderness Study Areas that include areas within the Project boundary. The McGraw Creek and Homestead Wilderness Study Areas overlap parts of Oregon Grazing District number 3. Wilderness Study Areas are also “withdrawn, reserved, or withheld from private appropriation and disposal under the public land laws” and so qualify as “reservations” under the FPA. *See* Memorandum from Associate Solicitor, Energy and Resources, to Director, BLM, on “‘Reservations’ and the Public Lands under the Federal Power Act” (Aug. 16, 1985) (*cited in* Opinion of the Solicitor, M-37005 (January 19, 2001)).

Section 4(e) of the Federal Power Act (FPA) gives the Secretary of the Interior (Secretary) authority to impose conditions on licenses issued by the Commission for hydropower projects located on “reservations” under the Secretary’s supervision. *See* 16 U.S.C. §§796(2), 797(e); *see also* *Escondido Mut. Water v. La Jolla Band of Mission Indians*, 466 U.S. 765 (1984). Specifically, Section 4 (e) provides:

That licenses shall be issued within any reservation only after a finding by the Commission that the license will not interfere or be inconsistent with the purpose for which such reservation was created or acquired, and shall be subject to and contain such conditions as the Secretary of the department under whose supervision such reservation falls shall deem necessary for the adequate protection and utilization of such reservations.

The Federal Power Act (FPA), 16 U.S.C. § 796(2) defines reservations as follows:

... “reservations” means national forest, tribal lands embraced within Indian reservations, military reservations, and other lands and interests in lands owned by the United States, and withdrawn, reserved, or withheld from private appropriation and disposal under the public land laws; also lands and interests in the lands acquired and held for any public purposes; but shall not include national monuments or national parks; . . .

As shown on the enclosed maps (Appendix A), lands within each of these grazing districts and within the two Wilderness Study Areas are located within the project boundaries of the Hells Canyon Complex (Project). Because any license for the Project’s continued operation will “be issued within [these] reservation[s],” the license will be subject to conditions that the Secretary of the Interior, acting through the BLM, “shall deem necessary for the adequate protection and utilization of [these] reservation[s].” 16 U.S.C. §797(e). As explained in greater detail below, the Project affects terrestrial, aquatic, recreational and cultural resources within these BLM-managed “reservations.” The BLM has developed conditions for the license that are designed to provide appropriate mitigation for those project impacts on the “reservations” managed by the BLM. Where project impacts affect BLM resources that lie outside of these “reservations”, the BLM’s recommended measures to address project impacts are included as recommendations under FPA § 10(a).

License articles contained in the Federal Energy Regulatory Commission’s (Commission) Standard Form L-1 issued by Order No. 540, dated October 31, 1975, cover those general requirements that the Secretary of the Interior, acting by and through the Bureau of Land Management (BLM), considers necessary for adequate protection and utilization of the land and related resources of Vale District Oregon, Boise District Idaho, and Coeur d’Alene District Idaho. Under authority of section 4(e) of the FPA, the Secretary also finds that the following conditions are necessary for the adequate protection and utilization of these reservations and the resource values for which those reservations are managed. These terms and conditions are based on those resources identified for management in the Federal Land Policy and Management Act (FLPMA) of 1976 and approved Resource Management Plans (RMPs) for each of the BLM units affected. *See* Appendix B. Therefore, the following conditions covering specific requirements for protection and utilization of the public lands shall also be included in any license issued for the Hells Canyon Project.

BLM Management Direction for “reserved” lands

The Hells Canyon Hydroelectric Project (Project) occupies lands within the Vale, Boise and Coeur d’Alene Districts of the Bureau of Land Management (BLM) that were reserved in 1935 and 1936. Resources within these FPA reservations are affected by the Project and for many of these affected resources, BLM’s statutory, regulatory, and policy directives provide guidance that has informed and directed the BLM’s decisions reflected in its 4(e) conditions. The Project affects BLM-administered lands occupied by the Hells Canyon, Oxbow and Brownlee reservoirs, lands contiguous to the reservoirs, and the Snake River downstream of Hells Canyon dam. Specific resources affected by the Project include wetlands, riparian, riverine, upland, and unique habitats (e.g. islands, forest seral stages, big game winter range, and sensitive and special status species habitat) and species reliant on these habitats; cultural sites; and recreation opportunities. Project impacts are anticipated to continue through the term of the new license. Project impacts occur on the BLM reserved lands to aquatic, recreational, and cultural resources.

The BLM has authority pursuant to Sections 4(e) and 10(a) of the Federal Power Act to seek mitigation for project impacts on federal lands managed by the BLM. The BLM manages its federal lands in accordance with a variety of statutory mandates. Primary guidance is provided by the Federal Land Policy and Management Act (FLPMA). Other statutes provide direction to the BLM with regard to more specific resource issues such as endangered species (Endangered Species Act) or cultural resources (Archaeological Resources Protection Act and Native American Graves Protection and Repatriation Act). Specific statutory direction will be discussed as appropriate in the resource-specific sections and in Appendix B.

The BLM implements its statutory mandates through a variety of planning and policy guidance documents. In the Project area, the BLM has developed the Baker Resource Management Plan and the Cascade Resource Management Plan which provide landscape scale direction for land management. Additional management plan documents that guide action on BLM lands include: The Bald Eagle Recovery Plan, Chief Joseph MFP, PACFISH and INFISH Strategy, Analysis Management Situation (AMS), A Management Strategy for Special Recreation Management Areas in Oregon and Washington. [See Appendix B for specific BLM authorities.]

Condition No. 1 – Activities On or Affecting Bureau of Land Management-Administered Lands

- (A) The Licensee shall consult with the Bureau of Land Management (BLM) to identify and resolve any potential conflicts with BLM policy and direction prior to initiating activities on BLM-administered lands that is beyond the scope of the Project license or for which the Licensee has not otherwise obtained BLM approval.
- (B) The Licensee shall cooperate with the BLM to obtain the appropriate rights-of-way or permits for use or access to BLM-administered lands prior to engaging in any activity that has the potential to affect other federally authorized activities on those lands.
- (C) The Licensee shall receive written approval from BLM prior to changing the location of any Project feature or facility located on BLM-administered lands. The Licensee shall also receive written approval for any actions which are inconsistent with activities authorizing use or occupancy of BLM-administered lands according the new license. Following BLM approval and at least 90 days prior to any change or departure, the Licensee shall file a report with the Federal Energy Regulatory Commission (Commission) and with the BLM, describing the change, reasons for the change, and demonstrating BLM approval of the change.
- (D) The Licensee shall prepare site-specific plans for approval by the BLM for any ground disturbing activities on BLM-administered lands required by the license, including activities outlined in BLM resource management plans (RMP). RMPs prepared subsequent to issuance of the license shall be developed in reference to license articles that may be affected as a consequence of RMP implementation. The Licensee’s site-specific plans shall include:
 - i. a map depicting the location of the proposed activity;
 - ii. a description of the land management area designation for the location of the proposed activity and applicable standards and guidelines;
 - iii. a description of alternative locations, designs, mitigation measures considered, and implementation and effectiveness monitoring designed to meet applicable standards and guidelines; and

- iv. data collected from surveys, biological evaluations, or consultation as required by regulations applicable to ground or habitat disturbing activities on BLM lands in existence at the time the plan is prepared;
 - (1) When surveys indicate that activities may affect an Endangered Species Act (ESA) listed or proposed listed species or their habitat, the Licensee shall evaluate the impacts of the action on the species or habitat and submit this evaluation to the BLM.
 - (2) When surveys indicate an activity may affect a BLM sensitive species or their habitat, the Licensee shall evaluate the potential impact of the action and submit conclusions to the BLM for review and approval. BLM reserves the authority to require mitigation for the protection of these species.
- (E) The Licensee shall file a Safety During Construction Plan with the Commission 60 days prior to initiating any ground-disturbing activity on BLM-administered lands. This plan will identify potential hazard areas and measures necessary to protect public safety. Areas to consider include construction activities near public roads, trails, recreation areas, and facilities.

The Licensee shall perform daily (or on a schedule otherwise agreed to by the BLM) inspections of Licensee's construction operations on BLM-administered lands and adjoining fee title property while construction is in progress. The Licensee shall document these inspections and deliver this documentation to BLM on a schedule agreed to by the Licensee and BLM. Inspections must evaluate fire plan compliance, public safety, and environmental protection. The Licensee shall act immediately to address any necessary corrections.
- (F) The Licensee shall consult with BLM to prepare a Spoils Disposal Plan prior to initiating any ground disturbing activity on BLM-administered lands. Upon BLM approval, the plan shall be filed with the Commission. The plan shall address disposal and/or storage of waste soil and/or rock materials (spoils) generated by road maintenance, slope failures, and construction projects. The plan shall include provisions for:
 - i. identifying and characterizing the nature of the spoils in accordance with applicable BLM regulations;
 - ii. identifying sites for the disposal and/or storage of spoils that prevent contamination of water by leachate and surface water runoff; and
 - iii. developing and implementing stabilization, slope reconfiguration, erosion control, reclamation, and rehabilitation measures.
- (G) The Licensee shall file a Hazardous Substances Plan for oil and hazardous substance storage, spill prevention, and clean up with the Commission prior to planning, construction, or maintenance that may affect BLM-administered lands. At least 90 days prior to submission, the Licensee shall provide a copy of the plan to the BLM for its review and approval. At a minimum, the plan shall:
 - i. outline the Licensee's procedures for reporting and responding to releases of hazardous substances, including names and phone numbers of all emergency response personnel and their assigned responsibilities; and
 - ii. maintain a cache of spill cleanup equipment sufficient to contain any spill from the Project.

On a semi-annual basis, the Licensee shall provide the BLM information on the location of spill cleanup equipment on BLM-administered lands and the location, type, and quantity of

oil and hazardous substances stored in the Project area. The Licensee shall inform BLM immediately as to the nature, time, date, location, and action taken for any spill affecting BLM-administered lands.

- (H) The Licensee shall avoid disturbance to all public land survey monuments, private property corners, and BLM boundary markers. In the event that any markers or monuments are destroyed by an act or omission of the Licensee, in connection with the use and/or occupancy authorized by the license, depending on the type of monument destroyed, the Licensee shall reestablish or reference same 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 BLM. The Licensee shall ensure that any such official survey records affected are amended as provided for by law.
- (I) The Licensee shall maintain Project-related improvements and facilities located on BLM-administered lands to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the agency. The Licensee shall comply with all applicable Federal, State, and local laws, regulations, including but not limited to, the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et seq.*, the Resources Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq.*, the Comprehensive Environmental Response, Control, and Liability Act, 42 U.S.C. § 9601 *et seq.*, and other relevant environmental laws, as well as public health and safety laws and other laws relating to the siting, construction, operation, maintenance of any facility, improvement, or equipment.
- (J) The Licensee shall restore BLM-administered lands to a condition satisfactory to BLM prior to any surrender of the Project license or abandonment of Project facilities. At least one year in advance of an application for license surrender, the Licensee shall file with the Commission a restoration plan approved by the BLM. The restoration plan shall identify any capital improvements that will be removed, restoration measures, time frames, and costs. In addition, the Licensee shall commission an audit to assist the BLM in determining whether the Licensee has the financial ability to fund the decommissioning and restoration work specified in the plan.

As a condition of any transfer of the license or sale of the project, the Licensee shall guarantee or assure, in a manner satisfactory to the BLM, that the Licensee or transferee will provide for the costs of surrender and restoration.

Any license amendment that authorizes use of BLM-administered lands shall be subject to such conditions the BLM deems necessary to protect and utilize affected BLM reservations.

- (K) The Licensee shall indemnify, defend, and hold the United States harmless for any costs, damages, claims, liabilities, and judgments arising from past, present, and future acts or omissions of the Licensee in connection with the use and/or occupancy authorized by the license. This indemnification and hold harmless provision applies to any acts and omissions of the Licensee or the Licensee's heirs, assigns, agents, employees, affiliates, subsidiaries, fiduciaries, contractors, or lessees in connection with the use and/or occupancy authorized by this license 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 environmental laws such as the Comprehensive Environmental Response Compensation and Liability Act, Resource Conservation and Recover Act, Oil Pollution Act, Clean Water Act, Clean Air Act; (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 substances, pollutant, contaminant, or oil in any form in the environment.

Condition No. 2 – Consultation with the Bureau of Land Management

Within 60 days of the anniversary of license issuance, the Licensee shall prepare and provide a written report in consultation with the Bureau of Land Management (BLM) documenting and/or evaluating measures necessary for the continued protection and utilization of BLM-administered lands and resources that are affected by the Project. Within 60-days of issuance of the report to BLM, the Licensee shall file the record of consultation and any recommendations with the Commission. The BLM reserves the right, after notice, comment, and administrative review, to require changes to Project operation through revision of 4(e) conditions.

Condition No. 3 – Travel and Access Management

Within five years of license issuance or on an alternate schedule agreed to by BLM and the Licensee, the Licensee shall develop, and thereafter will begin implementation of, a Law Enforcement and Emergency Services Plan (LEESP) that includes provision for coordination and cooperative funding of law enforcement and emergency services personnel with jurisdiction within the Hells Canyon Hydroelectric Project (Project). The LEESP is intended to be a planning document to increase the effectiveness and efficiency of law enforcement and response for medical and other emergencies and foster coordination and cooperation between the licensee and the various federal, state and local authorities with jurisdiction over law enforcement and emergency services in the Hells Canyon area.

The LEESP shall be developed collaboratively in consultation with the BLM and other relevant state, federal and local authorities, including the U.S. Forest Service, relevant Idaho and Oregon departments of law enforcement and emergency services, relevant local and county governments, and members of the Recreation Resource Work Group (RRWG). Documentation and a description of the consultation process including responses to any written comments received during the consultation process will be included as an appendix to the LEESP. The LEESP shall be based on the best data and information available and is intended to be an adaptive plan subject to amendment and revision during the term of the new license.

The LEESP may include provisions for law enforcement presence, other types of public contact personnel presence, enhanced emergency communication and response procedures, public safety and security, protection measures for natural resources, recreation resources, and heritage resources within the Project generally. The LEESP shall also address medical response measures, including the need for, number, placement, and time availability of quick response units and certified “first responders.” At a minimum, the LEESP shall provide for three strategically placed certified “first responders” and associated quick response units during all high use periods. For the purposes of the LEESP, “first responders” shall mean persons who have completed sufficient emergency training (approximately 40 hours of certified instruction under applicable Oregon and Idaho standards) to provide stabilization and evaluation in an emergency situation; and “quick response units” shall mean a first responder along with some basic emergency equipment. Licensee shall develop and implement the original LEESP and subsequent revisions as provided for in the LEESP.

The LEESP should include provisions to coordinate with the local counties and the Bureau of Land Management (BLM) to assess law enforcement needs and establish triggers to determine when and/or if additional law enforcement personnel are necessary to patrol BLM-administered lands that are impacted by the Project. This evaluation should include an assessment of the need for additional federal law enforcement. If additional law enforcement on BLM-administered lands is necessary over the period of the new license as a result of the operation, maintenance or use of the project, the LEESP shall contain provisions to assure adequate law enforcement, including funding for additional personnel (county, state, or federal) to the BLM and other law enforcement jurisdictions.

The LEESP shall include provisions for coordination with the BLM to evaluate the need for enhanced fire protection on IPC lands and BLM-administered lands affected by the project, including

monitoring, evaluation, and appropriate management changes necessary to prevent recurring human-caused fires that affect BLM-administered lands. If monitoring demonstrates an increased need for fire prevention, detection, and suppression as a result of licensee activities in connection with the operation and maintenance of the Project, the LEESP shall contain provisions for 100% of the costs of these activities to be funded by the Licensee. Licensee shall not be responsible for fires caused by third parties regardless of whether such fires originate on or within the project.

The Licensee shall continue to implement actions necessary for the safe and legal use and access of Project reservoirs and facilities according Protection, Mitigation, and Enhancement Measure (PM&E) 5.4.3.1.3 on p. 283 and PM&E 5.4.4.1.4 on p. 290 in the Technical Report, Appendix E, of the Final License Application dated July 2003 (FLA).

The Licensee shall implement law enforcement provisions of the Baker County Settlement Agreement dated October 3, 2003.

The LEESP shall be prepared in coordination with the BLM and the other parties described above. The Licensee shall include with the Plan submitted to FERC documentation of coordination and copies of comments and recommendations on the Plan. The Licensee shall allow a minimum of 60 days for the BLM to comment and to make recommendations prior to filing the Plan with the Commission for approval. The Plan submitted to FERC shall include all recommendations submitted by the BLM. If the Licensee does not agree with a recommendation made by BLM, the filing will include the Licensee's reasons for disagreeing with the BLM recommendation, based on Project-specific information. The Commission may consider the Licensee's comments on the BLM recommendations in its decision adopting or modifying the final Plan. The Licensee shall implement the Plan as approved by FERC.

Condition No. 4 – Law Enforcement and Emergency Services

Within five years of license issuance, the Licensee shall develop and implement a Law Enforcement and Emergency Services Plan (LEESP) that includes provision for coordination and funding of law enforcement and emergency services personnel with jurisdiction within the Hells Canyon Hydroelectric Project (Project). The LEESP is intended to increase the effectiveness and efficiency of law enforcement and response for medical and other emergencies. The LEESP may include provisions for law enforcement presence, other types of public contact personnel presence, enhanced emergency communication and response procedures, public safety and security, protection measures for natural resources, recreation resources, and heritage resources within the Project generally.

The LEESP shall address medical response measures, including number, placement, and time availability of quick response units and certified “first responders.” At a minimum, the LEESP shall include three strategically placed quick response units and a certified “first responder” available at each of these units during all high use periods.

Licensee shall develop and implement the original LEESP and subsequent revisions as provided for in the LEESP.

The LEESP should include provisions to coordinate with the local counties and the Bureau of Land Management (BLM) to assess law enforcement needs and establish triggers to determine when and/or if additional law enforcement personnel are necessary to patrol BLM-administered lands that are impacted by the Project. This evaluation should include an assessment of the need for additional federal law enforcement. If additional law enforcement on BLM-administered lands is necessary over the period of the new license, the Licensee shall assure adequate law enforcement, including funding for additional personnel (county, state, or federal) is provided to the BLM and other law enforcement jurisdictions.

The LEESP shall include provisions for coordination with the BLM to evaluate the need for enhanced fire protection on BLM-administered lands, including monitoring and evaluation of human-caused fires that affect BLM-administered lands. If monitoring demonstrates an increased need for fire

prevention, detection, and suppression, the Licensee shall provide for 100% of the costs of these activities.

The Licensee shall continue to implement actions necessary for the safe and legal use and access of Project reservoirs and facilities according Protection, Mitigation, and Enhancement Measure (PM&E) 5.4.3.1.3 on p. 283 and PM&E 5.4.4.1.4 on p. 290 in the Technical Report, Appendix E, of the Final License Application dated July 2003 (FLA).

The Licensee shall implement law enforcement provisions of the Baker County Settlement Agreement dated October 3, 2003.

Condition No. 5 – Historic Properties Management Plan

- (A) Within one year of license issuance, the Licensee shall file a revised final Historic Properties Management Plan (HPMP) with the Federal Energy Regulatory Commission (Commission). The plan shall be revised in consultation with the Bureau of Land Management (BLM), U.S. Forest Service, Oregon and Idaho State Historic Preservation Offices (SHPO) and Tribal governments. A draft of the revised plan shall be submitted to the BLM, providing 60 days for review and comment before completion of the final plan for submission to the Commission. As new historic properties are identified or additional Project effects are documented, site-specific monitoring, protection or mitigation measures shall be incorporated into HPMP updates, and subject to BLM review and comment.
- (B) The Licensee shall prepare and submit annual reports to BLM describing its activities involving BLM-administered cultural resources.
- (C) The Licensee shall conduct periodic reviews of the HPMP focusing on the degree to which protection and mitigation measures are contributing to cultural resource maintenance and protection. The review shall include consultation with and comments from signatories to the Programmatic Agreement. A formal report of the review shall be prepared by Licensee and submitted to the BLM and Commission.
- (D) In addition to following the Guidelines for an HPMP as described by the Commission and Advisory Council on Historic Preservation (ACHP), the revised HPMP will provide for the following:
 - i. Development of site-specific plans for evaluating eligibility, monitoring, protection and mitigation of historic properties on BLM land in consultation with and subject to review and approval of the BLM. Plans shall be submitted to the Commission before implementation. The following plans and actions shall be included:
 - 1. Determinations of National Register Eligibility

During the license term, Licensee shall complete investigations necessary to determine eligibility for cultural resource properties. Evaluations shall be completed within three years of discovery of any newly identified properties. Evaluation work plans shall be developed in consultation with BLM, SHPOs and Tribes, allowing at least 60 days for review and comment on proposed work plans. Final evaluation work plans shall be subject to prior BLM and SHPO approval.

Within five years of license issuance, Licensee shall complete evaluations of the National Register eligibility for Section 106 purposes for specific BLM heritage properties documented at the time of License issuance. These include the following sites: IPCBD 00-80, 35 BA 894, BK 489 (HC-6). An eligibility evaluation report for each site shall be submitted to BLM, Tribes and SHPO, allowing at least 60 days for review and comment before completion of the final

report. Eligibility determinations shall be subject to the approval of BLM and the SHPO, prior to submission to the Commission. In addition, the Licensee shall endeavor to relocate, evaluate for significance and record the following sites in Idaho: 19N4W17/01; and 10WN557.

2. Site Monitoring

Within one year of issuance of a new project license, Licensee shall develop and submit a site monitoring program with data collection methods, timing, priorities and schedules for eligible and potentially eligible sites affected by the Project on BLM-administered lands. The program will be developed in consultation with BLM and SHPOs, and subject to a minimum of 60 day review and comment, before submission of the final for approval by the BLM and SHPO. Methods and data collected for the initial monitoring program shall be standardized and quantifiable so as to provide adequate data for comparison of changes to site content, condition and impacts. At a minimum, documentation shall map site boundaries; update site records; provide a detailed description of the site, describe observed impacts; and provide recommendations for site protection or mitigation of any adverse effects. The monitoring protocol should describe how effects discovered during monitoring will be mitigated. Schedules, priorities and the list of sites identified for subsequent monitoring cycles will be adjusted based on initial results, and shall be prepared by Licensee in consultation with and subject to the approval of BLM. Licensee shall update the monitoring program to incorporate new historic properties as they are identified. Monitoring reports and updated site records shall be provided to BLM at the end of each calendar year.

The Licensee shall include the following known sites in the initial monitoring cycle: 35 BA 893; IPCBD 97-02; IPCBD 97-03; IPCBD 00-70; IPCBD 00-74; IPCBD 00-75; 10 WN 451, 10 AM 516, IPCBD 97-15, IPCBD 00-52, IPCBD 00-53, IPCBD 00-54, and IPCBD 00-61.

3. Site Protection and Stabilization

The Licensee shall prepare and implement site-specific plans for protection or stabilization of known or newly identified historic properties (including traditional cultural properties) on BLM land that are affected by Project operations. The Licensee shall develop the treatment plans in consultation with BLM, SHPOs, and Tribes, allowing a minimum of 60 days for review and comment on a draft prior to development of final plans. Plans shall be subject to BLM and SHPO approval.

Plans shall a) assess feasibility and alternative methods for protection, stabilization or restoration of affected, eligible properties, b) identify treatment objectives, priorities, and implementation schedule and c) be responsive to the criteria under which a site is considered eligible for the National Register. The Licensee shall maintain the site protection measures until the treatment has achieved objectives and has been assessed as no longer needed in consultation with BLM and SHPO.

If monitoring results or condition assessments indicate that protection measures are needed, the Licensee shall prepare site-specific feasibility plans for protection or stabilization for six sites on BLM-administered lands. Licensee shall complete the protection or stabilization measures, if feasible, for the following sites: 10WN 451, IPCBD 97-15, IPCBD 00-52; IPCBD 00-53, IPCBD 00-54, and IPCBD 00-

61. Licensee shall conduct post treatment efficacy monitoring and provide a report of results to the BLM.

4. Data Recovery

When in-place protection is not technically feasible, the Licensee shall develop and implement plans to recover data from affected eligible historic properties on BLM-administered lands. Plans shall be developed and implemented in consultation with the Advisory Council on Historic Preservation (ACHP) as necessary, BLM, SHPOs, and Tribes, allowing a minimum of 60 days for review and comment on proposed plans.

Within five years following issuance of a new project License, the Licensee shall prepare plans to stabilize or recover data from IPCBD 97-03, and to recover data from IPCBD 00-75. Data recovery plans shall be responsive to the criteria under which the site is considered eligible to the National Register. Licensee shall assess protection alternatives and feasibility for stabilization prior to implementing data recovery at IPCBD 97-03. The Licensee shall implement the stabilization, if feasible, and/or data recovery plans for IPCBD 97-03 within ten years of issuance of the project license.

ii. Curation:

The Licensee shall arrange and fund long term curation, at a repository meeting federal curation standards, for any collections and documentation resulting from Licensee's prior or future studies of BLM administered resources in the APE. The Licensee shall comply with the curation standards and requirements established by 36 C.F.R. 79, the curation repository and the Oregon and Idaho SHPOs.

iii. Plan for updated inventories within the APE; including:

If, over the period of the License, flow management or Project operations result in newly exposed, previously unsurveyed lands with potential for discoverable sites in the project APE, the Licensee shall inventory BLM-administered lands and provide a report to BLM on known and newly identified sites.

