

Responses to FERC Additional Information Request DR-4

Estimated Cost of PM&E Measures

Final Report

Hells Canyon Project FERC No. P-1971-079 February 2005

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SCHEDULE A: ADDITIONAL INFORMATION REQUEST DR-4 ESTIMATED COST OF PM&E MEASURES

Time Required: 9 months

In the Executive Summary of your license application, you provide the estimated total cost of each of your proposed PM&E measures, and in exhibit E you provide information as to the nature and timing of the costs for each measure. Also, you indicate which measures are a continuation of existing operations and which measures would be new. However, the information provided lacks the specific cash-flow information that would enable us to replicate your annual cost calculations and to independently evaluate your assumptions. Further, tables D-1 and D-2 in exhibit D of your application fail to differentiate between existing PM&E measures and new PM&E measures. The economic baseline for our developmental analysis is current project cost, inclusive of existing PM&E measures. It is unclear in which column of tables D-1 and D-2 existing PM&E measures are included.

Subsequent to the Commission's Notice of Ready for Environmental Analysis, interested parties will submit recommendations, terms and conditions, and prescriptions. To ensure a consistent approach to estimating the cost of proposed and alternative PM&E measures, we require that you provide cost estimates for the alternative measures in a format consistent with the cost estimates for your proposed measures.

Accordingly, please provide the following:

- (a) A 30-year cash-flow table showing, for each existing measure you propose for continuation: (a) the capital costs of the measure in the year(s) incurred; (b) the O&M costs of the measure over the 30-year period of analysis; (c) the levelized annual capital cost; (d) the levelized annual O&M cost; and (e) the total levelized annual cost of the measure. Within the table, the measures should be grouped by resource, and the table should include summations of the total levelized annual cost by resource. The cash-flow table should be in Microsoft Excel and include the supporting formulas.
- (b) A 30-year cash-flow table showing, for each proposed new measure: (a) the capital costs of the measure in the year(s) incurred; (b) the O&M costs of the measure over the 30-year period of analysis; (c) the levelized annual capital cost; (d) the levelized annual O&M cost; and (e) the total levelized annual cost of the measure. Within the table, the measures should be grouped by resource, and the table should include summations of the total levelized annual cost by resource. The cash-flow table should be in Microsoft Excel and include the supporting formulas.
- (c) Revised tables D-1 and D-2 that are consistent with the above cash-flow tables, and which provide data for (i) conditions with no PM&E measures; (ii) conditions with proposed continuation of existing PM&E measures; and (iii) conditions with both (1) proposed continuation of existing PM&E measures and (2) proposed new PM&E measures. In Table D-1 of your license application, you estimate the cost of your relicensing process at \$208.5 million, without escalation. Please provide documentation supporting this figure.

1. Introduction

In accordance with FERC AIR DR-4, this response addresses the specific cash flow information requested to replicate and evaluate the Applicant's assumptions regarding costs of various PM&E measures. Revised tables are being provided that modify Table D-1 and D-2 from the original license application. Finally, specific questions regarding the estimated cost of the relicensing process are addressed.

2. RESPONSES

2.1. Response to DR-4(a)

Exhibit E of the license application makes reference to some specific existing/ongoing measures relating to Hells Canyon operations; however, the existing and ongoing annual costs of the project in Exhibit D are based on 1) anticipated overall project investment at the time of original license expiration, and 2) annual average operating costs at the project (including taxes, insurance, and normal operations and maintenance) for the previous five operating years leading up to the filing of the license application. Therefore, the existing/ongoing costs reflected throughout Exhibit D are inclusive of not only the costs of the specific existing measures mentioned in Exhibit E, but also the cost of capital on plant investment carrying forward into the new license period, and other ongoing operating costs. Tables are being provided in **Appendices A-C** that detail the 30-year total and annual capital, O&M, and total combined cash flows for each of the specific existing measures mentioned in Exhibit E. The levelized annual capital cost, average annual O&M cost, and annual combined capital and O&M cost for each existing measure is included in the cash flow schedules in **Appendices A-C** as well. The tables are being provided in Microsoft Excel.