The Licensee shall ensure that all surveys and documentation meet federal and state agency requirements, and shall consult with the BLM on the design of any new field inventories on BLM land. The Licensee shall provide a minimum of 60 days for BLM review and comment on draft survey reports and site forms. Final reports shall be subject to BLM approval.

iv. Interpretation and Education Plan

Licensee shall consult with BLM, SHPO and Tribes on the development and implementation of any cultural Interpretive and Educational plan(s) proposed by Licensee on BLM-administered lands in the APE. Interpretative facilities or protection signage proposed on BLM lands shall be subject to prior BLM approval.

v. Prior to requesting BLM approval on any plan or project which would potentially affect Native American historic or prehistoric properties, sacred sites, or properties of traditional cultural and religious importance, the Licensee shall provide a minimum of 60 days for BLM to consult with affected Tribes.

- vi. The Licensee shall make records available to BLM of cultural resource data gathered by Licensee for inventory, evaluation, monitoring, or site mitigation on BLM-administered land.
- vii. The Licensee should document procedures for maintaining confidentiality and security of sensitive site data and records protected under the ARPA and NHPA;
- viii. The Licensee should outline procedures for protecting historic properties during emergency undertakings; including how emergency undertakings will be defined, and how the BLM will be notified and consulted when BLM lands are involved.
- ix. The Licensee shall immediately notify BLM if any human remains, funerary items, sacred objects or objects of cultural patrimony, as defined in the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered on BLM lands within the APE and Project. Discovery and stop work requirements shall be described, in accordance with 43 C.F.R.10, for inadvertent discoveries of Native American human remains and other items subject to NAGPRA on federal lands.
- x. The Licensee shall immediately notify BLM of any discovery of previously unidentified cultural resources encountered during Licensee Project work on BLM lands

Condition No. 6 – Comprehensive Recreation Management Plan (CRMP)

Within one year of license issuance, the Licensee shall prepare an integrated Comprehensive Recreation Management Plan (CRMP) for the Project. The CRMP shall include but not be limited to provisions for:

- 1. Developing and implementing the recreation Conditions;
- 2. Forming a stakeholders group;
- 3. A decision making structure that involves all stakeholders;
- 4. Implementing provisions of the recreation mitigation package according to the Americans with Disabilities Act;
- 5. Developing a framework for monitoring that incorporates a feedback loop necessary and trigger points for action for adaptive management;
- 6. Monitoring recreation use, preferences, and trends based on methods used during relicensing studies, e.g., Hall et al. (Idaho Power Company Tech. Rep. 5-9, 2001);
- 7. Protocols for consultation with and approval by agencies;
- 8. Law enforcement;
- 9. A process to reassess need for capital and operations and maintenance (O&M) every 6th year; and
- 10. Fire protection monitoring and funding.

The CRMP would form the baseline for modification or adaptive management provisions that may be necessary over the period of the new license.

The CRMP shall use the Recreation Opportunity Spectrum approach to identify, enhance, and sustain an appropriate range of recreation settings and experiences on lands for the public over the entire

complex, will identify recreation facility needs, identify and correct public health problems as they arise. The CRMP will identify how to use visitor contact, resource patrols, public outreach, and interpretation and information efforts to improve voluntary compliance with rules and regulations.

The CRMP will assess uses and resource conflicts at dispersed recreation sites and provide for mitigation of impacts. It will identify and implement actions to mitigate inappropriate impacts on other resources, including measures to limit or prohibit recreation use when necessary.

The CRMP will also define acceptable operational and maintenance standards for all recreation facilities and enhancements, and will define monitoring and data collection standards used to determine facility conditions, resource conflicts, public safety issues, levels of use, needs for new or expanded facilities, and levels of public satisfaction with recreation experiences.

Condition No. 7 – Litter and Sanitation Plan

Within one year of license issuance, the Licensee shall develop and implement a litter and sanitation plan for the Project, including but not limited to: supplying dumpsters with weekly service in appropriate locations near lands administered by the Bureau of Land Management (BLM) along the Homestead, Oxbow, and Snake River Roads, installation of permanent vault toilets at appropriate dispersed recreation sites, providing at least one floating restroom on each reservoir, and by implementing a routine litter pickup program that is adequate to mitigate the litter problem. Parameters to determine appropriate locations for dumpsters and vault toilets, and adequacy of litter program will be identified within the Litter and Sanitation Plan. Operation and maintenance (O&M) for this plan will be the responsibility of the Licensee. This plan will be incorporated into the Comprehensive Recreation Management Plan (CRMP).

The Licensee shall continue existing actions regarding litter and sanitation measures as described in Final License Application dated July 2003 (FLA).

The Licensee shall implement the litter and sanitation provisions of the Baker County Settlement Agreement dated October 3, 2003.

Condition No. 8 – Boat Moorage on Project Reservoirs

Within one year of license issuance, the Licensee shall develop a Project Boat Moorage Plan and submit this plan to the Commission for approval. This Plan shall be implemented within three years of plan approval. The Plan shall provide for at least a minimum of one moorage facility at each of the following BLM sites: Westfall, Bob Creek section C, Airstrip, and Copper Creek on Hells Canyon Reservoir; and Oxbow Boat Launch and Carter's Landing on Oxbow Reservoir. If monitoring indicates additional needs for moorage in the future at these sites, they should be provided in accordance with the Plan.

The licensee shall develop the Project Boat Moorage Plan in consultation with the Recreation Resource Work Group (RRWG) and the BLM. Within six months of license issuance, the licensee shall submit a draft of the Project Boat Moorage Plan to the RRWG for review and comment. The Plan shall include an implementation schedule to be funded by the Licensee. Documentation of consultation and specific descriptions of how comments are accommodated will be submitted with the Plan. The licensee shall allow a minimum of 60 days for BLM to comment and to make recommendations before filing the Plan revision with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on Project-specific information.

Boat moorage design and location shall mitigate impacts to terrestrial and aquatic resources, i.e. trampling and removal of vegetation, shoreline erosion, and soil compaction. Moorage facilities will meet the standards adopted by the Oregon State Marine Board and documented in the Oregon State Marine Board Layout & Design Guidelines for Recreational Boating Facilities (including safety features).

Facility design will incorporate the Americans with Disabilities Act (ADA) Access guidelines from the United States Access Board.

Operations and maintenance (O&M) for boat moorage facilities included in this Plan shall be the responsibility of the Licensee.

Condition No. 9 – Airstrip, Bob Creek section C, and Westfall

Within ten years of license issuance, the Licensee shall develop an enhancement plan for the BLM sites referred to as Airstrip, Bob Creek section C, and Westfall and submit this plan to the Commission for approval. Enhancement design shall mitigate impacts to terrestrial and aquatic resources, i.e. trampling and removal of vegetation, shoreline erosion, and soil compaction. The plan shall include, but not be limited to, provisions for enhanced campsites, enhanced day use areas, improved Americans with Disabilities Act (ADA) accessibility, boat moorage, potable water, camp host site, and shade shelters.

The licensee shall develop the Enhancement Plan in consultation with the Recreation Resource Work Group (RRWG) and the BLM. The licensee shall submit a draft of the Enhancement Plan to the RRWG for review and comment. The Plan shall include an implementation schedule to be funded by the Licensee. Documentation of consultation and specific descriptions of how comments are accommodated will be submitted with the Plan. The licensee shall allow a minimum of 60 days for BLM to comment and to make recommendations before filing the Plan revision with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on Project-specific information.

Operations and maintenance (O&M) for facilities included in this Plan shall be the responsibility of the Licensee.

Condition No. 10 – Swedes Landing Enhancement

Within four years of license issuance or according an alternative schedule to be agreed to by the Bureau of Land Management (BLM), the Licensee shall develop an enhancement plan for the BLM Swedes Landing Site (Swedes Plan). The Swedes Plan will be developed in consultation with the BLM. The Swedes Plan shall include provisions for enhanced campsites with kitchen areas, improved Americans with Disabilities Act (ADA) accessibility, enhancement of riparian area and rehabilitation, replacement of existing toilets, replacement of jersey barriers with more aesthetic barrier, boating facilities, and shade shelters. The Plan shall include an implementation schedule. The Swedes Plan shall be developed in concert with a plan for a low water boat launch in the vicinity of Swedes Landing.

The Licensee shall file the plan, as approved by the BLM, with the Commission and, following Commission approval, implement all elements of the plan.

The Licensee shall assume the responsibility associated with the operation and maintenance of existing and new facilities at this site for the life of the new license.

Condition No. 11 – Spring Recreation Site

Within three years of license issuance, or on an alternative schedule to be agreed to by the Bureau of Land Management (BLM), the licensee shall develop an enhancement plan for the BLM site referred to as Spring Recreation Site and submit this plan to the Commission for approval. The Plan shall be based on the best data and information available and is to be an adaptive plan, subject to amendment and revision during the term of the new license. The Plan is intended to be a planning document which will assess the current condition of the site, the nature and extent of its current, and anticipated future, use and contain provisions to address any current deficiencies and prepare for any increases in use that may occur in the future. The Plan shall include an implementation and maintenance schedule for any measures

proposed by the Plan. The Plan may explore options for funding that may be available through a cooperative venture between the licensee and third-party sources through recreational or similar grants.

The licensee shall develop the Spring Recreation Plan in consultation with the Recreation Resource Work Group (RRWG) and the BLM. The licensee shall submit a draft of the Spring Recreation Plan to members of the RRWG for review and comment. Documentation and a description of the consultation process including responses to any written comments received during the consultation process will be included as an appendix to the Plan.

The Plan shall include provisions, among others, addressing the need for, and feasibility of, the following measures:

- Redesign vehicle circulation and relocate portions of the interior road;
- Increase parking capacity for day use boat trailer parking;
- Define camping sites, add electric and water hookups where appropriate;
- Improve tent camping areas including parking and ADA toilets;
- Surface new and existing roads and parking areas with asphalt;
- Develop overflow parking;
- Retrofit the existing boat launch and boat ramp to be ADA accessible;
- Design access from boat ramps to boarding docks with accessible grade according to Oregon State Marine Board ADA design;
- Replace boat dock system to minimize ongoing maintenance and to better accommodate reservoir drawdowns and refill;
- Improve fish cleaning station to minimize ongoing maintenance, reduce offensive odors, and to meet DEQ septic requirements;
- Retrofit water system throughout site. Develop an irrigation system for vegetation;
- Upgrade one RV space for a campground host including shade and septic system; and
- Landscape site to maximize shade and reduce dust. Install shade structures where appropriate.

The Plan shall provide for the Licensee's assumption of the responsibility associated with the operation and maintenance of existing and new facilities at this site, and, to the extent allowed by applicable law, the transfer and assignment to the Licensee of any use fees associated with this site for the life of the new license.

The Spring Recreation Plan shall be prepared in coordination with the BLM and the other parties described above. The Licensee shall include with the Plan submitted to FERC documentation of coordination and copies of comments and recommendations on the Plan. The Licensee shall allow a minimum of 60 days for the BLM to comment and to make recommendations prior to filing the Plan with the Commission for approval. The Plan submitted to FERC shall include all recommendations submitted by the BLM. If the Licensee does not agree with a recommendation made by BLM, the filing will include the Licensee's reasons for disagreeing with the BLM recommendation, based on Project-specific information. The Commission may consider the Licensee's comments on the BLM recommendations in its decision adopting or modifying the final Plan. The Licensee shall implement the Plan as approved by FERC.

Condition No. 12 – Steck Recreation Site

Within one year of license issuance, or on an alternative schedule agreed to by the Bureau of Land Management (BLM), the Licensee shall develop an Enhancement Plan for the BLM site referred to as Steck Recreation Site and submit this plan to the Commission for approval. The Plan shall be based on the best data and information available and is to be an adaptive plan, subject to amendment and revision during the term of the new license. The Plan is intended to be a planning document which will assess the current condition of the site, the nature and extent of its current, and anticipated future, use and contain provisions to address any current deficiencies and prepare for any increases in use that may occur in the future. The Plan shall include an implementation and maintenance schedule for any measures proposed by the Plan. The Plan may explore options for funding that may be available through a cooperative venture between the licensee and third-party sources through recreational or similar grants.

The licensee shall develop the Plan in consultation with members of the Recreation Resource Work Group (RRWG) and the BLM. The licensee shall submit a draft of the Enhancement Plan to the RRWG for review and comment. Documentation and a description of the consultation process including responses to any written comments received during the consultation process will be included as an appendix to the Plan.

The plan shall include provisions, among others, addressing the need for, and feasibility of, communication capabilities for emergency and other necessary purposes to meet the needs based on site requirements; separate day-use facilities with shade structures, tables, cement pads, and grills; and an additional public information kiosk.

The Plan shall provide for the Licensee's assumption of the responsibility associated with the operation and maintenance of existing and new facilities at, and, to the extent allowed by applicable law, the transfer and assignment to the Licensee of any use fees associated with this site for the life of the new license.

The Steck Enhancement Plan shall be prepared in coordination with the BLM and the other parties described above. The Licensee shall include with the Plan submitted to FERC documentation of coordination and copies of comments and recommendations on the Plan. The Licensee shall allow a minimum of 60 days for the BLM to comment and to make recommendations prior to filing the Plan with the Commission for approval. The Plan submitted to FERC shall include all recommendations submitted by the BLM. If the Licensee does not agree with a recommendation made by BLM, the filing will include the Licensee's reasons for disagreeing with the BLM recommendation, based on Project-specific information. The Commission may consider the Licensee's comments on the BLM recommendations in its decision adopting or modifying the final Plan. The Licensee shall implement the Plan as approved by FERC.

Condition No. 13 – Jennifer's Alluvial Fan Site

Within two years of license issuance, the Licensee shall develop an Enhancement Plan for the BLM site referred to as Jennifer's Alluvial Fan Site and submit this plan to the Commission for approval. The licensee shall develop the Enhancement Plan in consultation with the Recreation Resource Work Group (RRWG) and the BLM. The licensee shall submit a draft of the Enhancement Plan to the RRWG for review and comment. The Plan shall include an implementation schedule to be funded by the Licensee. Documentation of consultation and specific descriptions of how comments are accommodated will be submitted with the Plan.

The Licensee shall allow a minimum of 60 days for BLM to comment and to make recommendations before filing the Plan revision with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on Project-specific information. The plan shall include, but not be limited to, provisions for a toilet, information kiosk with map, barriers

to delineate site and prevent expansion of vehicle impacts, and improve access from Olds Ferry Road. The Licensee shall file the plan, as approved by the BLM, with the Commission, and following Commission approval, implement all aspects of the plan.

The Licensee shall assume the responsibility associated with operation and maintenance of new facilities at this site for the life of the new license.

Condition No. 14 – Idaho Dispersed Sites

Within five years of license issuance, the Licensee shall develop an Idaho Dispersed Sites Plan and submit this plan to the Commission for approval. The Plan shall include, but not limited to, the following:

Boat-in Sites, Oxbow Reservoir:

WILS and BICB - Placement of portable toilets and pumping of toilets as needed, or, alternatively, locate a floating toilet on the reservoir which is accessible from land or by boat. Pick up litter at least twice a year.

Drive-in site, Hells Canyon Reservoir:

BCHB - At the site, level tent site, place boundary barriers to limit vehicle damage, and improve vehicle access from road to site. Install a vault toilet at the site. Pump as needed. Pick up litter at least twice a year.

The Licensee shall develop the Idaho Dispersed Sites Plan in consultation with the Recreation Resource Work Group (RRWG) and the BLM. The licensee shall submit a draft of the Idaho Dispersed Sites Plan to the RRWG for review and comment. The Plan shall include an implementation schedule to be funded by the Licensee. Documentation of consultation and specific descriptions of how comments are accommodated will be submitted with the Plan. The licensee shall allow a minimum of 60 days for BLM to comment and to make recommendations before filing the Plan revision with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on Project-specific information.

The Idaho Dispersed Sites Plan shall mitigate impacts to terrestrial and aquatic resources, i.e. trampling and removal of vegetation, shoreline erosion, and soil compaction.

The Licensee shall assume the responsibility associated with the operation and maintenance of existing and new facilities at this site for the life of the new licensee.

Condition No. 15 – Oxbow Boat Launch and Carter's Landing

Within one year of license issuance, the Licensee shall develop an Enhancement Plan for the BLM sites referred to as Carter's Landing and Oxbow Boat Launch and submit this plan to the Commission for approval. The licensee shall develop the Enhancement Plan in consultation with the Recreation Resource Work Group (RRWG) and the BLM. Within six months of license issuance, the licensee shall submit a draft of the Enhancement Plan to the RRWG for review and comment. The Plan shall include an implementation schedule to be funded by the Licensee. Documentation of consultation and specific descriptions of how comments are accommodated will be submitted with the Plan. The licensee shall allow a minimum of 60 days for BLM to comment and to make recommendations before filing the Plan revision with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on Project-specific information. The plan shall include, but not be limited to, provisions for enhanced campsites with kitchen areas, improved Americans with Disabilities Act (ADA) accessibility, boat moorage, and shade shelters. The Licensee shall file the plan,

as approved by the BLM, with the Commission, and following Commission approval, implement all aspects of the plan.

The Licensee shall assume the responsibility associated with the operation and maintenance of existing and new facilities at this site for the life of the new licensee.

Condition No. 16 – Oasis

Within two years of license issuance, or on an alternative schedule to be agreed to by the Bureau of Land Management (BLM), the Licensee shall develop an Enhancement Plan for the BLM site referred to as Oasis and submit this plan to the Commission for approval. The Plan shall be based on the best data and information available and is to be an adaptive plan, subject to amendment and revision during the term of the new license. The Plan is intended to be a planning document which will assess the current condition of the site, the nature and extent of its current, and anticipated future, use and contain provisions to address any current deficiencies and prepare for any increases in use that may occur in the future. The Plan shall include an implementation and maintenance schedule for any measures proposed by the Plan. The Plan may explore options for funding that may be available through a cooperative venture between the licensee and third-party sources through recreational or similar grants.

The Licensee shall develop the Enhancement Plan in consultation with members of the Recreation Resource Work Group (RRWG) and the BLM. Within eighteen months of license issuance, the licensee shall submit a draft of the Enhancement Plan to the RRWG for review and comment. Documentation and a description of the consultation process including responses to any written comments received during the consultation process will be included as an appendix to the Plan.

The plan shall include provisions, among others, addressing the need for, and feasibility of, enhanced restrooms, parking, vehicle control, day use activities, foot trail, and signing.

The Plan shall provide for the Licensee's assumption of the responsibility associated with the operation and maintenance of existing and new facilities and, to the extent allowed by applicable law, the transfer and assignment to the Licensee of any use fees associated with this site for the life of the new license.

The Oasis Enhancement Plan shall be prepared in coordination with the BLM and the other parties described above. The Licensee shall include with the Plan submitted to FERC documentation of coordination and copies of comments and recommendations on the Plan. The Licensee shall allow a minimum of 60 days for the BLM to comment and to make recommendations prior to filing the Plan with the Commission for approval. The Plan submitted to FERC shall include all recommendations submitted by the BLM. If the Licensee does not agree with a recommendation made by BLM, the filing will include the Licensee's reasons for disagreeing with the BLM recommendation, based on Project-specific information. The Commission may consider the Licensee's comments on the BLM recommendations in its decision adopting or modifying the final Plan. The Licensee shall implement the Plan as approved by FERC.

Condition No. 17 – Copper Creek

Within three years of license issuance, the Licensee shall develop an enhancement plan for the BLM site referred to as Copper Creek and submit this plan to the Commission for approval. Development shall be consistent with Section 106 of the National Historic Preservation Act and the requirements for the National Environmental Policy Act. Depending on findings of these evaluations, the Plan may include provisions for a road system serving designated campsites with picnic shelters and fire rings, trailhead parking, equestrian staging area, boat moorage, and mitigations for soil erosion around point near mouth of Copper Creek. Enhancement design shall mitigate impacts to terrestrial and aquatic resources, i.e. trampling and removal of vegetation, shoreline erosion, and soil compaction.

The licensee shall develop the Enhancement Plan in consultation with the Recreation Resource Work Group (RRWG) and the BLM. The licensee shall submit a draft of the Enhancement Plan to the RRWG for review and comment. The Plan shall include an implementation schedule to be funded by the Licensee. Documentation of consultation and specific descriptions of how comments are accommodated will be submitted with the Plan. The licensee shall allow a minimum of 60 days for BLM to comment and to make recommendations before filing the Plan revision with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on Project-specific information.

The Licensee shall assume the responsibility associated with the operation and maintenance of existing and new facilities at this site for the life of the new licensee.

Condition No. 18 – Low Water Boat Launch

Within one year of license issuance, the Licensee shall develop a Low-Water Boat Launch Plan and submit this plan to the Commission for approval. The plan shall included provisions to find a suitable location at or near Swedes Landing, develop a site plan, and implement the site plan for a low-water boat launch. The licensee shall develop the Plan in consultation with the Recreation Resource Work Group (RRWG) and the BLM. If the launch or associated facilities are to be located on BLM-administered lands, the plan shall be approved by the BLM. The licensee shall submit a draft of the Plan to the RRWG for review and comment. The Plan shall include an implementation schedule to be funded by the Licensee. Documentation of consultation and specific descriptions of how comments are accommodated will be submitted with the Plan. The licensee shall allow a minimum of 60 days for BLM to comment and to make recommendations before filing the Plan revision with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on Project-specific information.

The Licensee shall assume the responsibility associated with the operation and maintenance of existing and new facilities at this site for the life of the new licensee.

INTERIOR—SECTION 18 PRESCRIPTIONS

Guidance for the Prescription of Fishways Pursuant to Section 18 of the FPA (USFWS 2002c).

Reservation of Authority to Prescribe Fishways

The Service has prepared its prescriptions for fishways in response to the proposals being considered by the Commission in this proceeding involving the proposed relicensing of the Hells Canyon Hydroelectric Project, FERC No. 1971. If any proposal is modified as a result of licensing or after licensing, then the Department, through the Service, will require adequate opportunity to reconsider each prescription and make modifications it deems appropriate and necessary for submittal to the Commission. Therefore, the Service requests that the Commission include the following condition in any license it may issue for the Project, Commission No. 1971:

Authority is reserved for the Department of the Interior, as delegated to the U.S. Fish and Wildlife Service, to prescribe the construction, operation, and maintenance of fishways at the Hells Canyon Hydroelectric Project, Project No. 1971, as appropriate, including measures to determine, ensure, or improve the effectiveness of such fishways, pursuant to Section 18 of the Federal Power Act, as amended. This reservation includes, but is not limited to, authority to prescribe fishways for spring/summer Chinook salmon, summer steelhead trout, Pacific lamprey, bull trout, redband trout, fall Chinook salmon, white sturgeon, and any other fish to be managed, enhanced, protected, or restored to the Snake River Basin during the term of the license.

Preliminary Prescriptions for Fishways

The following prescriptions for fishways for bull trout apply to the operation and maintenance of both upstream and downstream fishways at the Hells Canyon Project, and are prescribed to ensure the effectiveness of the fishways pursuant to Section 1701(b) of the National Energy Policy Act (P.L. 102-486, Title XVII, 106 Stat. 3008):

1.0. Upstream and Downstream Fishways for Bull Trout

- 1.1 To provide for the safe, timely, and effective upstream passage of adult and sub-adult bull trout at the Hells Canyon Project, the Licensee shall continue to rehabilitate, operate, maintain, and monitor the Hells Canyon Dam trap and haul fishway, and construct, operate, and maintain a future fishway/trap at the base of Oxbow Dam. The future fishway/trap at the base of Oxbow Dam shall include measures and operations necessary to provide adequate attraction flow to safely and rapidly attract bull trout into the Oxbow trap for collection and transport upstream. In addition, the Licensee shall construct, operate, maintain, and monitor permanent weirs and trap and haul fishways near the mouths of Pine Creek, Indian Creek, and Wildhorse River for the downstream passage and transport of adult, sub-adult, and juvenile bull trout to a suitable release point downstream of Hells Canyon Dam. All new upstream and downstream fishways prescribed herein shall be designed and operated to meet the anadromous salmonid passage facility guidelines and criteria established by NOAA Fisheries (NOAA Fisheries 2004).
- 1.2 To implement recommendation 1.1 above, the Licensee shall, within 6 months of license issuance, develop and implement a Bull Trout Passage Plan to ensure that steady progress is made towards implementing bull trout passage at the Project (see also 10(j) Recommendation No. 9). The plan shall provide for implementation of

actions in Pine Creek, including construction and operation of a weir at the mouth of Pine Creek and provisions for transport to Pine Creek of fish caught in the trap below Hells Canyon dam. The plan shall identify specific habitat conditions that would trigger implementation of passage-related actions in Indian Creek, Wildhorse River, and the Oxbow bypass. The plan shall contain specifications for construction and operation of the permanent weirs and trap and haul fishways on those tributaries upstream tributaries, and establishing suitable upstream and downstream release points for adult and juvenile fish. The plan shall describe the location, functional design, and operating characteristics for all upstream and downstream fishways, include schedules and milestones for their timely modification, construction, operation, and evaluation, and detail the periods of operation for each species and life stage of fish to be passed. The plan shall include operation and maintenance procedures (including operator training and supervision) to insure that the upstream and downstream fishways operate effectively during the term of the new license. The operation and maintenance procedures shall include provisions for prior notification and coordination with the U.S. Fish and Wildlife Service (Service), NOAA Fisheries, the Oregon Department of Fish and Wildlife, the Idaho Department of Fish and Game, and the affected Tribes on maintenance scheduling or emergencies that affect the functioning of the fishways. Lastly, within one year of license issuance, the Licensee shall, in consultation with the aforementioned agencies, complete a written, Post-construction Monitoring Plan and implementation schedule to evaluate and monitor fishway effectiveness. To insure completeness, the Fish Passage Plan and the Postconstruction Monitoring Plan shall be developed in consultation with the aforementioned agencies. The plans shall be submitted to the agencies for review and comment. At least 60 days shall be provided for agency review. Following agency review and approval by the Service, the Licensee shall submit the plans to the Commission for approval and implement the plans.