2.2. Response to DR-4(b)

Tables are being provided in **Appendices D-F** that detail the total and annual capital, O&M, and combined cash flows for each of the new PM&E measures proposed in the license application. The levelized annual capital cost, average annual O&M cost, and annual combined capital and O&M cost for each proposed new measure are included in **Appendices D-F** as well. The tables are being provided in Microsoft Excel.

2.3. Response to DR-4(c)

Table 1 and Table 2 have been included in this response and modify tables D-1 and D-2 that were submitted in the original license application, and are consistent with the cash flow tables submitted in the Appendices of this response. **Table 1** summarizes the estimated total and levelized cost of capital for the Hells Canyon Complex with no PM&E's, with existing PM&E's, and with proposed new PM&E's. **Table 2** summarizes the estimated total and annual operating expenses for the Hells Canyon Complex with no PM&E's, with existing PM&E's, and with proposed new PM&E's.

Annual operating expenses throughout Exhibit D of the license application and within this response are stated as averages of each 30-year expense stream. Because these streams represent future expected

annual cash outflows rather than front-loaded costs of capital, the Applicant feels that a better representation of annual cost is a 30-year average rather than a levelized cost. The field entitled "Annual Measure Cost" in Appendices C and F represents the levelized cost of capital for each measure plus the average annual operating cost for that measure.

The \$208.5 million figure in the license application for the total cost of capital relating to relicensing study and license preparation costs is derived from a projected \$80.7 million balance in the Construction Work in Progress (CWIP) account relating to Hells Canyon Complex relicensing at the time the original license expires in 2005. This estimated balance was determined from the actual Hells Canyon relicensing CWIP balance for the project at the end of calendar year 2002, plus projections of relicensing capital expenditures for years 2003, 2004, and the first half of 2005. The same financing, capital structure assumptions, and overall methodology used for cost of capital calculations for these investments were used in the financial analysis for existing and proposed project investment. The projected ending relicensing balance of \$80.7 million includes Allowance for Funds Used During Construction (AFUDC).

Estimated Cost of PM&E Measures Idaho Power Company

Table 1. Estimated HCC cost of capital in millions of dollars (with and without PM&Es).

	Cost of Capit	al without P	M&Es	Cost of Capital	with Existing	PM&Es	Cost of Capital with Existing and Proposed New PM&Es		
	Escalation Applied @2.5%	No Escalation	30-Year Levelized	Escalation Applied @2.5%	No Escalation	30-Year Levelized	Escalation Applied @ 2.5%	No Escalation	30-Year Levelized
Existing Project Investment	319.5	318.9	12.6	319.5	318.9	12.6	319.5	318.9	12.6
Committed Construction (03-05)	6.4	6.4	0.2	6.4	6.4	0.2	6.4	6.4	0.2
Existing PM&Es *	N/A	N/A	N/A	81.9	81.9	3.5	81.9	81.9	3.5
Relicensing Study and Prep Costs	N/A	N/A	N/A	211.0	208.5	8.8	211.0	208.5	8.8
Proposed New PM&Es	N/A	N/A	N/A	N/A	N/A	N/A	159.7	146.3	6.2
Total Cost of Capital	325.9	325.3	12.9	618.8	615.7	25.1	778.5	762.0	31.3

^{*} The cost of capital for existing measures is based on projected investment at the time of original license expiration, and projected capital spending for these measures expected during the license period

Table 2. Estimated HCC expenses in millions of dollars (with and without PM&Es)

	Total Expe without Pl		Total Expenses With Existing PM&Es		Total Expo With Existing and Prop	
	Escalation Applied @2.5%	No Escalation	Escalation Applied @2.5%	No Escalation	Escalation Applied @2.5%	No Escalation
Operations and Maintenance	252.5	164.4	398.0	255.7	545.0	347.6
FERC Fees	80.4	51.6	80.4	51.6	80.4	51.6
Insurance	23.2	14.9	36.6	23.5	38.4	24.6
Property Taxes	37.9	30.7	59.7	48.4	70.3	55.6
Kwh Taxes	27.1	27.1	27.1	27.1	27.1	27.1
Opportunity Cost *	N/A	N/A	75.0	75.0	75.0	75.0
Total Cost of Capital	421.1	288.7	676.8	481.4	836.1	581.5
Average Annual	14.0	9.6	22.6	16.0	27.9	19.4

^{*} Opportunity cost associated with the Fall Chinook Plan.