NMFS RESERVATION OF SECTION 18 AUTHORITY

NMFS requests that FERC include as a license condition, a general reservation of authority for NMFS to prescribe fishways during the term of the license, as it may subsequently determine are necessary to provide for safe, timely, and effective upstream and downstream passage of anadromous salmon and steelhead through the Project's facilities.

Poor water quality severely limits the potential for fall Chinook salmon to incubate through emergence, and the degraded habitat in most tributaries would similarly limit the possibilities for successful reintroduction of spring Chinook salmon and steelhead into most areas upstream of the Project. Therefore, at this time, NMFS will not use its Section 18 fishway authority to require fish passage at any of the Project's dams.

APPENDIX C

MODELED CONSTRAINTS FOR THE IDAHO POWER COMPANY'S PROPOSED OPERATION AND OPERATIONAL ALTERNATIVES

To support the evaluation of resource effects of alternative operating regimes, Idaho Power used a simulation computer model for hydropower systems, called CHEOPS.¹ CHEOPS evaluates physical and operational changes at multiple-development hydroelectric projects. It is designed to emphasize long-term simulations of project operations, and it emphasizes maintaining correct mass balances in reported flows and meeting all project-related operating constraints. This appendix presents the constraints used in the CHEOPS modeling of project operations for the Applicant's Proposed Operation (Section 2.2.2) and for the several alternative operating scenarios described in DEIS Section 2.3.2.

Following are the operating scenarios evaluated:

- Applicant's Proposed Operation
- Alternative Operating Scenarios
 - Scenario 1(a). Stabilized Hells Canyon Release, with instantaneous outflow from Hells Canyon dam equaling the average inflow to the Hells Canyon reservoir during the previous 24 hours
 - Scenario 1(b). Stabilized Hells Canyon Release, with maximum ramping rate of 2 inches per hour (year-round)
 - Scenario 1(c). Stabilized Hells Canyon Release, with maximum ramping rate of 6 inches per hour (year-round)
 - Scenario 1(d). Stabilized Hells Canyon Release, with maximum ramping rate of 2 inches per hour (March 1 through May 31)
 - Scenario 1(e). Stabilized Hells Canyon Release, with maximum ramping rate of 6 inches per hour (March 1 through May 31); and
 - Scenario 1(f). Stabilized Hells Canyon Release, with maximum ramping rate of 2 inches per hour March 1 through May 31 and 6 inches per hour for the rest of the year, plus a maximum total daily fluctuation of 2.0 feet year-round.
 - Scenario 2. Flow Augmentation with Stabilized Release.
 - Scenario 3. Navigation Target Flow.

¹ The content of the appendix is based on Idaho Power, Responses to FERC Additional Information Request, OP-1(a) Operational Scenarios, Power Economics, February 2005.

Table 1. Constraints for modeled proposed operations and Scenarios 1a and 1b for the Brownlee development.

Constraints

Brownlee Development

	Modeled Proposed Operations		
		Scenario 1a	Scenario 1b
Maximum reservoir elevation	2,077 feet msl	2,077 feet msl	2,077 feet msl
Minimum reservoir elevation	1,976 feet msl	1,976 feet msl	1,976 feet msl
Flood-control Requirements			
Brownlee reservoir official target elevations specified for February 28, March 31, April 15, and April 30	Corps flood-control rule curve requirements ^a	Corps flood-control rule curve requirements ^a	Corps flood-control rule curve requirements ^a
Daily Reservoir-level Fluctuation^b			
January 1 through May 20	3 feet	3 feet	3 feet
May 21 through June 21 for resident fish spawning	1 foot	1 foot	1 foot
June 22 through December 31	3 feet	3 feet	3 feet
Reservoir Target Elevation			
June 7	2,069 feet msl or higher ^c	2,069 feet msl or higher ^c	2,069 feet msl or higher ^c
June 8 through July 5 August 31 ^e	2,075 feet msl ^d	2,075 feet msl ^d	2,075 feet msl ^d
High water year	2,059 feet msl	2,059 feet msl	2,059 feet msl
Medium water year	2,069 feet msl	2,069 feet msl	2,069 feet msl
Low water year	2,072 feet msl	2,072 feet msl	2,072 feet msl
October 21 ^f	2,040 feet msl or higher	2,040 feet msl or higher	2,040 feet msl or higher
December 11 through 31 ^g	2,075 feet msl	2,075 feet msl	2,075 feet msl

^a For modeling purposes, reservoir target elevations are calculated in the model using the Corps' 1998 modified rule curve procedure and are based on observed inflows (not monthly forecasts). Flood-control requirements are not modeled past the last April 30 target date.

- ^b Dates specified are for modeling purposes only and may vary under actual operations.
- ^c The elevation of 2,069 feet msl or higher was set as a target in the model for June 7 for resident fish spawning requirements.
- ^d A full reservoir during this period helps Idaho Power meet peak summer load demands. The dates specified are for modeling purposes only and would vary as a function of Idaho Power's system needs and water conditions.
- ^e This target was only specified in the model for this date as a means of modeling power needs of the system by drafting Brownlee reservoir. The specified target was also a function of water year type.
- ^f Reservoir elevation for modeling purposes was calculated as a function of the specified fall Chinook flow for water year type for Hells Canyon Development discharge (see table 6). This calculation resulted in reservoir elevations typically 2,040 feet msl or higher, except under extreme high-water conditions for the model runs.
- ^g In the late fall, the reservoir is operated to accommodate the fall Chinook program, and in early December, Idaho Power attempts to have a full reservoir, typically around 2,075 feet msl, to help meet peak winter load conditions. December 11 was specified for modeling purposes only and is a function of inflow and system or load needs during this period.

Table 2. Constraints for Scenarios 1c, 1d, and 1e for the Brownlee development.

Brownlee Development	Constraints
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	Scenario 1c	Scenario 1d	Scenario 1e
Maximum reservoir elevation	2,077 feet msl	2,077 feet msl	2,077 feet msl
Minimum reservoir elevation	1,976 feet msl	1,976 feet msl	1,976 feet msl
Flood-control Requirements			
Brownlee reservoir official target elevations specified for February 28, March 31, April 15, and April 30	Corps flood-control rule curve requirements ^a	Corps flood-control rule curve requirements ^a	Corps flood-control rule curve requirements ^a
Daily Reservoir-level Fluctuation^b			
January 1 through May 20	3 feet	3 feet	3 feet
May 21 through June 21 for resident fish spawning	1 foot	1 foot	1 foot
June 22 through December 31	3 feet	3 feet	3 feet
Reservoir Target Elevation			
June 7	2,069 feet msl or higher ^c	2,069 feet msl or higher ^c	2,069 feet msl or higher ^c
June 8 through July 5	2,075 feet msl ^d	2,075 feet msl ^d	2,075 feet msl ^d
August 31 ^e			
High water year	2,059 feet msl	2,059 feet msl	2,059 feet msl
Medium water year	2,069 feet msl	2,069 feet msl	2,069 feet msl
Low water year	2,072 feet msl	2,072 feet msl	2,072 feet msl
October 21 ^f	2,040 feet msl or higher	2,040 feet msl or higher	2,040 feet msl or higher
December 11 through 31 ^g	2,075 feet msl	2,075 feet msl	2,075 feet msl

^a For modeling purposes, reservoir target elevations are calculated in the model using the Corps' 1998 modified rule curve procedure and are based on observed inflows (not monthly forecasts). Flood-control requirements are not modeled past the last April 30 target date.

^b Dates specified are for modeling purposes only and may vary under actual operations.

- ^c The elevation of 2,069 feet msl or higher was set as a target in the model for June 7 for resident fish spawning requirements.
- ^d A full reservoir during this period helps Idaho Power meet peak summer load demands. The dates specified are for modeling purposes only and would vary as a function of Idaho Power's system needs and water conditions.
- ^e This target was only specified in the model for this date as a means of modeling power needs of the system by drafting Brownlee reservoir. The specified target was also a function of water year type.
- ^f Reservoir elevation for modeling purposes was calculated as a function of the specified fall Chinook flow for water year type for Hells Canyon Development discharge (see table 6). This calculation resulted in reservoir elevations typically 2,040 feet msl or higher, except under extreme high-water conditions for the model runs.
- ^g In the late fall, the reservoir is operated to accommodate the fall Chinook program, and in early December, Idaho Power attempts to have a full reservoir, typically around 2,075 feet msl, to help meet peak winter load conditions. December 11 was specified for modeling purposes only and is a function of inflow and system or load needs during this period.

Table 3. Constraints for Scenarios 1f, 2, and 3 for the Brownlee development.

Brownlee Development	Constraints
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	Scenario 1f	Scenario 2	Scenario 3
Maximum reservoir elevation	2,077 feet msl	2,077 feet msl	2,077 feet msl
Minimum reservoir elevation	1,976 feet msl	1,976 feet msl	1,976 feet msl
Flood-control Requirements			
Brownlee reservoir official target elevations specified for February 28, March 31, April 15, and April 30	Corps flood-control rule curve requirements ^a	Corps flood-control rule curve requirements ^a	Corps flood-control rule curve requirements ^a
Daily Reservoir-level Fluctuation^b			
January 1 through May 20	3 feet	3 feet	3 feet
May 21 through June 21 for resident fish spawning	1 foot	1 foot	1 foot
June 22 through December 31	3 feet	3 feet	3 feet
Reservoir Target Elevation			
June 7	2,069 feet msl or higher ^c	2,069 feet msl or higher ^c	2,069 feet msl or higher ^c
June 8 through July 5	2,075 feet msl ^d	NA	2,075 feet msl ^d
June 8 through June 20	NA	2,075 feet msl	NA
July 5	NA	2,069 feet msl	NA
July 31 through August 31	NA	2,049 feet msl	NA
August 31 ^e			
High water year	2,059 feet msl	2,049 feet msl	2,059 feet msl
Medium water year	2,069 feet msl	2,049 feet msl	2,069 feet msl
Low water year	2,072 feet msl	2,049 feet msl	2,072 feet msl
October 21 ^f	2,040 feet msl or higher	2,040 feet msl or higher	2,040 feet msl or higher
December 11 through 31 ^g	2,075 feet msl	2,075 feet msl	2,075 feet msl

Note: NA – Not applicable

- ^a For modeling purposes, reservoir target elevations are calculated in the model using the Corps' 1998 modified rule curve procedure and are based on observed inflows (not monthly forecasts). Flood-control requirements are not modeled past the last April 30 target date.
- ^b Dates specified are for modeling purposes only and may vary under actual operations.
- ^c The elevation of 2,069 feet msl or higher was set as a target in the model for June 7 for resident fish spawning requirements.
- ^d A full reservoir during this period helps Idaho Power meet peak summer load demands. The dates specified are for modeling purposes only and would vary as a function of Idaho Power's system needs and water conditions.
- ^e This target was only specified in the model for this date as a means of modeling power needs of the system by drafting Brownlee reservoir. The specified target was also a function of water year type.
- ^f Reservoir elevation for modeling purposes was calculated as a function of the specified fall Chinook flow for water year type for Hells Canyon Development discharge (see table 6). This calculation resulted in reservoir elevations typically 2,040 feet msl or higher, except under extreme high-water conditions for the model runs.
- ^g In the late fall, the reservoir is operated to accommodate the fall Chinook program, and in early December, Idaho Power attempts to have a full reservoir, typically around 2,075 feet msl, to help meet peak winter load conditions. December 11 was specified for modeling purposes only and is a function of inflow and system or load needs during this period.

Table 4. Constraints for modeled proposed operations and alternative scenarios for the Oxbow development.

Oxbow Development	Constraints	
	Modeled Proposed Operations	Scenarios 1a, 1b, 1c, 1d, 1e, 1f, 2, and 3
Maximum reservoir elevation	1,805 feet msl	1,805 feet msl
Minimum reservoir elevation	1,800 feet msl	1,800 feet msl
Daily reservoir-level fluctuation (January 1 through December 31) ^a	5 feet	5 feet
Bypass flow (January 1 through December 31)	100 cfs	100 cfs

^a The typical operating limit for modeling purposes was 5 feet.

Table 5. Constraints for modeled proposed operations and Scenarios 1a and 1b for the Hells Canyon development.

Hells Canyon	Constraints
Developmen t	

	Modeled Proposed Operations		
		Scenario 1a^a	Scenario 1b
Maximum reservoir elevation	1,688 feet msl	1,688 feet msl	1,688 feet msl
Minimum reservoir elevation	1,683 feet msl ^b	1,668 feet msl ^c	1,668 feet msl ^c
Daily reservoir-level fluctuation limit (January 1 through December 31)	5 feet	None	None
Ramp-rate Restriction^b			
Ramp rate	1 foot per hour	None	2 inches per hour
Compliance ramp-rate curve ^d	Johnson Bar	Hells Canyon	Hells Canyon
Daily Limit Between Minimum and Maximum Flows			
December 12 through May 31	None	No load following	None
June 1 through September 30	10,000 cfs ^e	No load following	10,000 cfs ^e
October 1 through October 20	None	No load following	None
October 21 through December 11 ^f	No load following	No load following	No load following
Minimum Instantaneous Flows			
December 12 through May 31 ^g			
Low	8,500 cfs	8,500 cfs	8,500 cfs
Medium	10,500 cfs	10,500 cfs	10,500 cfs
High	12,000 cfs	12,000 cfs	12,000 cfs
June 1 through October 20			
Low	6,500 cfs ^h	6,500 cfs ^h	6,500 cfs ^h
Medium	6,500 cfs ^h	6,500 cfs ^h	6,500 cfs ^h
High	6,500 cfs ^h	6,500 cfs ^h	6,500 cfs ^h
October 21 through December 11 ^f			

Hells Canyon Development	Constraints		
	Modeled Proposed Operations	Scenario 1a^a	Scenario 1b
Low	9,000 cfs	9,000 cfs	9,000 cfs
Medium	11,500 cfs	11,500 cfs	11,500 cfs
High	13,000 cfs	13,000 cfs	13,000 cfs

^a The model passed daily average flow below Hells Canyon dam in this scenario with no load following. Flood control and the fall Chinook program are also modeled in this scenario.

^b The typical operating limit for modeling purposes was 5 feet.

^c An extreme minimum was defined for modeling purposes such that the model was not constrained under these scenario constraints.

^d Compliance was modeled at either the Johnson Bar gage, located approximately 17.6 miles downstream of Hells Canyon dam or at the Hells Canyon gage, located 0.6 mile downstream of Hells Canyon Dam.

^e A limit of 10,000 cfs was modeled during this time frame to represent typical operations.

^f For modeling purposes only, flows under the fall Chinook program began October 21 and ended December 11.

^g Releases under the fall Chinook program are reduced in the model and assume that the most critical shallow redd is still protected under load-following conditions downstream of the Hells Canyon Complex. The December 12 date was specified for modeling purposes only, since the actual date that fall Chinook spawning is completed can vary.

^h Minimum flow modeled was 6,500 cfs or project inflow during this period to avoid drafting Brownlee reservoir.

Table 6. Constraints for Scenarios 1c, 1d, and 1e for the Hells Canyon development.

Hells Canyon Development t	Constraints
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	Scenario 1c	Scenario 1d	Scenario 1e
Maximum reservoir elevation	1,688 feet msl	1,688 feet msl	1,688 feet msl
Minimum reservoir elevation	1,668 feet msl ^a	1,668 feet msl ^a	1,668 feet msl ^a
Daily reservoir-level fluctuation limit (January 1 through December 31)	None	None	None
Ramp-rate Restriction^b			
Ramp rate	6 inches per hour	1 foot per hour (except 2 inches per hour from March 1–May 31)	1 foot per hour (except 6 inches per hour from March 1–May 31)
Compliance ramp-rate curve ^c	Hells Canyon	Hells Canyon	Hells Canyon
Daily Limit Between Minimum and Maximum Flows			
December 12 through May 31	None	None	None
June 1 through September 30	10,000 cfs ^d	10,000 cfs ^d	10,000 cfs ^d
October 1 through October 20	None	None	None
October 21 through December 11 ^e	No load following	No load following	No load following

Hells Canyon Development	Constraints		
	Scenario 1c	Scenario 1d	Scenario 1e
Minimum Instantaneous Flows			
December 12 through May 31 ^f			
Low	8,500 cfs	8,500 cfs	8,500 cfs
Medium	10,500 cfs	10,500 cfs	10,500 cfs
High	12,000 cfs	12,000 cfs	12,000 cfs
June 1 through October 20			
Low	6,500 cfs ^g	6,500 cfs ^g	6,500 cfs ^g
Medium	6,500 cfs ^g	6,500 cfs ^g	6,500 cfs ^g
High	6,500 cfs ^g	6,500 cfs ^g	6,500 cfs ^g
October 21 through December 11 ^e			
Low	9,000 cfs	9,000 cfs	9,000 cfs
Medium	11,500 cfs	11,500 cfs	11,500 cfs
High	13,000 cfs	13,000 cfs	13,000 cfs

^a An extreme minimum was defined for modeling purposes such that the model was not constrained under these scenario constraints.

^b The typical operating limit for modeling purposes was 5 feet.

^c Compliance was modeled at either the Johnson Bar gage, located approximately 17.6 miles downstream of Hells Canyon dam or at the Hells Canyon gage, located 0.6 mile downstream of Hells Canyon Dam.

^d A limit of 10,000 cfs was modeled during this time frame to represent typical operations.

^e For modeling purposes only, flows under the fall Chinook program began October 21 and ended December 11.

^f Releases under the fall Chinook program are reduced in the model and assume that the most critical shallow redd is still protected under load-following conditions downstream of the Hells Canyon Complex. The December 12 date was specified for modeling purposes only, since the actual date that fall Chinook spawning is completed can vary.

^g Minimum flow modeled was 6,500 cfs or project inflow during this period to avoid drafting Brownlee reservoir.

Table 7. Constraints for Scenarios 1f, 2, and 3 for the Hells Canyon development.

Hells Canyon Development t	Constraints
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	Scenario 1f	Scenario 2	Scenario 3
Maximum reservoir elevation	1,688 feet msl	1,688 feet msl	1,688 feet msl
Minimum reservoir elevation	1,668 feet msl ^a	1,683 feet msl ^b (except 1,668 feet msl from March 1–May 31) ^a	1,683 feet msl ^b
Daily reservoir-level fluctuation limit (January 1 through December 31)	None	5 feet (except none from March 1–May 31)	5 feet
Ramp-rate Restriction^b			
Ramp rate	6 inches per hour 2 inches per hour (March 1–May 31)	1 foot per hour 2 inches per hour (March 1–May 31)	1 foot per hour
Compliance ramp-rate curve ^c	Hells Canyon	Hells Canyon	Johnson Bar
Daily Limit Between Minimum and Maximum Flows			
December 12 through May 31	2 feet on gage	None	None
June 1 through September 30	2 feet on gage	10,000 cfs ^d	10,000 cfs ^d
October 1 through October 20	2 feet on gage	None	None
October 21 through December 11 ^e	No load following	No load following	No load following
Minimum Instantaneous Flows			
December 12 through May 31 ^f			
Low	8,500 cfs	8,500 cfs	8,500 cfs
Medium	10,500 cfs	10,500 cfs	10,500 cfs
High	12,000 cfs	12,000 cfs	12,000 cfs
June 1 through October 20			

Hells Canyon Development	Constraints		
	Scenario 1f	Scenario 2	Scenario 3
Low	6,500 cfs ^g	6,500 cfs ^g	8,500 cfs ^h
Medium	6,500 cfs ^g	6,500 cfs ^g	8,500 cfs ^h
High	6,500 cfs ^g	6,500 cfs ^g	8,500 cfs ^h
October 21 through December 11 ^e			
Low	9,000 cfs	9,000 cfs	9,000 cfs ⁱ
Medium	11,500 cfs	11,500 cfs	11,500 cfs
High	13,000 cfs	13,000 cfs	13,000 cfs

^a An extreme minimum was defined for modeling purposes such that the model was not constrained under these scenario constraints.

^b The typical operating limit for modeling purposes was 5 feet.

^c Compliance was modeled at either the Johnson Bar gage, located approximately 17.6 miles downstream of Hells Canyon dam or at the Hells Canyon gage, located 0.6 mile downstream of Hells Canyon dam.

^d A limit of 10,000 cfs was modeled during this time frame to represent typical operations.

^e For modeling purposes only, flows under the fall Chinook program began October 21 and ended December 11.

^f Releases under the fall Chinook program are reduced in the model and assume that the most critical shallow redd is still protected under load-following conditions downstream of the Hells Canyon Complex. The December 12 date was specified for modeling purposes only, since the actual date that fall Chinook spawning is completed can vary.

^g Minimum flow modeled was 6,500 cfs or project inflow during this period to avoid drafting Brownlee reservoir.

^h The minimum instantaneous flow modeled was 8,500 cfs unless inflows to Brownlee reservoir dropped below 8,500 cfs. When this occurred, the modeled minimum instantaneous flow below the Hells Canyon development was calculated as the 3-day moving average of Brownlee reservoir inflow.

ⁱ The constant flows below the Hells Canyon development were not modified during the fall Chinook program to achieve 11,500 cfs downstream of the mouth of the Salmon River.

APPENDIX D

FLOW FLUCTUATIONS DOWNSTREAM OF HELLS CANYON DAM—FIGURES

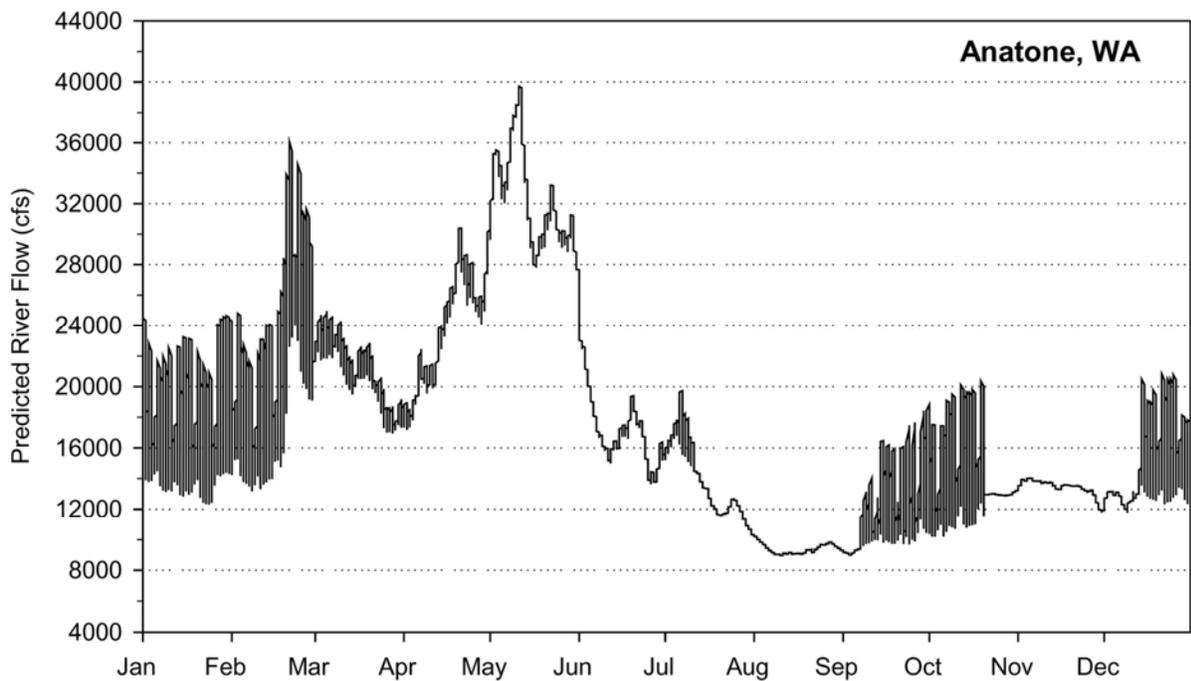
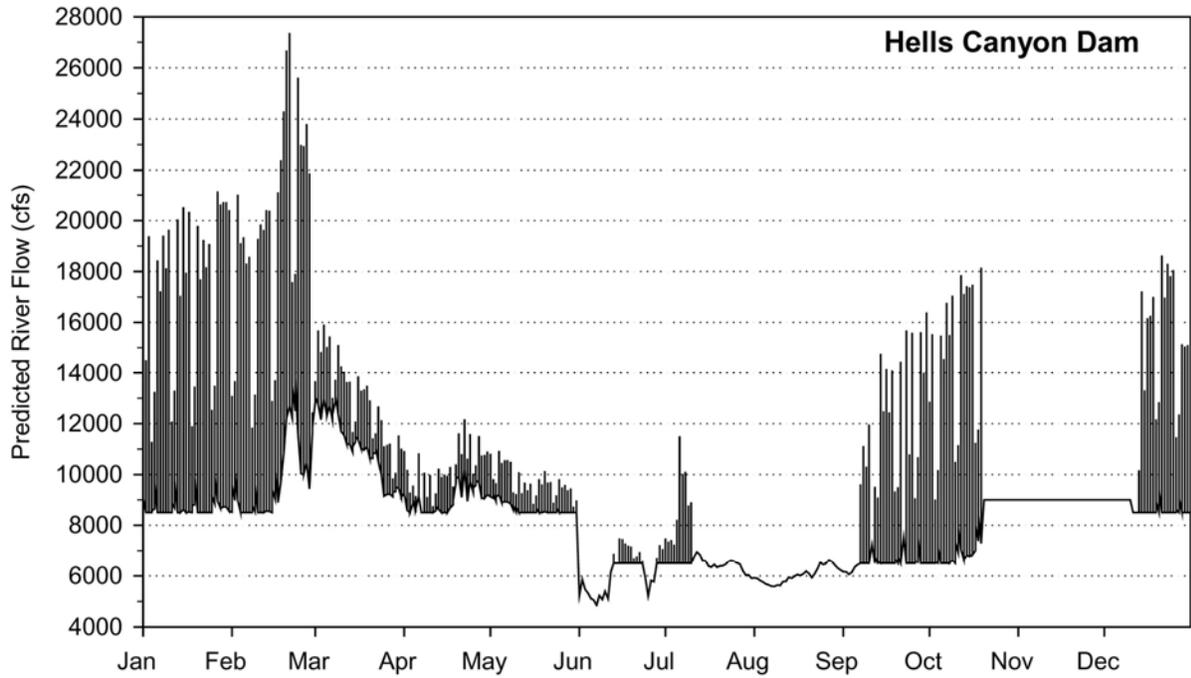


Figure D-1 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Proposed Operations for extremely low water conditions. (Source: Brink and Chandler, 2005-OP-1f)

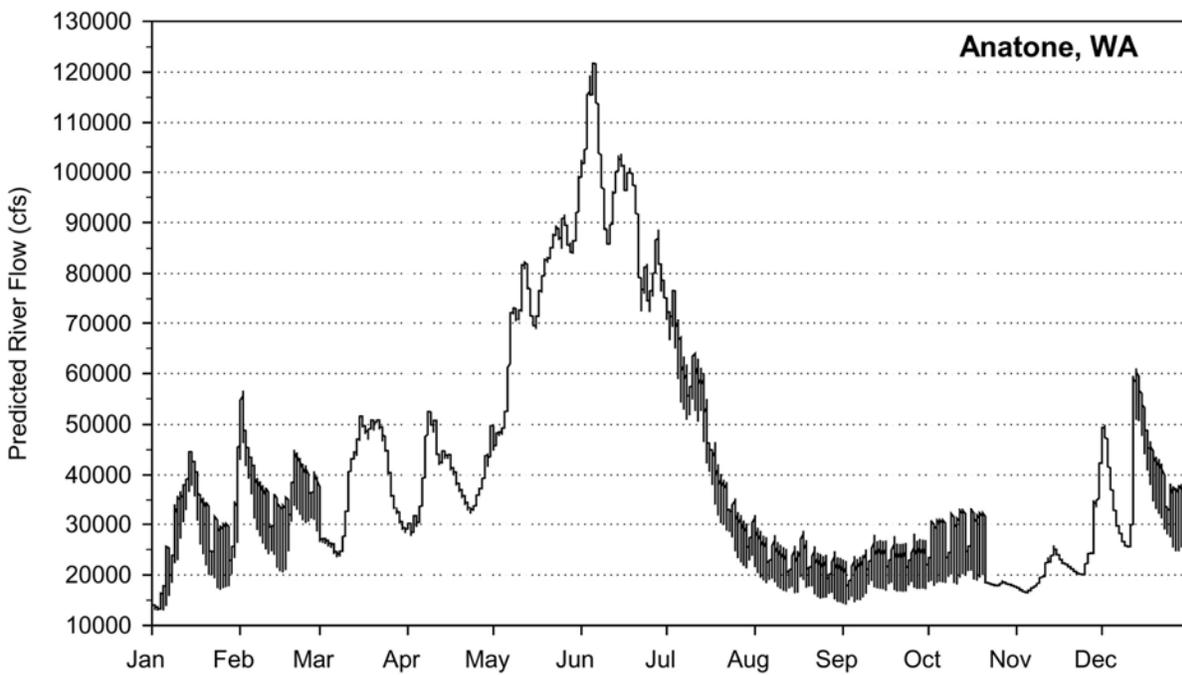
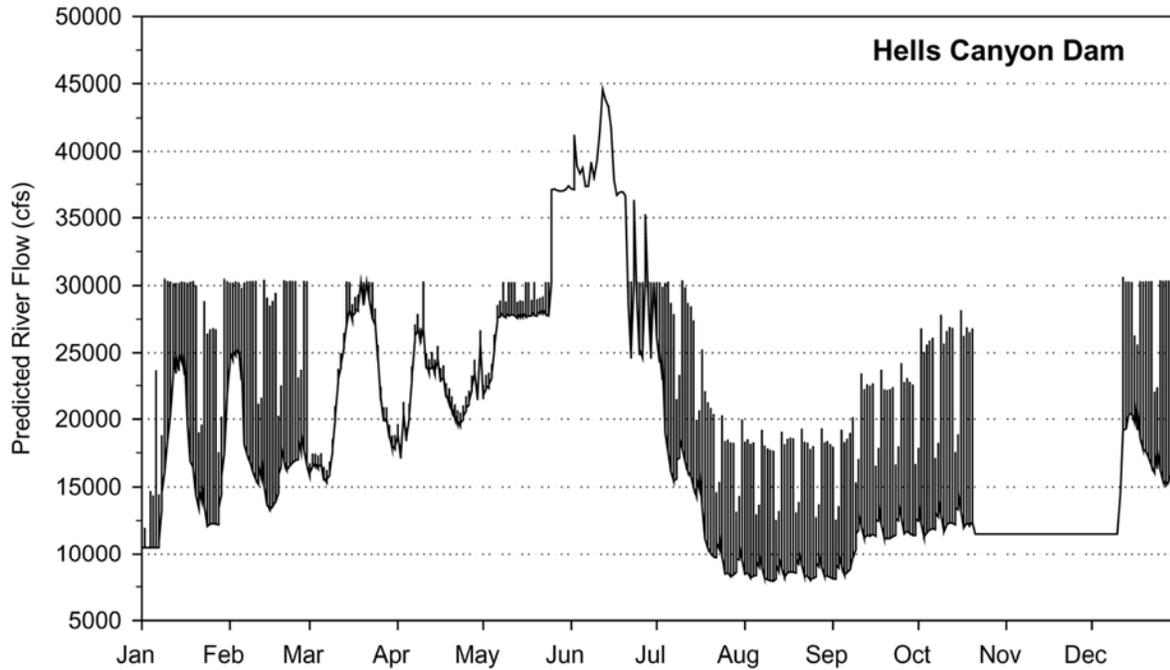


Figure D-2 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Proposed Operations for medium water condition. (Source: Brink and Chandler, 2005-OP-1f)

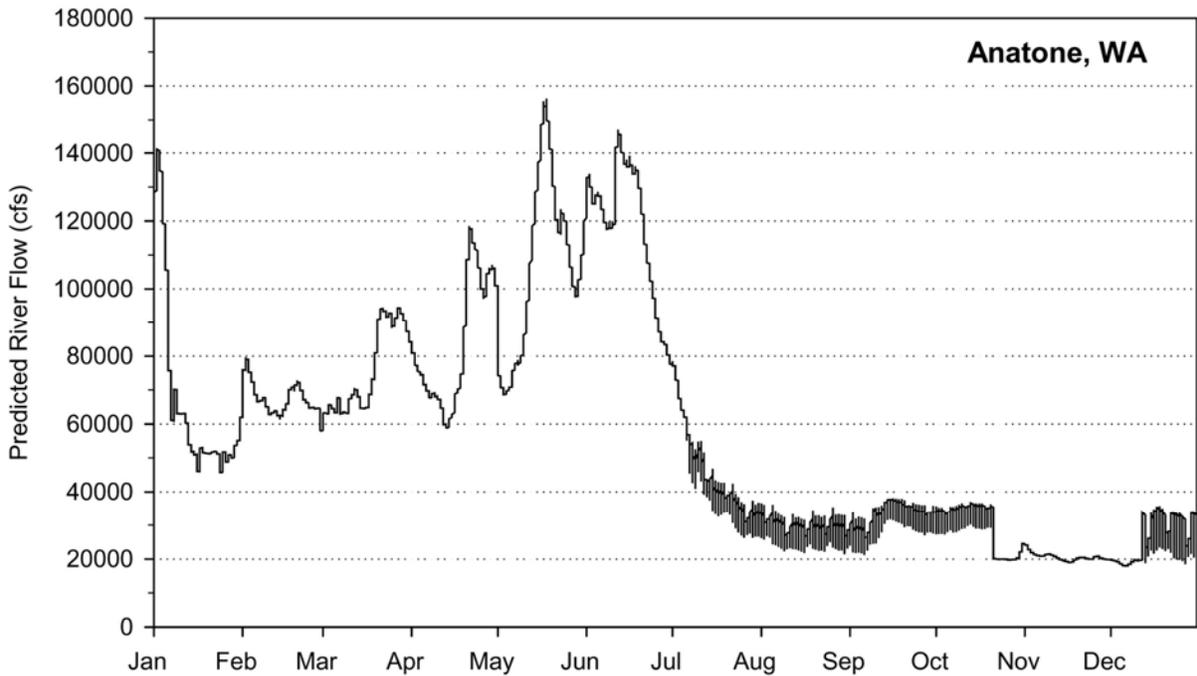
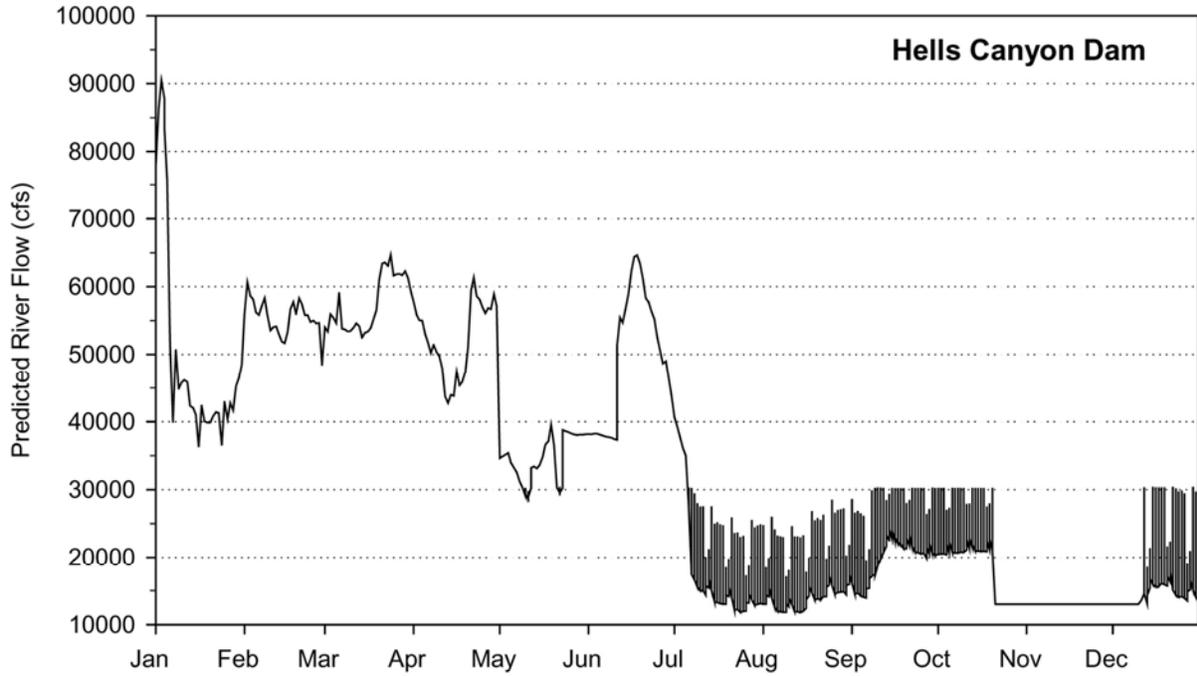


Figure D-3 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Proposed Operations for extremely high water conditions. (Source: Brink and Chandler, 2005-OP-1f)

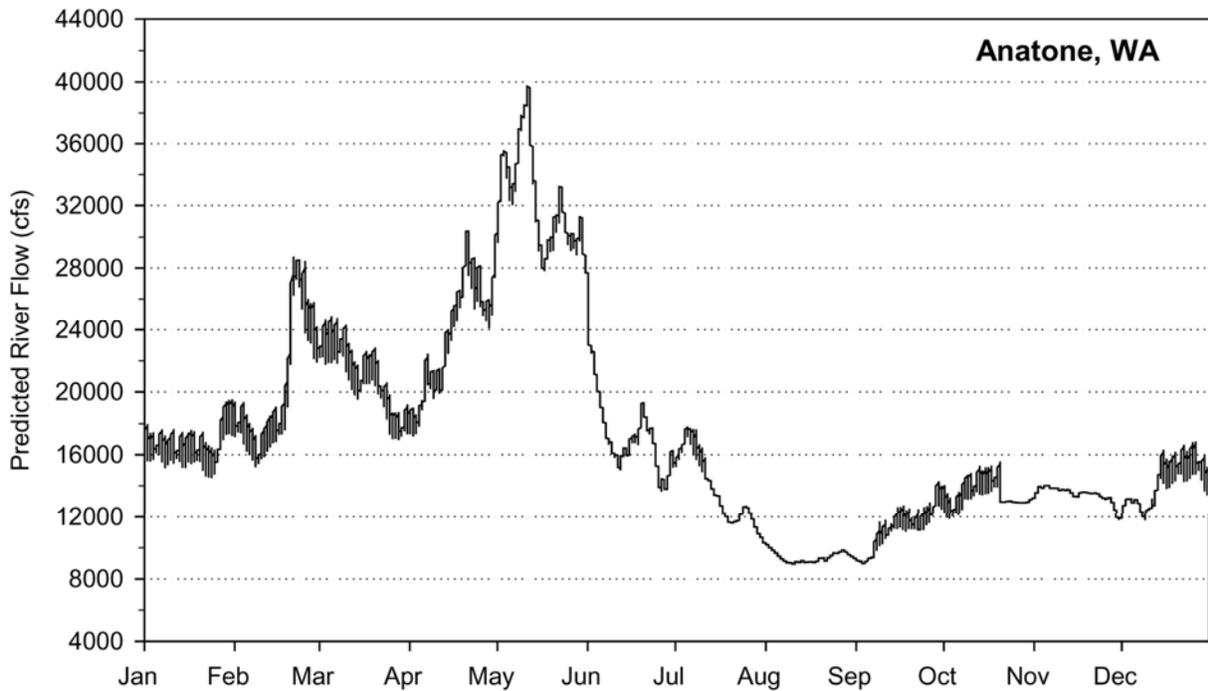
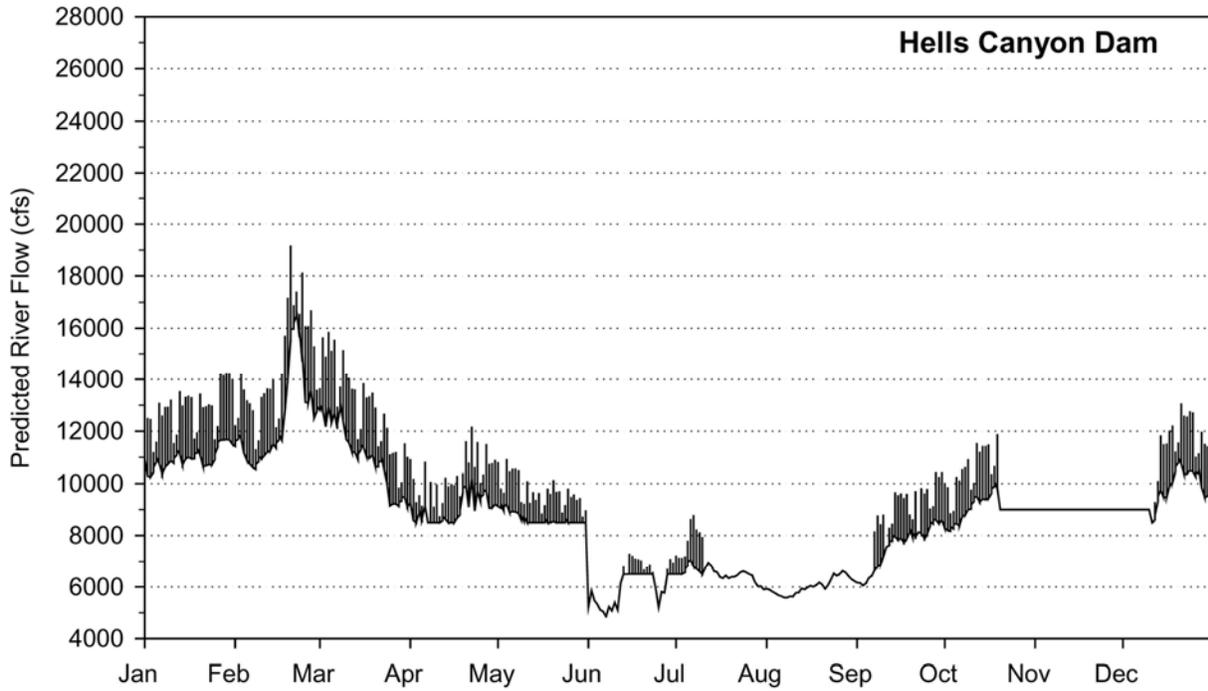


Figure D-4 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 1b (Year-round 2-Inches-Per-Hour Ramping Rate) for extremely low water conditions. (Source: Brink and Chandler, 2005-OP-1f)

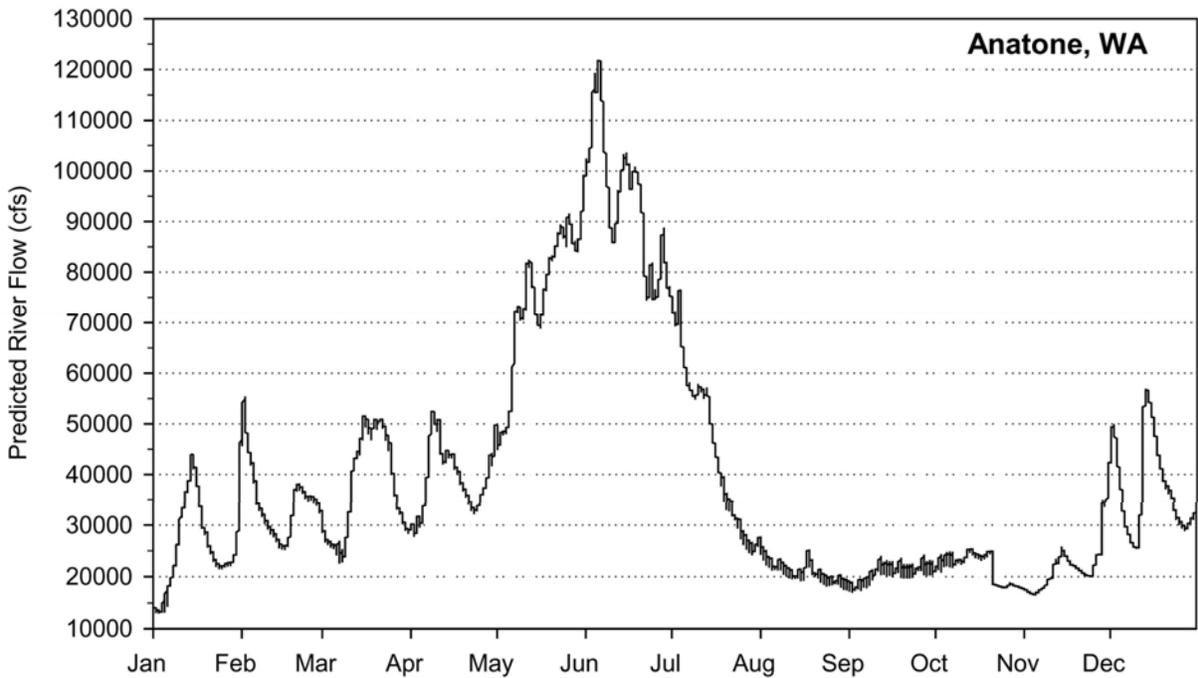
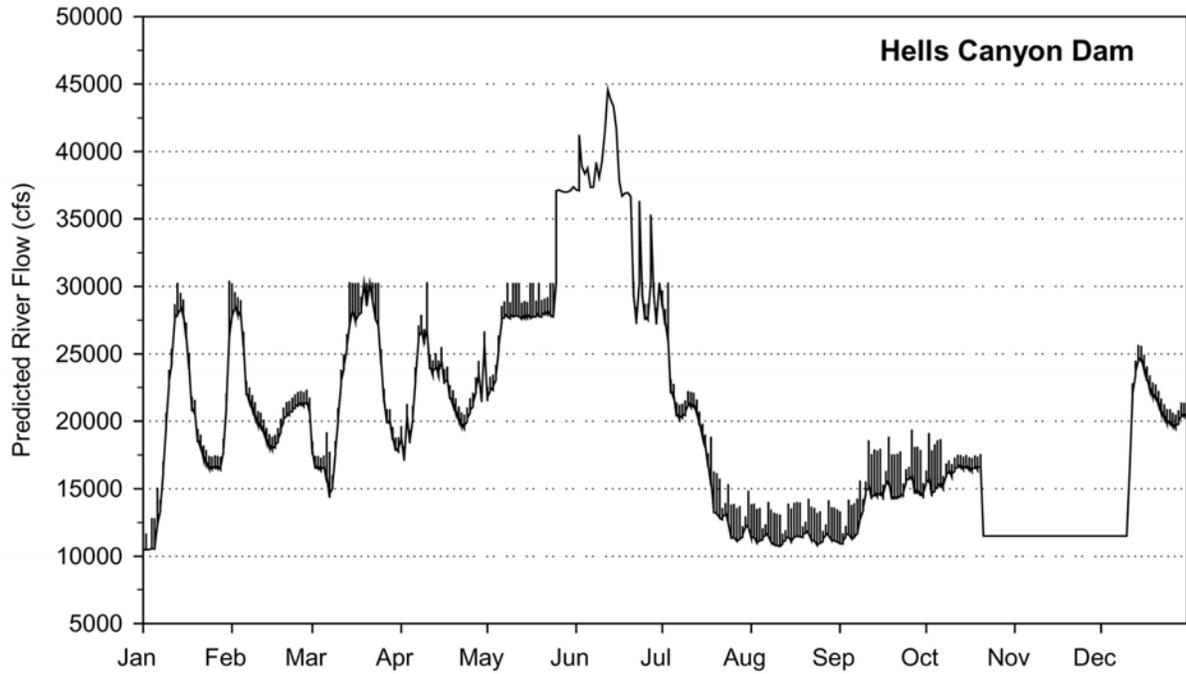


Figure D-5 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 1b (Year-round 2-Inches-Per-Hour Ramping Rate) for medium water conditions. (Source: Brink and Chandler, 2005-OP-1f)

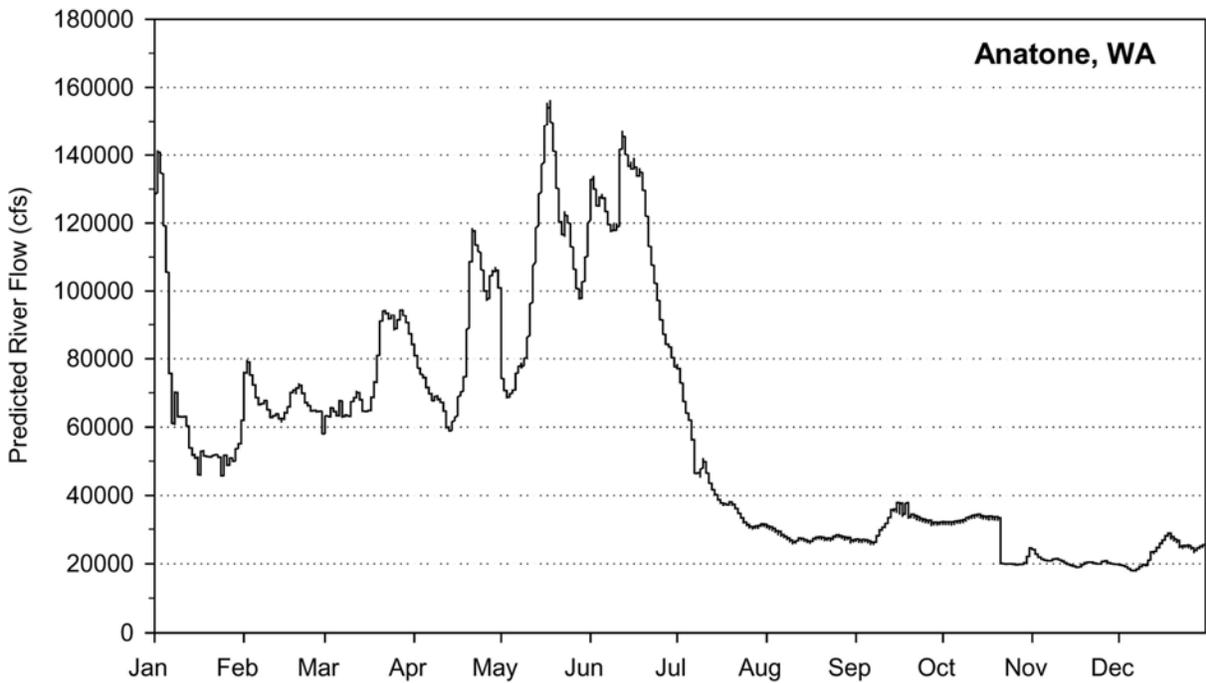
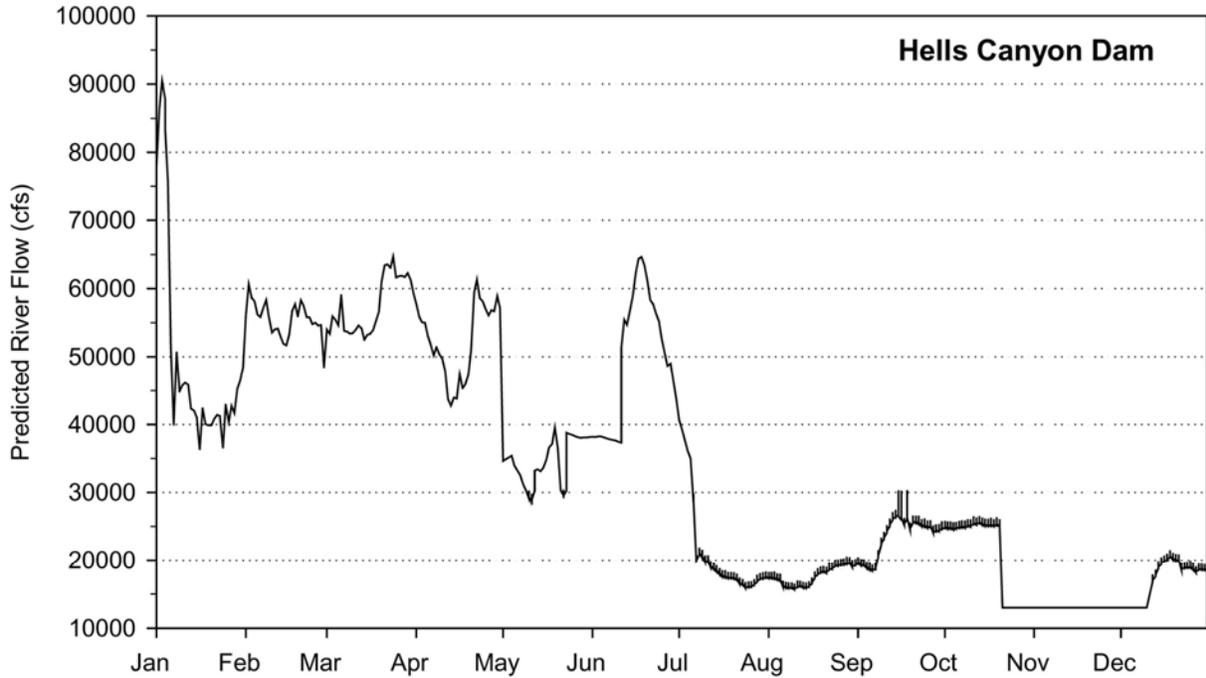


Figure D-6 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 1b (Year-round 2-Inches-Per-Hour Ramping Rate) for extremely high water conditions. (Source: Brink and Chandler, 2005-OP-1f)

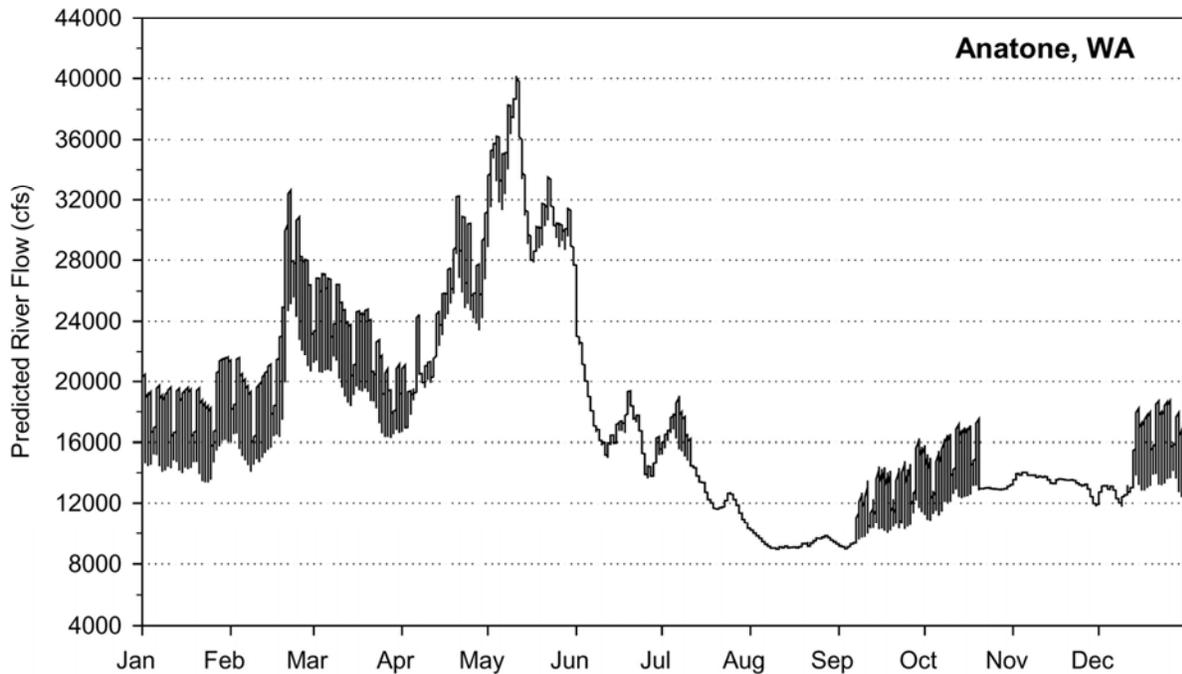
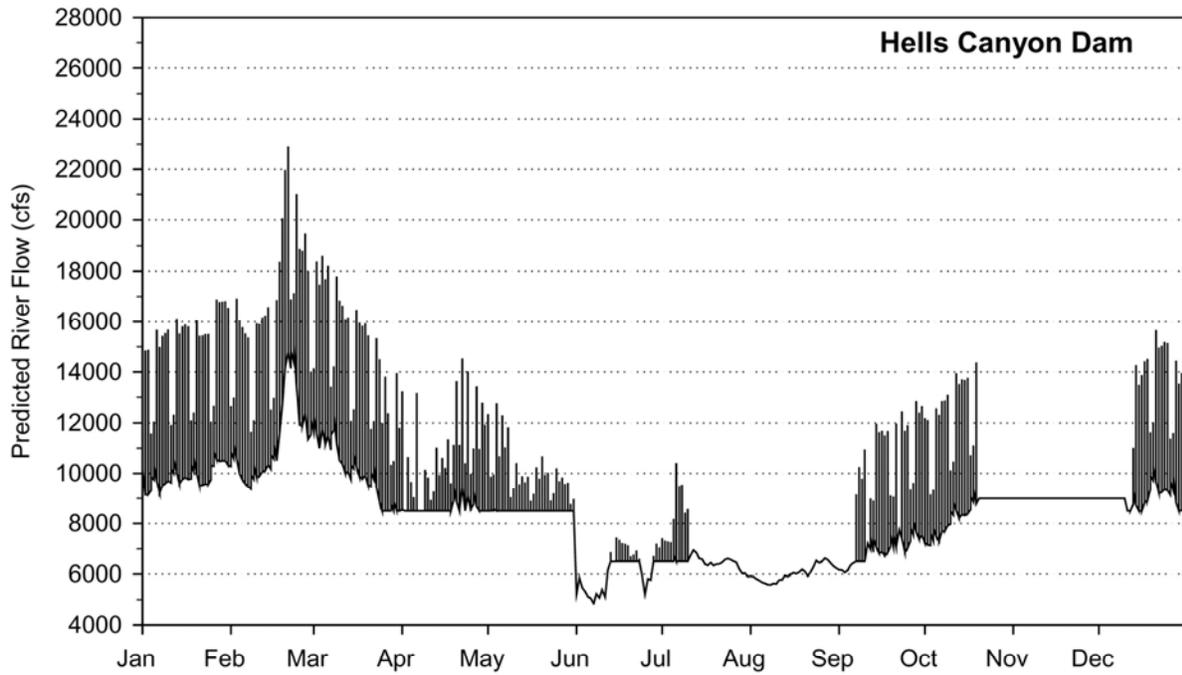


Figure D-7 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 1c (Year-round 6-Inches-Per-Hour Ramping Rate) for extremely low water conditions. (Source: Brink and Chandler, 2005-OP-1f)

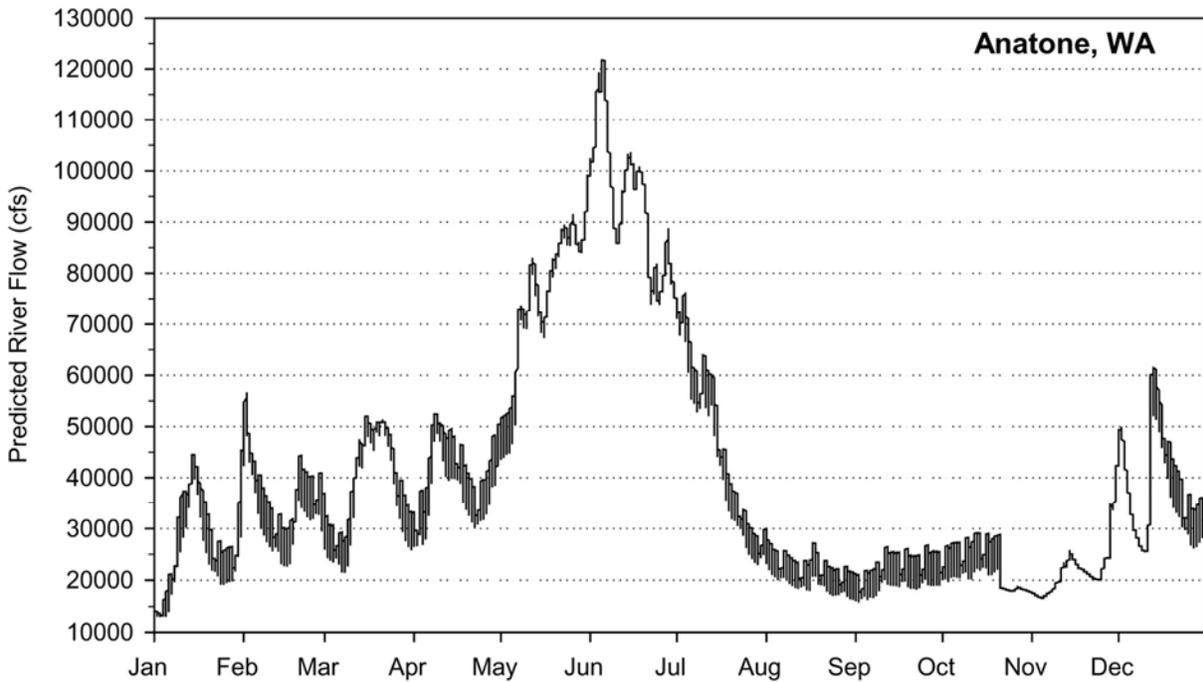
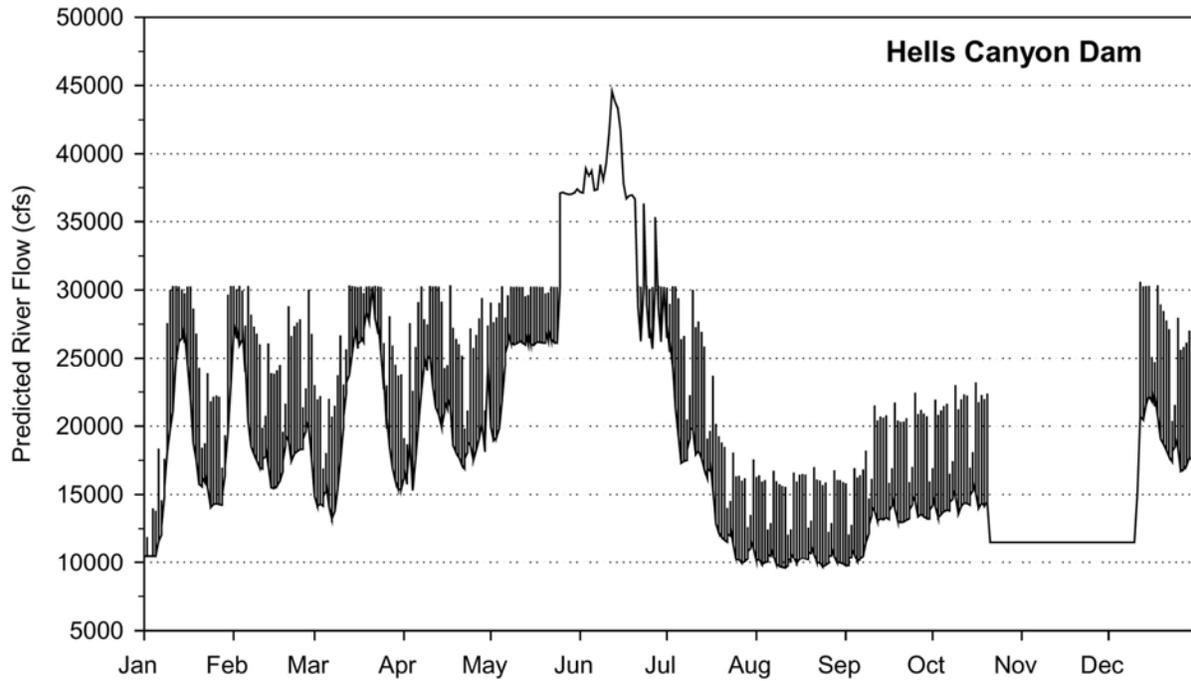


Figure D-8 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 1c (Year-round 6-Inches-Per-Hour Ramping Rate) for medium water conditions. (Source: Brink and Chandler, 2005-OP-1f)

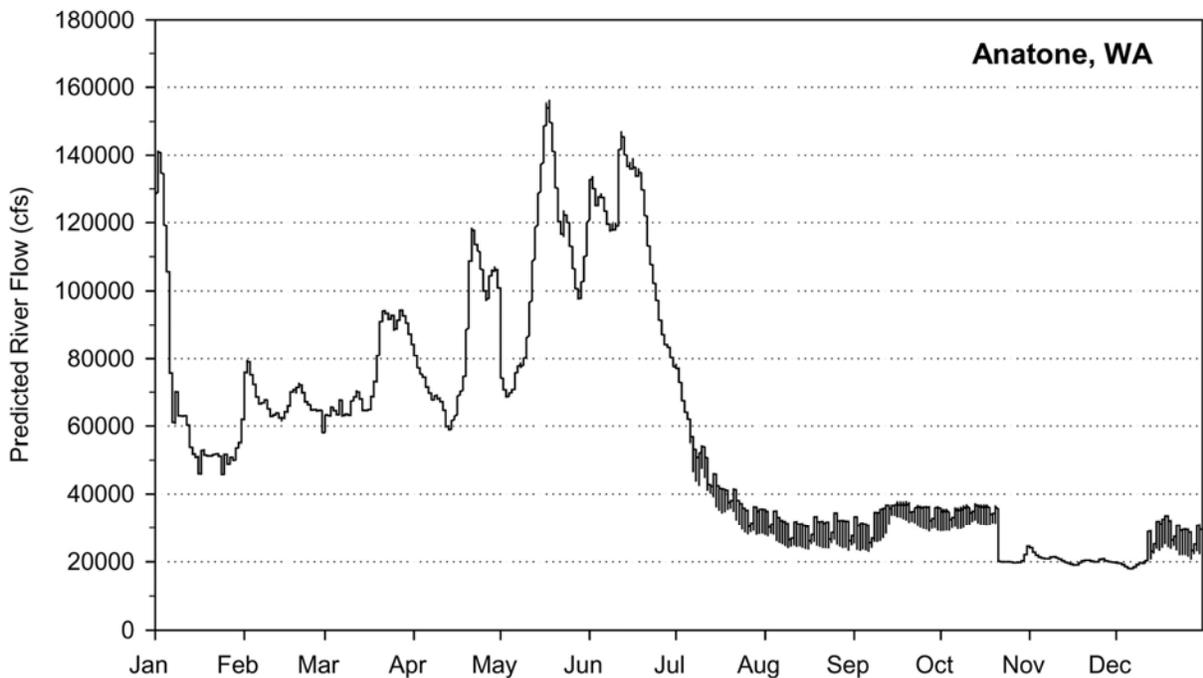
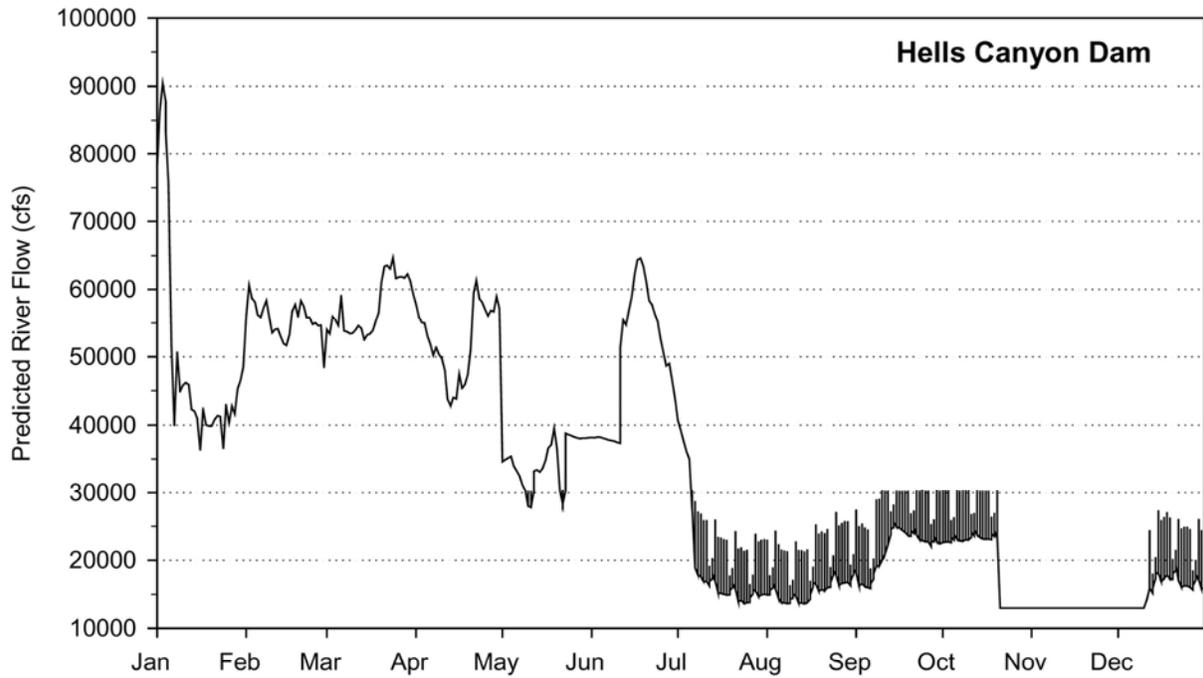


Figure D-9 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 1c (Year-round 6-Inches-Per-Hour Ramping Rate) for extremely high water conditions. (Source: Brink and Chandler, 2005-OP-1f)

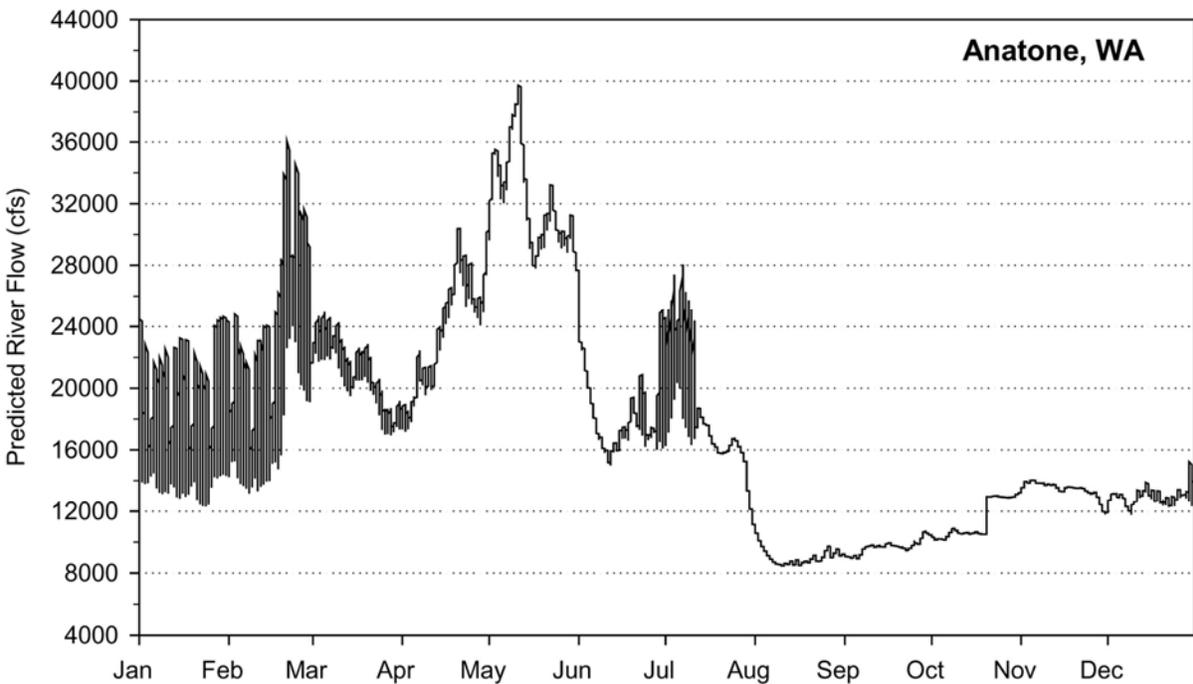
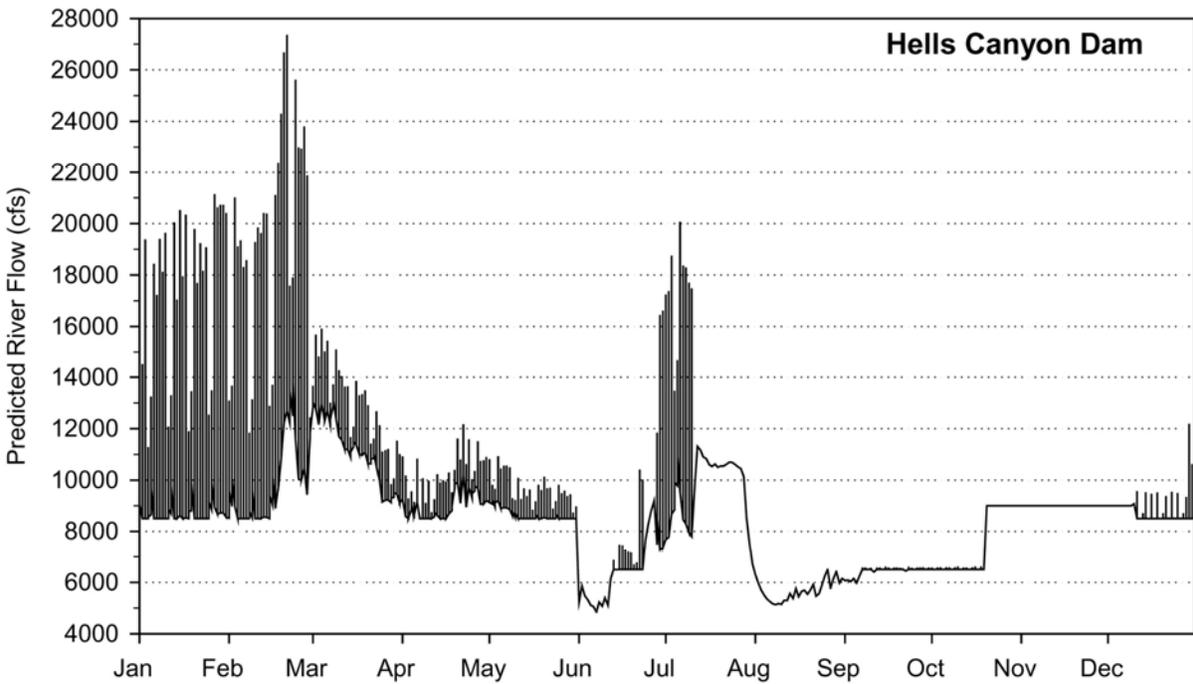


Figure D-10 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 2 (Flow Augmentation) for extremely low water conditions. (Source: Brink and Chandler, 2005-OP-1f)

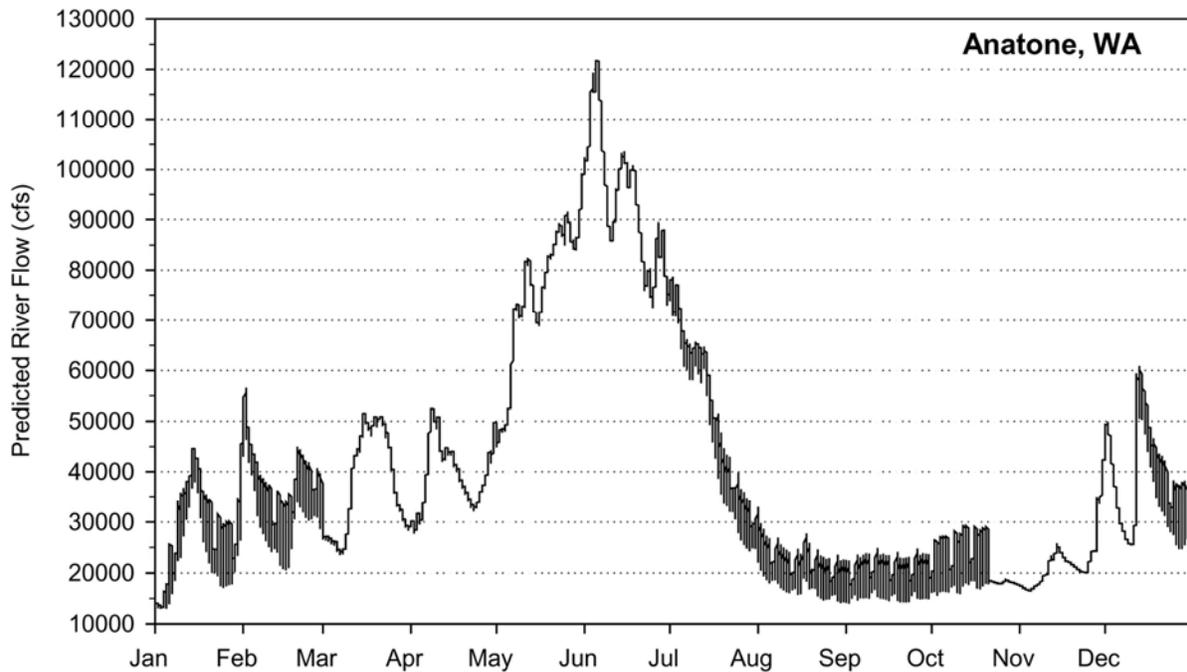
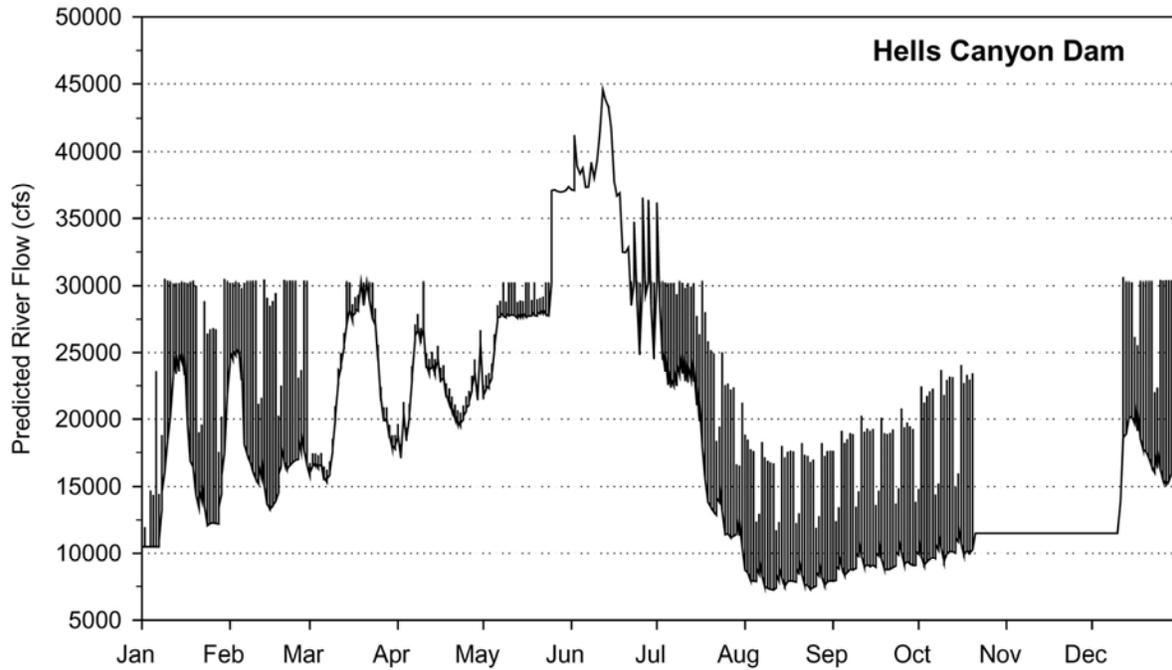


Figure D-11 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 2 (Flow Augmentation) for medium water conditions. (Source: Brink and Chandler, 2005-OP-1f)

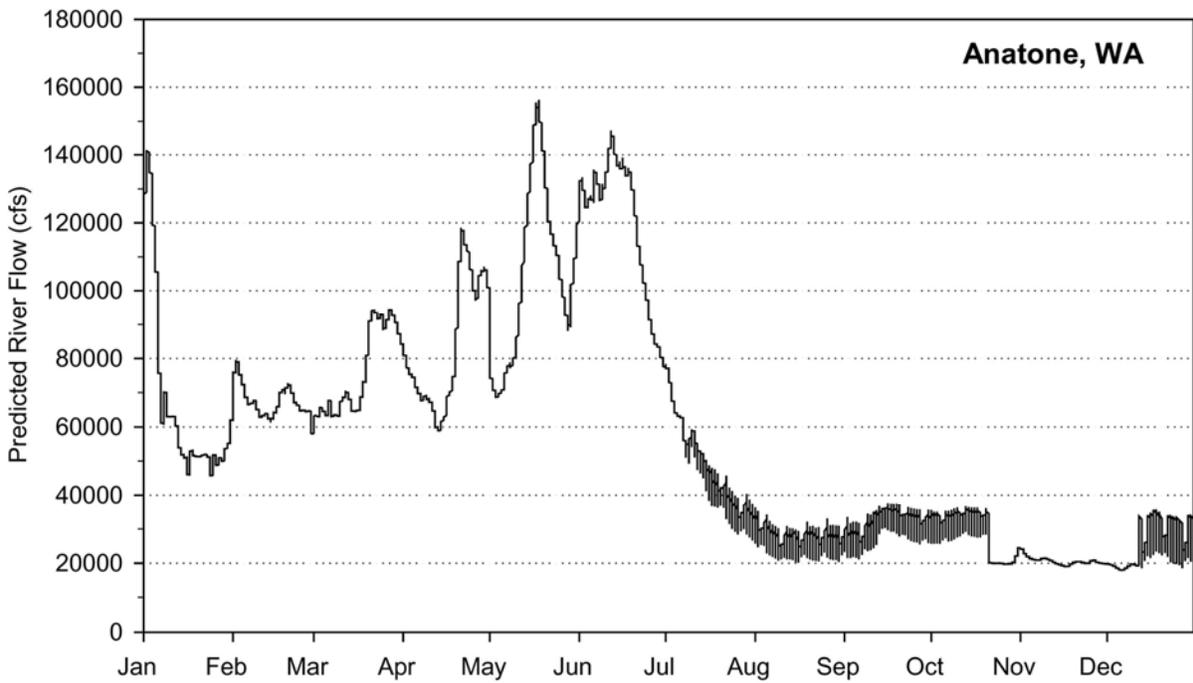
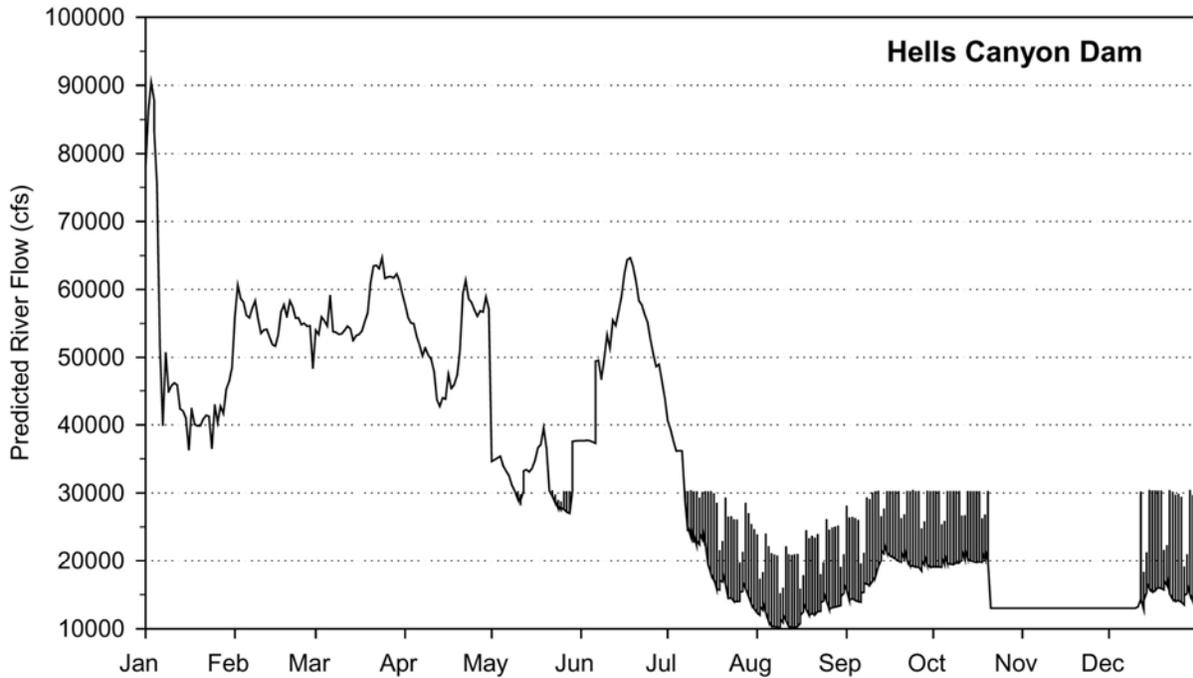


Figure D-12 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 2 (Flow Augmentation) for extremely high water conditions. (Source: Brink and Chandler, 2005-OP-1f)

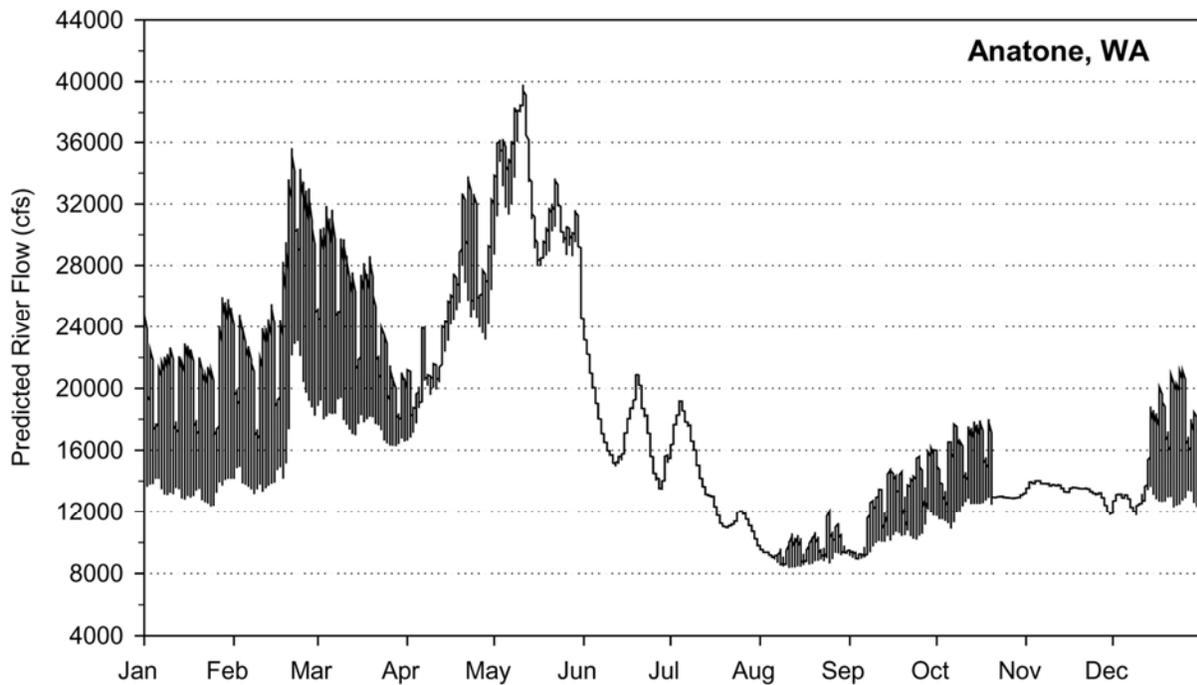
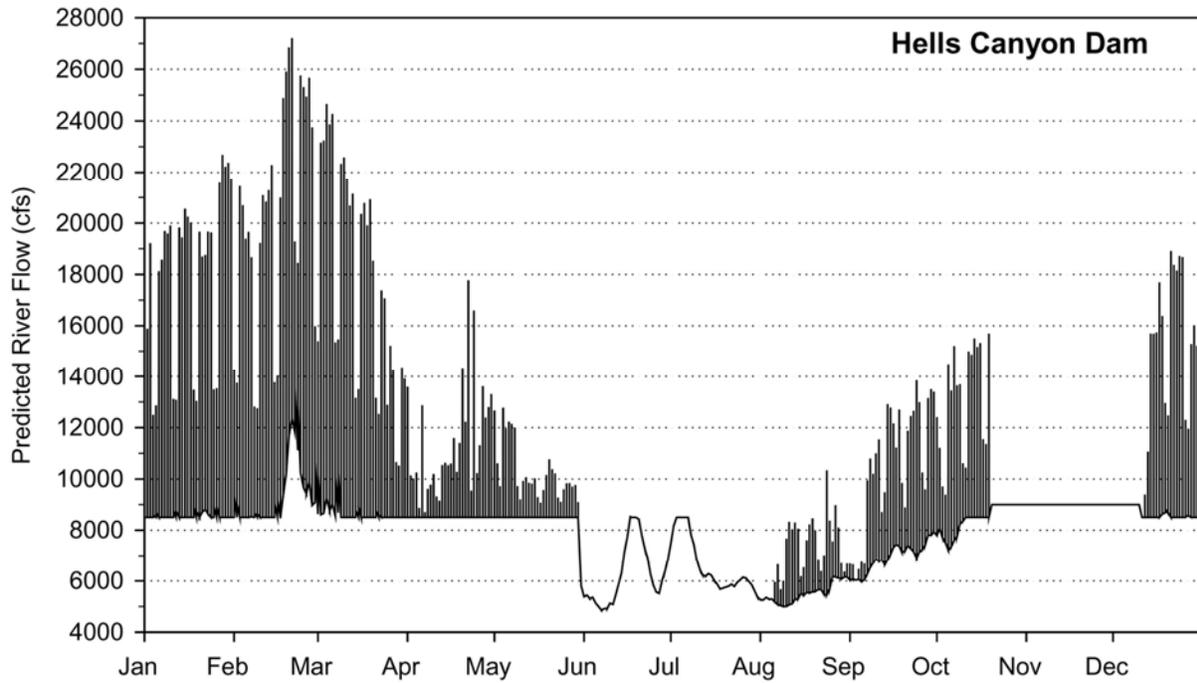


Figure D-13 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 3 (Navigation) for extremely low water conditions. (Source: Brink and Chandler, 2005-OP-1f)

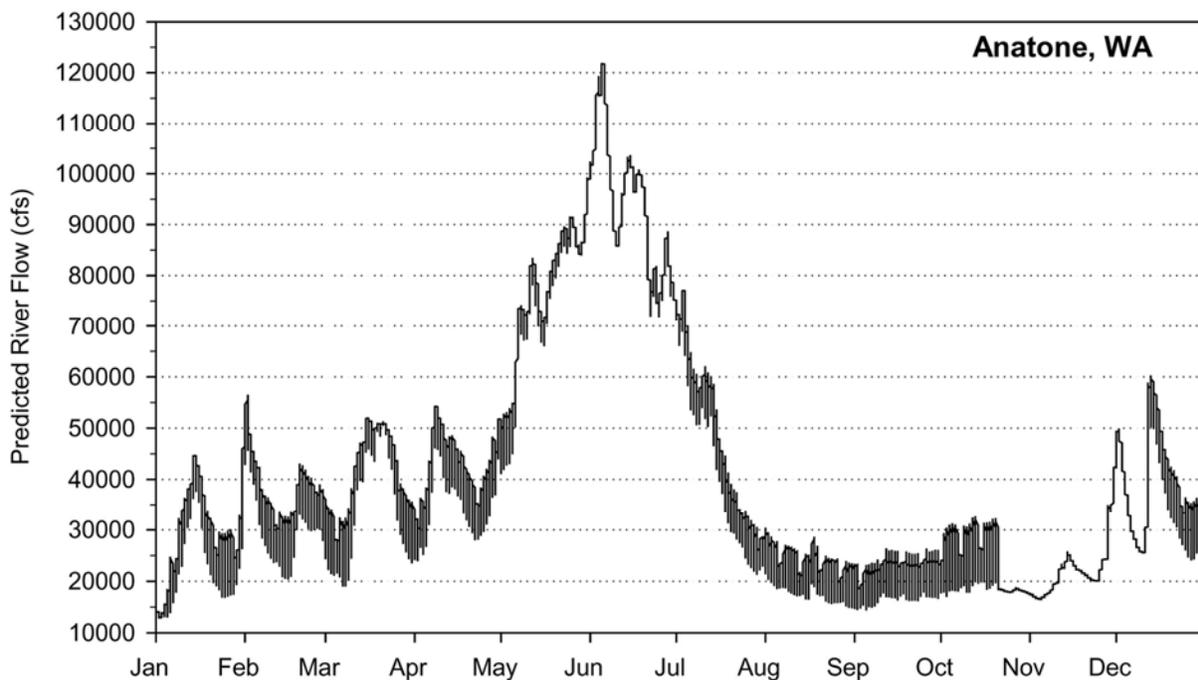
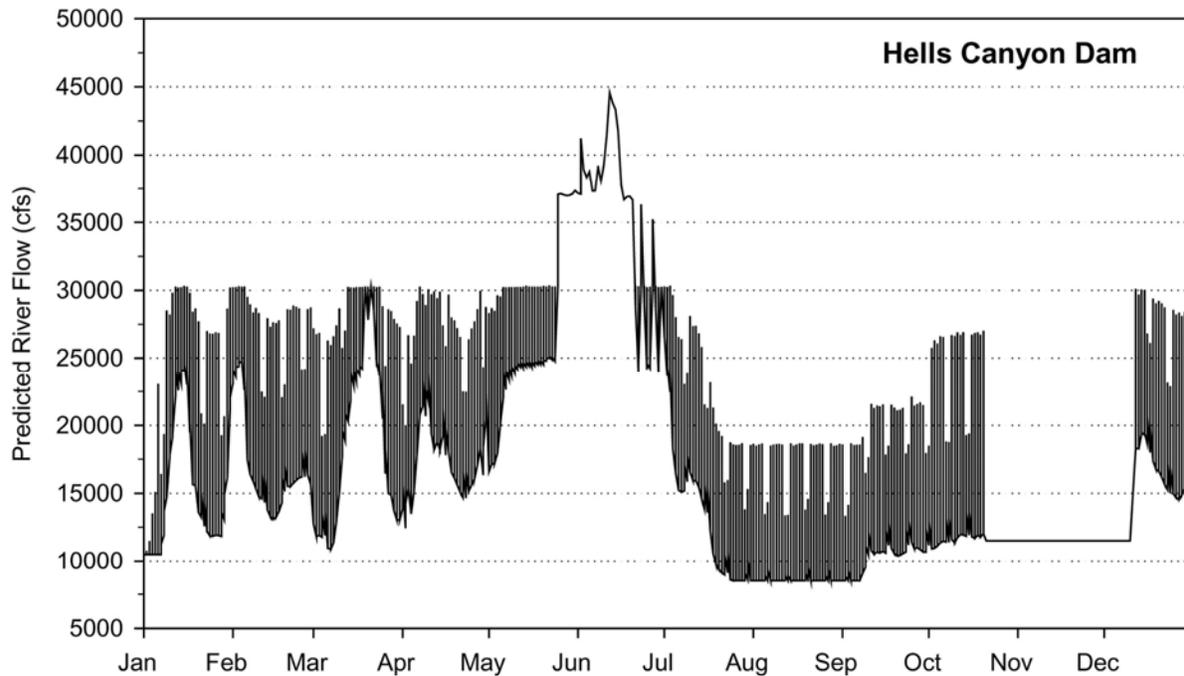


Figure D-14 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 3 (Navigation) for medium water conditions. (Source: Brink and Chandler, 2005-OP-1f)

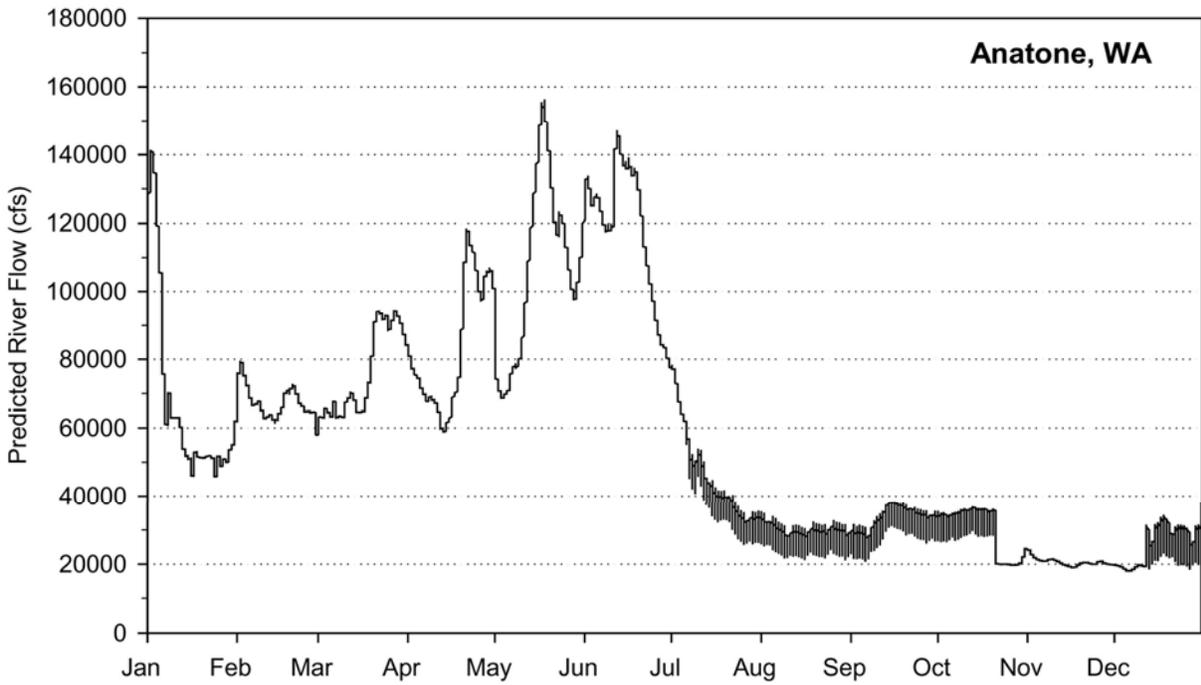
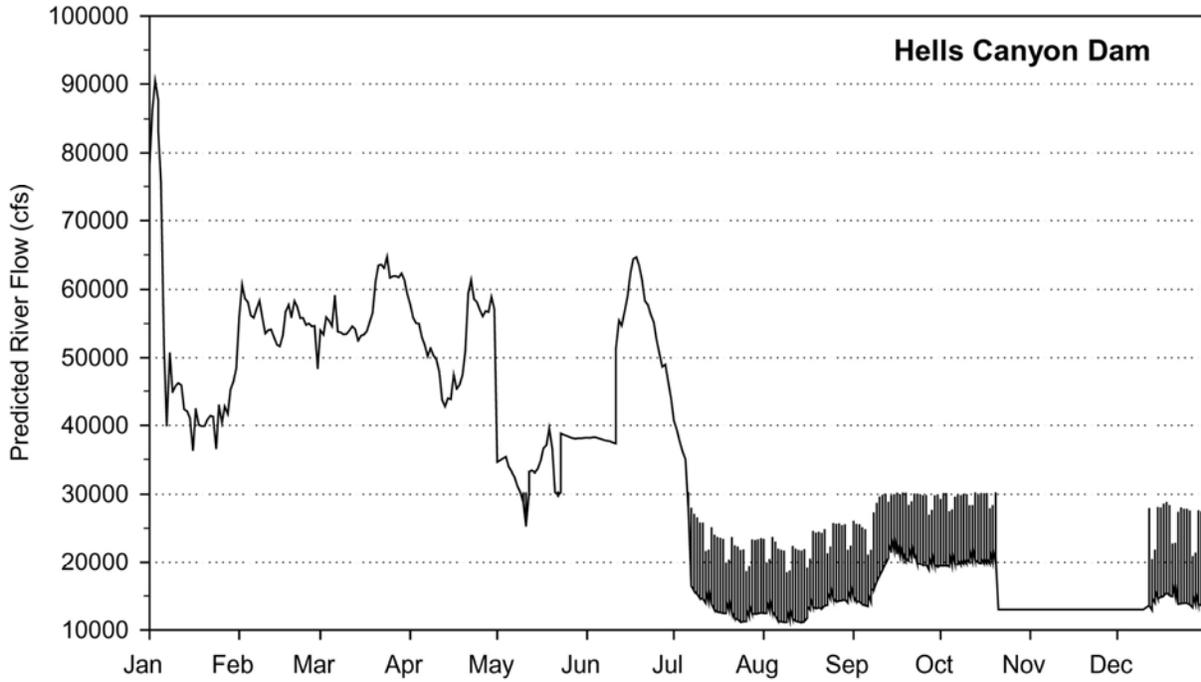


Figure D-15 Simulated river flows for the Snake River near Hells Canyon dam (top) and near Anatone (bottom) modeled under Scenario 3 (Navigation) for extremely high water conditions. (Source: Brink and Chandler, 2005-OP-1f)

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APPENDIX E
DEVELOPMENTAL ANALYSIS OF NEW ENVIRONMENTAL
MEASURES PROPOSED BY IDAHO POWER

Table E-1. Developmental analysis of new sediment transport measures proposed by Idaho Power.

[Idaho Power did not categorize any new environmental measures as primarily sediment transport measures.]

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Table E-2. Developmental analysis of new water quality measures proposed by Idaho Power.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-84	4. Supplement dissolved oxygen (DO) into Brownlee reservoir to improve DO conditions within the Hells Canyon Project.	IPC	\$1,817,400	\$291,500	\$447,800	Staff estimate based on Idaho Power's Feb-05 AIR WQ-1 response	No
IPC-85	5. Install Hells Canyon dam spillway flow deflectors to reduce total dissolved gas concentrations in the tailrace of Hells Canyon dam and the Snake River downstream of the dam.	IPC	\$4,000,000	\$0	\$407,600	Staff estimate based on contract of \$2.5 million for construction of Ice Harbor spillway deflectors and adjusting to present day costs.	Yes
Total Idaho Power Proposal			\$5,817,400	\$291,500	\$855,400		
Subtotal Staff Alternative			\$4,000,000	\$0	\$407,600		

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Table E-3. Developmental analysis of new operational measures proposed by Idaho Power.

[Idaho Power did not categorize any new environmental measures as primarily operational measures.]

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Table E-4. Developmental analysis of new aquatic resources measures proposed by Idaho Power.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-15	8a. Conduct pathogen survey in the Pine-Indian-Wildhorse core area to support development of a pathogen risk assessment plan.	IPC	\$0	\$34,700	\$34,700	Idaho Power estimate with staff parameters.	No; however measure is included in IPC AMC-Interior-87
IPC-7	8b.i. Prepare and implement a plan to allow for the capture of resident salmonids and other species migrating upstream and for their transfer to areas above Hells Canyon and Oxbow dams. The plan includes modification of the Hells Canyon fish trap to capture juvenile salmonids, construction of facilities for sorting and holding fish and for scanning PIT-tag returns, and potentially expansion of year-round operations. The plan also includes a provision to construct a fish trap at Oxbow dam a minimum of 5 years after the Hells Canyon trap has been modified.	IPC	\$2,800,000	\$369,500	\$675,300	Idaho Power estimate with staff parameters.	No

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-20	8b.ii. Purchase two new tanker trucks to support fish passage plan.	IPC	\$400,000	\$0	\$43,700	Idaho Power estimate with staff parameters.	No; however measure is included in IPC AMC-Interior-87
IPC-14	8b.iii. The plan also includes a provision to construct a fish trap at Oxbow dam a minimum of 5 years after the Hells Canyon trap has been modified.	IPC	\$2,800,000	\$153,100	\$458,900	Idaho Power estimate with staff parameters.	No; however measure is included in IPC AMC-Interior-87
IPC-16	8f. Design, construct, and monitor a permanent monitoring weir at Pine Creek to establish a long-term monitoring program of fluvial fish migrating upstream and downstream in the Pine Creek system.	IPC	\$2,500,000	\$92,400	\$365,500	Idaho Power estimate with staff parameters.	No; however measure is included in IPC AMC-Interior-87
IPC-18	8c. Prepare and implement a tributary habitat enhancement plan within the Pine Creek, Indian Creek, and Wildhorse River basins and smaller tributaries to the Hells Canyon Complex reservoirs.	IPC	\$8,500,000	\$0	\$928,400	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-6	8d. Supplement marine-derived nutrients to enhance the forage base within bull trout rearing areas (Pine, Indian, and Wildhorse core area).	IPC	\$0	\$40,000	\$40,000	Idaho Power estimate with staff parameters. Idaho Power includes these costs within the Oxbow hatchery and Rapid River hatchery upgrades.	Yes
IPC-21	8e. Conduct Eagle Creek presence/absence survey to determine, with statistical probability, the presence or absence of bull trout within the Eagle Creek basin.	IPC	\$0	\$42,700	\$42,700	Idaho Power estimate with staff parameters.	Yes
IPC-13	8g. Evaluate the feasibility of, and possibly implement, an experimental brook trout suppression program in Indian Creek.	IPC	\$0	\$51,700	\$51,700	Idaho Power estimate with staff parameters.	Yes
IPC-19	11a. Assess water quality-related effects on early life stages of white sturgeon in the Swan Falls-Brownlee reach.	IPC	\$0	\$24,000	\$24,000	Idaho Power estimate with staff parameters.	No
IPC-17	11b. Translocate reproductive-sized white sturgeon into the Swan	IPC	\$0	\$20,600	\$20,600	Idaho Power estimate with staff parameters.	No

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-22	Falls-Brownlee reach to increase spawner abundance and population productivity, if water quality is found to be adequate and if genetic and demographic risks to the donor population are found to be acceptable. 11c. Develop an experimental conservation aquaculture plan to maintain adequate population size and genetic variability of white sturgeon in the Swan Falls-Brownlee reach, if approved by Idaho Department of Fish and Game (IDFG) and Oregon Department of Fish and Wildlife (ODFW).	IPC	\$0	\$28,000	\$28,000	Idaho Power estimate with staff parameters.	No

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-12	11d. Make periodic population assessments to monitor white sturgeon populations in the Swan Falls-Brownlee, Brownlee-Hells Canyon, and Hells Canyon-Lower Granite reaches of the Snake River.	IPC	\$0	\$95,900	\$95,900	Idaho Power estimate with staff parameters.	Yes
IPC-23	11e. Monitor genotypic frequencies of white sturgeon between Shoshone Falls and Lower Granite dams.	IPC	\$0	\$2,300	\$2,300	Idaho Power estimate with staff parameters.	No
Total Idaho Power Proposal			\$17,000,000	\$954,900	\$2,811,700		
Subtotal Staff Alternative			\$8,500,000	\$230,300	\$1,158,700		

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Table E-5. Developmental analysis of new hatchery measures included in the Idaho Power Proposal.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-10a	Make improvements to the Pahsimeroi fish hatchery to control pathogens (IPC 10a).	IPC	\$6,320,000	\$187,500	\$877,800	Idaho Power estimate with staff parameters.	Yes
IPC-10b	Develop a locally adapted steelhead broodstock at Pahsimeroi hatchery (IPC 10a).	IPC	\$20,000	\$8,500	\$10,700	Idaho Power estimate with staff parameters.	Yes
IPC-10c	Monitor and evaluate hatchery performance at Pahsimeroi fish hatchery through one FTE fish biologist (IPC 10a).	IPC	\$0	\$46,200	\$46,200	Idaho Power estimate with staff parameters.	Yes
IPC-9a	Make improvements to the Oxbow fish hatchery by constructing adult holding pond and spawning facilities, distributing carcasses, and generally upgrading the hatchery facilities (IPC 10b).	IPC	\$2,783,000	\$24,900	\$328,900	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-9b	Make improvements to the Oxbow fish hatchery by expanding the fall Chinook rearing program (IPC 10b).	IPC	\$2,500,000	\$10,000	\$283,100	Idaho Power estimate with staff parameters.	Yes
IPC-9c	Monitor and evaluate hatchery performance at Oxbow hatchery through one FTE fish biologist (IPC 10b).	IPC	\$0	\$46,200	\$46,200	Idaho Power estimate with staff parameters.	Yes
IPC-8a	Make improvements to the Niagara Springs fish hatchery by expanding the hatchery building, acquiring an additional smolt tanker, acquiring a fish marking unit, upgrading employee housing, and monitoring and evaluating hatchery performance (IPC 10c).	IPC	\$1,550,000	\$9,200	\$178,500	Idaho Power estimate with staff parameters.	Yes
IPC-8b	Acquiring a fish marking unit (IPC 10c).	IPC	\$750,000	\$4,600	\$86,500	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-8c	Monitor and evaluate hatchery performance at Niagara Springs through one FTE fish biologist (IPC 10c).	IPC	\$0	\$46,200	\$46,200	Idaho Power estimate with staff parameters.	Yes
IPC-11a	Make improvements to the Rapid River fish hatchery by constructing an adult holding pond and spawning facilities, distributing carcasses, upgrading employee housing, generally upgrading the hatchery facilities, constructing an offsite smolt acclimation/ adult collection facility, and monitoring and evaluating hatchery performance (IPC 10d).	IPC	\$3,083,000	\$39,700	\$376,400	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-11b	Monitor and evaluate hatchery performance at Rapid River hatchery through one FTE fish biologist (IPC 10d).	IPC	\$0	\$46,200	\$46,200	Idaho Power estimate with staff parameters.	Yes
Total Idaho Power Proposal			\$17,006,000	\$469,200	\$2,326,700		
Subtotal Staff Alternative			\$17,006,000	\$469,200	\$2,326,700		

Table E-6. Developmental analysis of new terrestrial resources measures proposed by Idaho Power.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-86	12. Acquire, enhance, and manage approximately 22,761 acres of upland and 821 acres of riparian habitat near the Hells Canyon Project reservoirs and downstream of Hells Canyon dam to mitigate for the estimated effects of project operations on wildlife.	IPC	\$9,432,000	\$650,000	\$1,651,100	Idaho Power estimate with staff parameters.	Yes
IPC-88a	13. In cooperation with ODFW, enhance habitat on two Snake River islands (Hoffman and Porter) for waterfowl and for threatened, endangered, candidate, and special status species.	IPC	\$0	\$6,000	\$6,000	Idaho Power estimate with staff parameters.	Yes
IPC-88b	14 & 17. In cooperation with ODFW and IDFG, enhance habitat on two Snake River islands (Gold and Patch) for waterfowl and for threatened, endangered, candidate, and special status species.	IPC	\$0	\$20,000	\$20,000	Idaho Power estimate with staff parameters.	No

E-17

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-87	15. Cooperate with state and federal wildlife management agencies to enhance low-elevation riparian habitat and reintroduce mountain quail in areas adjacent to the Hells Canyon Project reservoirs, providing \$20,000/yr for 5 yrs.	IPC	\$100,000	\$0	\$9,600	Idaho Power estimate with staff parameters.	Yes
IPC-90	15. Through an interdisciplinary team, develop and implement an integrated wildlife habitat program to manage wildlife resources on 5,300 acres of Idaho Power-owned lands.	IPC	\$15,000	\$148,400	\$150,000	Extrapolated from Idaho Power estimate.	Yes
IPC-89	16. Develop and implement an operation and maintenance plan for the Pine Creek-Hells Canyon transmission line to minimize effects on wildlife, protect wildlife resources, and enhance habitat conditions.	IPC	\$0	\$5,500	\$5,500	Idaho Power estimate.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-1	18. Formalize cooperative relationships to accomplish noxious weed control and non-native invasive weed management, site monitoring, and re-seeding along the Snake River corridor from Weiser downstream to the confluence of the Salmon River.	IPC	\$0	\$50,000	\$50,000	Idaho Power estimate.	Yes
IPC-2	19. Formalize cooperative relationships, including establishment of a rare plant advisory board, to protect and monitor sensitive plant sites along the Snake River corridor from the headwaters of Brownlee reservoir downstream to the confluence of the Salmon River.	IPC	\$0	\$6,000	\$6,000	Idaho Power estimate.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-3	20. Develop and implement an operation and maintenance plan for the Pine Creek-Hells Canyon transmission line to minimize effects on rare plants, protect botanical resources, and enhance habitat conditions.	IPC	\$0	\$4,200	\$4,200	Idaho Power estimate.	Yes
Total Idaho Power Proposal			\$9,547,000	\$890,100	\$1,902,400		
Subtotal Staff Alternative			\$9,547,000	\$870,100	\$1,882,400		

Table E-7. Developmental analysis of new cultural resources measures proposed by Idaho Power.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-30	22. Monitor sites along transmission line 945 that are eligible for inclusion on the National Register.	IPC	\$0	\$2,400	\$2,400	Idaho Power estimate with staff parameters.	Yes
IPC-31	23. Monitor the known burial site on Oxbow reservoir.	IPC	\$0	\$800	\$800	Idaho Power estimate with staff parameters.	Yes
IPC-34	24. Monitor known eligible sites on Oxbow and Hells Canyon reservoirs.	IPC	\$0	\$20,800	\$20,800	Idaho Power estimate with staff parameters.	No
IPC-33	25. Monitor known eligible sites on Brownlee reservoir.	IPC	\$0	\$20,100	\$20,100	Idaho Power estimate with staff parameters.	No
IPC-32	26. Monitor known eligible sites downstream of Hells Canyon dam.	IPC	\$0	\$65,000	\$65,000	Idaho Power estimate with staff parameters.	No
IPC-43	27. Stabilize approximately 20 archaeological sites downstream of Hells Canyon dam after identifying sites requiring stabilization.	IPC	\$0	\$106,700	\$106,700	Idaho Power estimate with staff parameters.	Yes
IPC-44	28. Stabilize seven archaeological sites on Brownlee reservoir.	IPC	\$0	\$34,700	\$34,700	Idaho Power estimate with staff parameters.	Yes
IPC-26	29. Recover archaeological data at four archaeological sites on	IPC	\$0	\$35,400	\$35,400	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-35	Brownlee reservoir to prevent possible damage by reservoir operations. 30. Establish Native American interpretive sites on Brownlee reservoir to enhance visitors' awareness of Native American presence and land use in the project area.	IPC	\$22,000	\$2,200	\$4,600	Idaho Power estimate with staff parameters.	Yes
IPC-36	31. Establish Native American interpretive sites on Oxbow and Hells Canyon reservoirs to enhance visitors' awareness of Native American presence and land use in the project area.	IPC	\$11,000	\$1,100	\$2,300	Idaho Power estimate with staff parameters.	Yes
IPC-28	32. Establish European-American interpretive sites on Brownlee, Oxbow, and Hells Canyon reservoirs to enhance visitors' awareness of European-American presence and land use in the project area.	IPC	\$22,000	\$2,200	\$4,600	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-25	33. Establish Asian-American interpretive sites on Brownlee, Oxbow, and/or Hells Canyon reservoirs to enhance visitors' awareness of Asian-American presence and land use in the project area.	IPC	\$22,000	\$2,200	\$4,600	Idaho Power estimate with staff parameters.	Yes
IPC-27	34. Support European-American and Asian-American interpretive projects by assisting local community museums with collections acquisition, display, and curation related to Hells Canyon area trappers, miners, homesteaders, ranchers, and river runners of European and Asian descent.	IPC	\$0	\$5,800	\$5,800	Idaho Power estimate with staff parameters.	Yes
IPC-37a	35a. Provide support for Native American programs of the Burns Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures,	IPC	\$0	\$10,000	\$10,000	Staff estimate.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-37b	educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs. 35b. Provide support for Native American programs of the Burns Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	No
IPC-37c	educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs. 35c. Provide support for Native American programs of the Burns Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and	IPC	\$0	\$11,700	\$11,700	Staff estimate.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-39a	providing funds to facilitate several cultural enhancement programs. 36a. Provide support for Native American programs of the Confederated Tribes of the Warm Springs Indian Reservation in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$10,000	\$10,000	Staff estimate.	Yes
IPC-39b	36b. Provide support for Native American programs of the Burns Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to	IPC	\$0	\$11,700	\$11,700	Staff estimate.	No

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-39c	facilitate several cultural enhancement programs. 36c. Provide support for Native American programs of the Burns Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	Yes
IPC-40a	facilitate several cultural enhancement programs. 37a. Provide support for Native American Programs of the Nez Perce Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$10,000	\$10,000	Staff estimate.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-40b	37b. Provide support for Native American programs of the Burns Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	No
IPC-40c	37c. Provide support for Native American programs of the Burns Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-41a	38a. Provide support for Native American Programs of the Confederated Tribes of the Umatilla Indian Reservation in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/ training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$10,000	\$10,000	Staff estimate.	Yes
IPC-41b	38b. Provide support for Native American Programs of the Shoshone-Paiute Tribes in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/ training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	No

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-41c	38c. Provide support for Native American programs of the Burns Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	Yes
IPC-38a	39a. Provide support for Native American programs of the Confederated Tribes of the Shoshone Paiute Indian Reservation in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$10,000	\$10,000	Staff estimate.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-38b	39b. Provide support for Native American programs of the Shoshone Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	No
IPC-38c	39c. Provide support for Native American programs of the Shoshone Paiute Tribe in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-42a	40a. Provide support for Native American Programs of the Shoshone-Bannock Tribes in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$10,000	\$10,000	Staff estimate.	Yes
IPC-42b	40b. Provide support for Native American Programs of the Shoshone-Bannock Tribes in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/ training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	No

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-42c	40c. Provide support for Native American Programs of the Shoshone-Bannock Tribes in its efforts to obtain funding for participating in and/or administering cultural resources PME measures, educating its youth by providing scholarship/ training funds, and providing funds to facilitate several cultural enhancement programs.	IPC	\$0	\$11,700	\$11,700	Staff estimate.	Yes
IPC-24	41. Fund additional Section 106 projects to protect sites and mitigate for any unforeseen adverse effects attributed to Hells Canyon Project operations.	IPC	\$0	\$0	\$0	Cannot estimate until projects identified	Yes
Total Idaho Power Proposal			\$77,000	\$499,800	\$508,200		
Subtotal Staff Alternative			\$77,000	\$323,700	\$332,100		

Table E-8. Developmental analysis of new recreation measures proposed by Idaho Power.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-76	45. Provide additional boat moorage on Hells Canyon Project reservoirs to improve angling access.	IPC	\$180,000	\$3,300	\$19,300	Idaho Power estimate with staff parameters.	Yes
IPC-67	46. Enhance litter and sanitation plan to improve litter cleanup and access to portable and vault toilets at dispersed recreational sites.	IPC	\$60,000	\$55,000	\$61,600	Idaho Power estimate with staff parameters.	Yes
IPC-74	47. Develop and implement an integrated Information and Education (I&E) Plan to promote protection and preservation of cultural, natural, and historical resources through education.	IPC	\$1,380,000	\$18,400	\$149,800	Idaho Power estimate with staff parameters.	Yes
IPC-75	48. Coordinate the prioritization of law enforcement resource use among appropriate law enforcement agencies to address public safety issues.	IPC	\$0	\$15,000	\$15,000	Idaho Power estimate with staff parameters.	Yes
IPC-79	49. Develop and implement a Recreation Adaptive Management Plan to identify and	IPC	\$1,200,000	\$58,000	\$100,500	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
	address the adequacy of Idaho Power's Recreation Plan over the life of the new license.						
IPC-70	50. Enhance road maintenance to improve public safety and further protect at-risk cultural and natural resources.	IPC	\$20,000	\$25,600	\$27,800	Idaho Power estimate with staff parameters.	Yes
IPC-81	51. Perform operation and maintenance at Idaho Power-enhanced BLM and Forest Service reservoir-related recreational sites to benefit recreation, provide public access, enhance visitor services and user satisfaction, and reduce the responsibilities of federal agencies to provide operations and maintenance (O&M) services.	IPC	\$0	\$85,300	\$85,300	Idaho Power estimate with staff parameters.	Yes
IPC-65	52. Enhance Eagle Bar dispersed recreational site and improve boat ramp access to Hells Canyon reservoir.	IPC	\$150,000	\$0	\$15,300	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-57	53. Develop site plan for Big Bar recreational site to accommodate recreational use and provide cultural and natural resource protection.	IPC	\$50,000	\$0	\$5,500	Idaho Power estimate with staff parameters.	Yes
IPC-58	54. Enhance boat ramp and associated facilities at Big Bar Section D recreational site to improve access to lower Hells Canyon reservoir and provide cultural and natural resource protection.	IPC	\$249,900	\$0	\$25,500	Idaho Power estimate with staff parameters.	Yes
IPC-56	55. Develop site plan and enhance Eckels Creek dispersed recreational site to benefit recreation and provide cultural and natural resource protection.	IPC	\$30,000	\$0	\$3,100	Idaho Power estimate with staff parameters.	Yes
IPC-68	56. Supplement the existing O&M budget to accommodate enhancements at Idaho Power-managed parks and recreational facilities.	IPC	\$0	\$85,300	\$85,300	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-63	57. Develop and implement a site plan for the Copper Creek dispersed recreational site to benefit recreation and provide cultural and natural resource protection.	IPC	\$50,000	\$0	\$5,100	Idaho Power estimate with staff parameters.	Yes
IPC-77	58. Reconstruct Hells Canyon Park to benefit recreation, improve public access, and protect cultural and natural resources.	IPC	\$2,000,000	\$0	\$176,100	Idaho Power estimate with staff parameters.	Yes
IPC-54	59. Develop Airstrip A&B dispersed recreational site to benefit recreation, improve public access, and protect cultural and natural resources.	IPC	\$40,000	\$0	\$4,100	Idaho Power estimate with staff parameters.	Yes
IPC-59	60. Develop and implement a site plan for Bob Creek Section A dispersed recreational site to benefit recreation, improve public access, and protect cultural and natural resources.	IPC	\$50,000	\$0	\$5,100	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-60	61. Develop and implement a site plan for Bob Creek Section B dispersed recreational site to benefit recreation, improve public access, and protect cultural and natural resources.	IPC	\$25,000	\$0	\$2,500	Idaho Power estimate with staff parameters.	Yes
IPC-61	62. Develop and implement a site plan for Bob Creek Section C dispersed recreational site to benefit recreation, improve public access, and protect cultural and natural resources.	IPC	\$50,000	\$0	\$5,100	Idaho Power estimate with staff parameters.	Yes
IPC-73	63. Develop and implement a site plan for Westfall dispersed recreational site to benefit recreation, improve public access, and protect cultural and natural resources.	IPC	\$60,000	\$0	\$6,100	Idaho Power estimate with staff parameters.	Yes
IPC-64	64. Enhance Copperfield boat launch area to benefit day-use activities.	IPC	\$100,000	\$0	\$9,500	Idaho Power estimate with staff parameters.	Yes
IPC-69	65. Implement a site plan for Oxbow boat launch to benefit recreation, improve public access,	IPC	\$80,000	\$0	\$7,600	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-62	and protect cultural and natural resources. 66. Implement a site plan for Carters Landing and Old Carters Landing recreational sites to benefit recreation, improve public access, and protect cultural and natural resources.	IPC	\$80,000	\$0	\$8,200	Idaho Power estimate with staff parameters.	Yes
IPC-78	67. Reconstruct McCormick Park to meet current standards of services, benefit recreation, improve public access, and protect cultural and natural resources.	IPC	\$3,000,000	\$0	\$266,500	Idaho Power estimate with staff parameters.	Yes
IPC-66	68. Develop and implement a site plan for Hewitt and Holcomb Parks to accommodate recreational use and provide cultural and natural resource protection.	IPC	\$99,900	\$0	\$10,200	Idaho Power estimate with staff parameters.	Yes
IPC-55	69. Develop and implement a site plan for a low-water boat launch at or near Swedes Landing to improve boat access to	IPC	\$250,000	\$0	\$25,200	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-72	Brownlee reservoir during seasonal reservoir drawdowns and periods of low reservoir levels. 70. Develop and implement a site plan for Swedes Landing to benefit recreation, improve public access, and protect cultural and natural resources.	IPC	\$75,000	\$0	\$7,300	Idaho Power estimate with staff parameters.	Yes
IPC-71	71. Develop and implement a site plan for Spring recreational site to enhance recreational facilities and improve boat ramp access to Brownlee reservoir.	IPC	\$500,000	\$0	\$46,000	Idaho Power estimate with staff parameters.	Yes
Total Idaho Power Proposal			\$9,779,800	\$345,900	\$1,178,600		
Subtotal Staff Alternative			\$9,779,800	\$345,900	\$1,178,600		

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Table E-9. Developmental analysis of new land use and aesthetic resources measures proposed by Idaho Power.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-53	73. Incorporate aesthetic concerns when upgrading or repairing the existing transmission line 945.	IPC	\$20,000	\$3,300	\$5,500	Idaho Power estimate with staff parameters.	Yes
IPC-46	74. Develop standards and guidelines for designing new physical structures and modifying existing structures to achieve aesthetic and other goals.	IPC	\$35,000	\$0	\$3,800	Idaho Power estimate with staff parameters.	Yes
IPC-45	75. Establish standards and guidelines for the design of vegetation and hardscape elements and structures in developed areas to control noxious weeds and to achieve aesthetic and other goals.	IPC	\$20,000	\$0	\$2,200	Idaho Power estimate with staff parameters.	Yes
IPC-48	76. Implement a general aesthetic clean-up plan to enhance the quality of the recreational experience in specific areas.	IPC	\$215,000	\$4,600	\$28,100	Idaho Power estimate with staff parameters.	Yes
IPC-52	77. Replace guardrails and Jersey barriers with barriers of corten steel or other visually acceptable material, except where Jersey barriers function as barriers to slides	IPC	\$160,000	\$0	\$13,900	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-50	and falling rocks along roads and developed areas. 78. Reduce the visual contrast of certain project facilities with their environment to improve aesthetics and enhance the recreational experience near those facilities.	IPC	\$304,000	\$4,100	\$32,900	Idaho Power estimate with staff parameters.	Yes
IPC-47	79. Cooperate with BLM and the Forest Service to develop and assist them with implementing proposed design standards and guidelines at specific BLM and Forest Service facilities, including the Spring recreational site on Brownlee reservoir (BLM), Copper Creek trailhead on Hells Canyon reservoir (BLM), and Big Bar and Eagle Bar on Hells Canyon reservoir (Forest Service).	IPC	\$10,000	\$0	\$1,100	Idaho Power estimate with staff parameters.	Yes
IPC-49	80. Provide signs and/or facilities that interpret some elements of the Hells Canyon Project that cannot be effectively modified to reduce their visual contrast.	IPC	\$11,000	\$0	\$1,200	Idaho Power estimate with staff parameters.	Yes

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment	Included in the Staff Alternative
IPC-51	81. Implement the common policies of the Hells Canyon Resource Management Plan to provide for the management, protection, and/or conservation of natural and cultural resources.	IPC	\$0	\$70,000	\$70,000	Idaho Power estimate with staff parameters.	Yes
Total Idaho Power Proposal			\$775,000	\$82,000	\$158,700		
Subtotal Staff Alternative			\$775,000	\$82,000	\$158,700		

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APPENDIX F
DEVELOPMENTAL ANALYSIS OF OTHER MEASURES INCLUDED
IN THE STAFF ALTERNATIVE

Table F-1. Developmental analysis of new sediment transport measures included in the Staff Alternative.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
Staff-ST-1	Develop and implement a gravel augmentation pilot program (Staff 7).	Staff	\$25,000	\$46,300	\$49,000	Staff estimate.
Interior-68	5-year volumetric monitoring of sand and gravel bars (Staff 1).	Interior	\$0	\$28,800	\$28,800	Staff estimate.
OPRD-1	Apply a bank stabilization treatment to Farewell Bend State Park (Staff 21c).	OPRD	\$720,400	\$0	\$78,700	Staff estimate.
	Subtotal Staff Alternative (this table)		\$745,400	\$75,100	\$156,500	
	Subtotal Staff Alternative (IPC table)		\$0	\$0	\$0	
	Total Staff Alternative		\$745,400	\$75,100	\$156,500	

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Table F-2. Developmental analysis of new water quality measures included in the Staff Alternative.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
ST-WQ-1	Monitor Snake River water quality just upstream of and in Brownlee reservoir, at the Brownlee dam discharge, and downstream of Hells Canyon dam (Staff 4).	Staff	\$0	\$100,000	\$100,000	Staff estimate.
AR/IRU-17c	Adaptively manage dissolved oxygen beginning at Brownlee, proceeding downstream (IPC 4).	AR/IR U	\$0	\$2,000	\$2,000	Staff estimate.
AR/IRU-18b	Adaptively manage TDG, beginning at Hells Canyon and moving upstream (Staff 3).	AR/IR U	\$0	\$2,000	\$2,000	Staff estimate.
Interior-62b	Monitor effectiveness of TDG-abatement measures (Staff 3).	Interior	\$30,000	\$11,400	\$14,100	Staff estimate.
Interior-64	Comply with IDEQ and ODEQ water quality certifications (WQC).	Interior	\$0	\$0	\$0	WQCs have not yet been issued, hence these costs have not been estimated. It is likely that staff would include this measure.
ST-WQ-2	Design and construct a gas abatement structure at the Oxbow dam spillway (IPC 5).	NMFS	\$4,000,000	\$0	\$287,900	Staff estimate based on contract of \$2.5 million for construction of Ice Harbor spillway deflectors in 1996. Assumed operational in year 7.

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Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
NMFS-11	Design and construct a gas abatement structure at the Brownlee dam spillway (IPC 5).	NMFS	\$4,000,000	\$0	\$354,700	Based on contract of \$2.5M for construction of Ice Harbor spillway deflectors in 1996. Assumed operational in year 4.
NMFS-12	Evaluate and implement the most effective methods to augment Hells Canyon outflow DO levels in late summer and fall (IPC 4).	NMFS	\$100,000	\$0	\$10,900	Staff estimate, evaluation and preliminary design only—no implementation of control measure.
NPT-16a	Construct DO-augmentation structures on Hells Canyon dam (IPC 4).	NPT	\$2,633,000	\$1,262,600	\$1,530,900	Staff estimate. This measure may affect energy and that cost is reflected in the O&M cost.
ODFW-54a	Develop TDG-abatement plan (Staff 3).	ODFW	\$20,000	\$0	\$2,200	Staff estimate.
ODFW-55	Develop and implement a plan to ensure that the project does not contribute to violation of Oregon's dissolved oxygen standard within or below the project (IPC 4).	ODFW	\$20,000	\$0	\$2,200	Staff estimate, cost for plan only—no control measures.
ODFW-56	Develop and implement a temperature management plan (Staff 2).	ODFW	\$50,000	\$0	\$5,500	Staff estimate. Estimate for development of plan—unknown cost for implementation.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
ODFW-57	Conduct a study to determine mercury, dieldrin, and DDT/DDE levels in Brownlee reservoir fish (Staff 5).	ODFW	\$0	\$21,400	\$21,400	Staff estimate.
ODFW-58	Implement water quality monitoring measures (Staff 4).	ODFW	\$40,000	\$0	\$4,400	Staff estimate, cost of plan only.
	Subtotal Staff Alternative (this table)		\$10,893,000	\$1,399,400	\$2,338,200	
	Subtotal Staff Alternative (IPC table)		\$4,000,000	\$0	\$407,600	
	Total Staff Alternative		\$14,893,000	\$1,399,400	\$2,745,800	

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Table F-3. Developmental analysis of new operational measures included in the Staff Alternative.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Annualized Reduction in Energy Benefit	Comment
ST-1	Implement a 4-inch-per-hour ramp rate measured at Johnsons Bar from March 15 through June 15, to be adjusted if warranted based on monitoring studies (Staff Op-3)	Staff	\$1,600,000	\$68,000	\$242,800	\$6,771,100	Staff estimate based on Idaho Power response to AIR OP-1. Value interpolated between scenarios 1d and 1e.
Corps-1	The flood control draft for Brownlee in preparation of the spring runoff should be determined consistent with the November 1998 Procedure for Determining Flood Control Draft at Brownlee reservoir (IPC).	Corps	\$0	\$0	\$0	\$0	No incremental power benefits effect relative to current conditions.
Corps-2	Handle future winter flood control operations for Brownlee reservoir in conjunction with the Corps on a case-by case basis (IPC).	Corps	\$0	\$0	\$0	\$0	No incremental power benefits effect relative to current conditions.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Annualized Reduction in Energy Benefit	Comment
Corps-6	Prevent the maximum variation in river stage from exceeding 1 foot per hour as measured at the Snake River at Johnson's Bar station (Staff Op-3).	Corps	\$0	\$0	\$0	\$0	No incremental power benefits effect relative to current conditions.
IDFG-1a	Continue Idaho Power's fall Chinook spawning program which includes providing stable flows (IPC).	IDFG	\$0	\$0	\$0	\$0	No incremental power benefits effect relative to current conditions.
NMFS-1	Provide stable flows between 8,500 and 13,500 cfs below Hells Canyon dam throughout fall Chinook spawning season (monitor) (IPC).	NMFS	\$0	\$0	\$0	\$0	No incremental power benefits effect relative to current conditions.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Annualized Reduction in Energy Benefit	Comment
NMFS-2	Provide instantaneous minimum flows below Hells Canyon dam that are equal to, or greater than, the stable flows provided during the preceding fall Chinook salmon spawning period throughout the incubation period unless surveys indicate that shallow water redds can be fully protected at a lower flow (IPC).	NMFS	\$0	\$0	\$0	\$0	No incremental power benefits effect relative to current conditions.
NMFS-8	Refill Brownlee reservoir to within 1 foot of the April 15 and April 30 minimum elevations necessary to meet the Corps flood control requirements and coordinate refill with NMFS (Staff Op-1).	NMFS	\$0	\$0	\$0	\$0	Not estimated.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Annualized Reduction in Energy Benefit	Comment
NMFS-9	Refill Brownlee reservoir to full pool by June 20, release 237 kaf of stored water from Brownlee reservoir between June 21 and July 31 (release at least 150 kaf of this water by July 15) and not refill until after August 31 (Staff Op-2).	NMFS	\$0	\$0	\$0	\$6,534,000	Staff estimate based on Idaho Power response to AIR OP-1. Value estimated from scenario 2 times ratio of 237 to 350 KAF.
	Subtotal Staff Alternative (this table)		\$1,600,000	\$68,000	\$242,800	\$16,420,400	See table 93 for explanation of subtotal.
	Subtotal Staff Alternative (IPC table)		\$0	\$0	\$0	\$0	
	Total Staff Alternative		\$1,600,000	\$68,000	\$242,800	\$16,420,400	

Table F-4. Developmental analysis of new aquatic resources measures included in the Staff Alternative.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
AMC-Interior-87	Develop and implement a bull trout passage plan, modify the Hells Canyon fish trap and construct a permanent monitoring weir at Pine Creek, conduct pathogen surveys, conduct monitoring studies needed to determine when trigger criteria have been met to construct an adult trap at Oxbow dam and permanent monitoring weirs on Indian Creek and the Wildhorse River, evaluate and monitor fishway effectiveness (includes Staff 6 and Staff 9).	IPC	\$11,258,000	\$619,700	\$1,369,400	Idaho Power cost estimates used for Hells Canyon fish trap modification and monitoring weir at Pine Creek. Other components estimated by staff. Assumes modification of Hells Canyon trap in year 2, construction of Pine Creek weir in year 5, construction of Indian Creek weir in year 10, Oxbow trap and Wildhorse weir in year 20.
NMFS-5	Develop and implement a stranding and entrapment monitoring plan.	NMFS	\$0	\$28,700	\$28,700	Staff estimate.
ST-AQ-4	Expanded experimental conservation plan to include stocking of project reservoirs (IPC 11c).	Staff	\$0	\$42,000	\$42,000	Staff estimate.
ST-AQ-6	Fall Chinook spawning and incubation flow management plan (Staff 10).	Staff	\$25,000	\$0	\$2,700	Staff estimate.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
ST-AQ-7	Flow augmentation evaluation report (Staff 8).	Staff	\$25,000	\$0	\$2,700	Staff estimate.
	Subtotal Staff Alternative (this table)		\$11,308,000	\$690,400	\$1,445,500	
	Subtotal Staff Alternative (IPC table)		\$8,500,000	\$230,300	\$1,158,700	
	Total Staff Alternative		\$19,808,000	\$892,000	\$2,604,200	

Table F-5. Developmental analysis of new hatchery measures included in the Staff Alternative.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
ST-HT-1	Develop hatchery management plan for each hatchery (IPC 10).	Staff	\$0	\$66,700	\$66,700	Staff estimate.
IDFG-7	Purchase new adult fish transport vehicle (IPC 10).	IDFG	\$160,000	\$2,000	\$18,300	Staff estimate.
NMFS-131	Screen hatchery water intakes to meet NMFS juvenile fish screen criteria (IPC 10).	NMFS	\$10,000	\$0	\$1,100	Staff estimate.
NMFS-13m	Assess and minimize impacts of Hatchery Steelhead to listed ESUs (IPC 10).	NMFS	\$0	\$8,300	\$8,300	Staff estimate.
	Subtotal Staff Alternative (this table)		\$170,000	\$77,000	\$94,400	
	Subtotal Staff Alternative (IPC table)		\$17,006,000	\$469,200	\$2,326,700	
	Total Staff Alternative		\$17,176,000	\$546,200	\$2,421,100	

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Table F-6. Developmental analysis of new terrestrial resources measures included in the Staff Alternative.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
FS-7	Prepare an Integrated Weed Management Plan	FS	\$30,000	\$0	\$3,300	Staff estimate.
FS-8	Prepare and implement a Threatened and Endangered Species Management and Monitoring Strategy (Staff 12).	FS	\$2,000	\$2,000	\$2,200	Staff estimate.
FS-11	Develop and implement a Transmission Line Operation and Maintenance Plan	FS	\$50,000	\$0	\$5,500	Staff estimate.
FS-34	Finalize and implement the Hells Canyon Resource Management Plan, Integrated Wildlife Habitat Program and Wildlife Mitigation and Management Plan (Staff 15).	FS	\$50,000	\$20,000	\$25,500	Staff estimate.
Interior-23	Submit pesticide plans and reports to BLM (IPC 18).	Interior	\$1,000	\$500	\$600	Staff estimate.
Interior-77	Develop and implement Integrated Weed Management Plan for project lands, including cooperative projects on adjacent lands (IPC 18).	Interior	\$10,000	\$0	\$1,100	Staff estimate plus Idaho Power estimate.
Interior-82	As part of Threatened, Endangered, and Sensitive Species Management Plan, implement measures to protect Townsend's big-eared bat maternity sites and hibernacula (Staff 12).	Interior	\$0	\$1,500	\$1,500	Idaho Power estimate.
Interior-83	As part of Threatened, Endangered, and Sensitive Species Management Plan, implement measures to protect southern Idaho ground squirrel (Staff 12).	Interior	\$10,000	\$1,000	\$2,100	Staff estimate.

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Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
Interior-85	As part of Threatened, Endangered, and Sensitive Species Management Plan, implement measures to protect special status amphibians and reptiles (Staff 12).	Interior	\$0	\$1,000	\$1,000	Staff estimate.
Interior-34b	As part of project-wide plan, develop and implement Threatened, Endangered, and Sensitive Species Management Plan for BLM-administered lands inside project boundary (Staff 12).	Interior	\$5,000	\$5,000	\$5,500	Staff estimate.
ODFW-72	As part of WMMP, schedule O&M to minimize disturbance on deer winter range (Staff 15).	ODFW	\$0	\$1,000	\$1,000	Staff estimate.
ODFW-73	As part of WMMP, develop and implement I&E program to minimize risk of wildlife disturbance (Staff 15).	ODFW	\$5,000	\$1,000	\$1,500	Staff estimate.
ODFW-60b	Establish a Terrestrial Resources Work Group (Staff 27).	ODFW	\$50,000	\$12,000	\$17,500	Staff estimate.
Staff-TR-1	Develop and implement project-wide Threatened, Endangered, and Sensitive Species Management Plan (Staff 12).	Staff	\$10,000	\$5,000	\$6,100	Staff estimate.
Staff-TR-2	Monitor bald eagles and manage nest and roost sites as part of project-wide Threatened, Endangered, and Sensitive Species Management Plan (Staff 12).	Staff	\$5,000	\$10,000	\$10,500	Staff estimate.
Staff-TR-3	Conduct riparian planting feasibility assessment and implement stabilization/revegetation program if possible; if not, acquire 70 acres of riparian habitat offsite (Staff 11).	Staff	\$150,000	\$10,000	\$26,400	Staff estimate.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
Staff-TR-4	As part of Transmission Line O&M Plan for transmission line 945, monitor electrocution and collision and implement measures to reduce risks (Staff 13).	Staff	\$0	\$1,000	\$1,000	Staff estimate.
Staff-TR-5	Enhance 13 acres of riverine riparian habitat along the Snake River below Hells Canyon dam (Staff 14).	Staff	\$65,000	\$0	\$6,200	Staff estimate.
	Subtotal Staff Alternative (this table)		\$443,000	\$71,000	\$118,500	
	Subtotal Staff Alternative (IPC table)		\$9,547,000	\$870,100	\$1,882,400	
	Total Staff Alternative		\$9,990,000	\$941,100	\$2,000,900	

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Table F-7. Developmental analysis of new cultural resources measures included in the Staff Alternative.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
AMC-FS-25	Modified FS Condition 25 - finalize a Historic Properties Management Plan (HPMP) for cultural resources within the area of potential effect (APE) for the project. The list of topics included in the plan is modified from FS condition 25 (Staff 19).	IPC	\$0	\$800	\$800	Staff estimate.
BPT-15	Establish a Cultural Resources Task Force that adds an oversight committee (Staff 27).	BPT	\$0	\$1,000	\$1,000	Staff estimate.
Staff-CR-1	Renew, within a specified time frame, the offer to fund oral histories for the Shoshone-Bannock and Shoshone-Paiute Tribes (Staff 16).	Staff	\$0	\$7,600	\$7,600	Staff estimate.
Staff-CR-2	Within 1 year of license issue, develop monitoring plan for archaeological sites, rock art and TCPs in consultation with the tribes, SHPOs, Forest Service and BLM and file with the Commission (Staff 17).	Staff	\$0	\$2,300	\$2,300	Staff estimate.
Staff-CR-3	Within 1 year of license issue, in consultation with the tribes, SHPOs, Forest Service, and BLM, develop an implementation plan for Study 8.4.7, <i>Effects of Reservoir Water Level Fluctuations on Cultural Resources</i> , which Idaho Power deferred, in consultation with the CRWG, until the monitoring plan was implemented. File with the Commission (Staff 18).	Staff	\$0	\$1,900	\$1,900	Staff estimate.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
Staff-CR-4	Within 1 year of license issue, finalize HPMP in consultation with tribes, SHPOs, Forest Service, and BLM, and file with the Commission (Staff 19).	Staff	\$0	\$800	\$800	Staff estimate.
Staff-CR-5	Expand monitoring program to cover all known historic properties in the project APE (Staff 17).	Staff	\$0	\$185,500	\$185,500	Staff estimate.
Staff-CR-6	Develop and implement a program to re-evaluate buildings and structures within the project boundary as they reach 50 years old (Staff 20).	Staff	\$0	\$3,000	\$3,000	Staff estimate.
NPT-27	Update the 1984 National Register nomination for the Hells Canyon Archaeological District, to incorporate the numerous additional sites identified during the relicensing surveys (Staff 20).	NPT	\$0	\$5,700	\$5,700	
	Subtotal Staff Alternative (this table)		\$0	\$208,600	\$208,600	
	Subtotal Staff Alternative (IPC table)		\$77,000	\$323,700	\$332,100	
	Total Staff Alternative		\$77,000	\$532,300	\$540,700	

Table F-8. Developmental analysis of new recreation measures included in the Staff Alternative.

Identifier	Measure	Entity	Capital Cost	Annualize d O&M Cost	Total Annualized Cost	Comment
Interior-6	Prepare a Comprehensive Recreational Plan (Staff 21).	Interior	\$70,000	\$0	\$7,600	Staff estimate.
FS-13	Develop a site development plan for the Big Bar recreation area (IPC 53).	FS	\$0	\$10,000	\$10,000	Staff estimate.
FS-16	Complete a condition and safety inspection of Deep Creek Stairway/Trail #218 and correct any deficiencies found during inspection (Staff 21e).	FS	\$80,000	\$3,000	\$11,700	Staff estimate.
FS-18	Perform the operations and maintenance necessary to meet Forest Service standards for Eagle Bar, Eckels Creek, Big Bar, parking areas along Hells Canyon reservoir, Black Point Viewpoint, and dispersed areas pursuant to the Recreation Plan (see Staff 21g).	FS	\$0	\$0	\$0	Staff estimate of \$0 included in the staff estimate for incremental additional costs for the site-specific FS recommendations
FS-21	Design, construct, and maintain facility enhancements at the Hells Canyon Creek Launch Site and Visitor Center (Staff 21f).	FS	\$275,000	\$10,000	\$36,100	Staff estimate.
Interior-8	Develop a Project Boat Moorage Plan (see IPC 45).	Interior	\$0	\$5,000	\$5,000	Staff estimate.
Interior-9	Develop an enhancement plan for the BLM sites referred to as Airstrip, Bob Creek section C, and Westfall (IPC 59, 62, and 63)	Interior	\$0	\$4,600	\$4,600	Staff estimate.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
Interior-10	Develop an enhancement plan for the BLM Swedes Landing site (IPC 70)	Interior	\$0	\$5,000	\$5,000	Staff estimate.
Interior-11	Develop an enhancement plan for the BLM Spring recreation site (IPC 71).	Interior	\$0	\$5,000	\$5,000	Staff estimate.
Interior-12	Portion of revised Interior condition 12– Steck recreation site improved communication system (Staff 21b).	Interior, staff	\$35,000	\$0	\$3,800	Staff estimate.
Interior-13	Develop an enhancement plan for the BLM site referred to as Jennifer’s Alluvial Fan Site (Staff 21d).	Interior	\$50,000	\$5,000	\$9,800	Staff estimate.
Interior-14	Develop an Idaho Dispersed Sites Plan (IPC 49).	Interior	\$200,000	\$50,000	\$69,000	Staff estimate.
Interior-15	Develop an enhancement plan for the BLM site referred to as Carter’s Landing and Oxbow Boat Launch (IPC 65 and 66).	Interior		\$10,000	10,000	Staff estimate
Interior-16	Revised Interior Condition 16— develop site plan for minor improvements and monitor the need for a higher level of development at the BLM site referred to as Oasis through the Recreation Adaptive Management Plan during the license term (Staff 21a).	Interior	\$50,000	\$0	\$4,400	Staff estimate.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
Interior-17	Develop an enhancement plan for the BLM site referred to as Copper Creek (Staff 21g).	Interior	\$0	\$5,000	\$5,000	Staff estimate.
Interior-18	Develop a Low-Water Boat Launch Plan As modified by staff to lessen layers of decision-making authorities reduces the number of steps in consultation processes (IPC 70).	Interior	\$0	\$5,000	\$5,000	Staff estimate.
Interior-32b	As part of the warmwater fisheries plan (Interior-32a), describe relationship between the timing of reservoir level fluctuations and the ability to access and launch boats at existing Idaho Power boat ramps, and satisfy reservoir-level requirements of Baker County Settlement Agreement.	Interior	\$0	\$0	\$0	Unknown.
NMFS-20	Design and construct an anadromous fish interpretive display located at a mutually agreeable location near Brownlee dam (IPC 47).	NMFS	\$8,000	\$500	\$1,400	Staff estimate.
ODFW-79	Hells Canyon Park Consultation—ODFW (Staff 21)	ODFW	\$0	\$0	\$0	Staff estimate.
OPRD-2	Sediment Maintenance Plan for Farewell Bend State Park—OPRD (Staff 21c).	OPRD	\$2,000	\$4,000	\$4,200	Staff estimate.
OSMB-6	I&E Plan (IPC 47)	OSMB	\$0	\$0	\$0	Staff estimate.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
Interior-7	Implement Litter and Sanitation Plan as modified by staff to include the service schedule and include floating restrooms only where the need is confirmed through consultation (IPC 46).	Interior	\$120,000	\$55,000	\$66,800	Staff estimate.
	Subtotal Staff Alternative (this table)		\$890,000	\$177,100	\$264,500	
	Subtotal Staff Alternative (IPC table)		\$9,779,800	\$345,900	\$1,178,600	
	Total Staff Alternative		\$10,669,800	\$523,000	\$1,443,000	

Table F-9. Developmental analysis of new land use and aesthetic resources measures included in the Staff Alternative.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
ST-LM-1	Expand the HCRMP by creating the following maps: map of roads for which Idaho Power should be responsible for within the HCRMP. Maps will be made available to the public as part of the I&E program that include 1) roads and important resource areas and areas of high wildlife collisions, and 2) land and water use designations (IPC 72).	Staff	\$15,000	\$0	\$1,500	Staff estimate.
ST-LM-2	Create oversight and Resource Technical Advisory Committees (Staff 27).	Staff	\$0	\$50,000	\$50,000	Staff estimate.
FS-1	Obtain Forest Service approval of site-specific designs prior to start of Idaho Power activities on National Forest System lands as modified by staff to limit scope to Forest Service lands in the project boundary (Staff 25).	FS	\$0	\$1,000	\$1,000	Staff estimate.
FS-2	Prepare and implement a Resource Coordination Plan as modified by staff to limit scope to Forest Service lands in the project boundary (Staff 25).	FS	\$10,000	\$5,000	\$6,100	Staff estimate.
FS-3	Prepare a Fire Prevention Plan (IPC 81).	FS	\$10,000	\$1,000	\$2,000	Staff estimate.
FS-22	Develop and implement an aesthetic improvement plan for the upper deck, entrance, and egress areas of Hells Canyon dam as modified by staff to limits measures to Forest Service lands and excludes restroom and measures that could compromise security (Staff 26).	FS	\$0	\$0	\$0	Staff estimate.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
FS-23	Finalize Idaho Power's proposed Comprehensive Management Plan relating to design standards and landscaping as modified by staff to adopt standards developed by Aesthetics Subgroup (Staff 22).	FS	\$25,000	\$0	\$2,500	Staff estimate.
FS-24	Prepare and implement a Scenery Management Plan for Forest Service lands as modified by staff to adopt standards developed by Aesthetics Subgroup (Staff 22).	FS	\$10,000	\$0	\$1,000	Staff estimate.
FS-26	Obtain agreement from the Forest Service regarding Forest Service land within a modified project boundary and locate the land with monuments tied to a Public Land Survey System as modified by staff to include alternative means of defining boundary on the ground (Staff 24).	FS	\$20,000	\$0	\$2,000	Staff estimate.
Interior-1	Follow BLM requirements for Idaho Power activities on or affecting BLM-administered lands as modified by staff to limit the scope to activities on BLM land and permit more flexibility in timing (Staff 25).	Interior	\$40,000	\$0	\$4,400	Staff estimate.
Interior-25	Develop a Visual Resource Management Plan for project facilities to address the design, maintenance, and construction of project facilities (both existing and future facilities) in order to preserve or enhance visual resource values in the project area (Staff 22).	Interior	\$25,000	\$0	\$2,500	Staff estimate.

Identifier	Measure	Entity	Capital Cost	Annualized O&M Cost	Total Annualized Cost	Comment
Interior-30	Modify the Project boundary to include all of the land within the Airstrip, Steck Park, Swedes Landing, and Westfall recreation sites (Staff 23).	Interior	\$10,000	\$0	\$1,000	Staff estimate.
ODFW-76	Develop a road management plan (IPC 81).	ODFW	\$10,000	\$0	\$1,100	Staff estimate.
OSMB-3	Facilitate biannual law enforcement proceedings (IPC 81).	OSMB	\$0	\$5,000	\$5,000	Staff estimate.
	Subtotal Staff Alternative (this table)		\$175,000	\$62,000	\$80,100	
	Subtotal Staff Alternative (IPC table)		\$775,000	\$82,000	\$158,700	
	Total Staff Alternative		\$950,000	\$144,000	\$238,800	

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