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Appendix A. Capital—Existing Measures

						Capital
			Total	Present Value	Levelized (Annual)	Cash Flow
Measure_Description	Measure_Category	Measure_Type	Cost of Capital *	Cost of Capital *	Cost of Capital *	Year 1 - 30
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing				
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing				
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing				
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	20,224,560	10,490,150	855,968	2,900,000
Oxbow Fish Hatchery	Fish and Mollusc	Existing	11,435,257	5,931,282	483,977	2,900,000
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	11,815,034	6,128,266	500,050	2,900,000
Rapid River Fish Hatchery	Fish and Mollusc	Existing	11,454,163	5,941,088	484,777	2,900,000
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing				
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing				
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing				
Continuation of Aid to Local Law Enforcement	Recreation	Existing				
Continuation of Litter and Sanitation Plan	Recreation	Existing				
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	27,012,239	14,010,809	1,143,245	-
Continuation of Public Safety Program	Recreation	Existing				
Continuation of Road Maintenance	Recreation	Existing				
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing				
Memorandum of Understanding between USFS and Applicant	Recreation	Existing				
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing				
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing				
Recreation Waste Disposal	Water Quality	Existing				
Big Game Habitat Improvement Project	Wildlife	Existing				
Powder River Arm Wildlife Management Area	Wildlife	Existing				
Powerline Modification for Raptor Protection	Wildlife	Existing				
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing				
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing				
Winter Big Game Feeding	Wildlife	Existing				
Totals			81,941,254	42,501,595	3,468,018	11,600,000

^{*} NOTE: Cost of capital figures are based on projected investment for these existing measures at the end of original license expiration, AND projected capital spending for these measures expected during the new license period.

			Capital	Capital	Capital	Capital	Capital	Capital
			Cash Flow	Cash Flow	Cash Flow	Cash Flow	Cash Flow	Cash Flow
Measure_Description	Measure_Category	Measure_Type	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing						
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing						
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	2,900,000					
Oxbow Fish Hatchery	Fish and Mollusc	Existing	2,900,000					
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	2,900,000					
Rapid River Fish Hatchery	Fish and Mollusc	Existing	2,900,000					
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing						
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing						
Administration of the General Land Management Policies/Hells Canyon Resource Management F	Land Management and Aestetics	Existing						
Continuation of Aid to Local Law Enforcement	Recreation	Existing						
Continuation of Litter and Sanitation Plan	Recreation	Existing						
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	-	-	-	-	-	-
Continuation of Public Safety Program	Recreation	Existing						
Continuation of Road Maintenance	Recreation	Existing						
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing						
Memorandum of Understanding between USFS and Applicant	Recreation	Existing						
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing						
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing						
Recreation Waste Disposal	Water Quality	Existing						
Big Game Habitat Improvement Project	Wildlife	Existing						
Powder River Arm Wildlife Management Area	Wildlife	Existing						
Powerline Modification for Raptor Protection	Wildlife	Existing						
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing						
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing						
Winter Big Game Feeding	Wildlife	Existing						
Totals			11,600,000	-	-	-	-	-

^{*} NOTE: Cost of capital figures are based on projected investment for these existing measures at the end of original license expiration, AND projected capital spending for these measures expected during the new license period.

			Capital	Capital	Capital	Capital	Capital	Capital
Maria Distriction	N		Cash Flow					
Measure_Description	Measure_Category	Measure_Type	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing						
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing						
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing						
Oxbow Fish Hatchery	Fish and Mollusc	Existing						
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing						
Rapid River Fish Hatchery	Fish and Mollusc	Existing						
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing						
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing						
Administration of the General Land Management Policies/Hells Canyon Resource Management F	Land Management and Aestetics	Existing						
Continuation of Aid to Local Law Enforcement	Recreation	Existing						
Continuation of Litter and Sanitation Plan	Recreation	Existing						
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	-	-	-	-	-	-
Continuation of Public Safety Program	Recreation	Existing						
Continuation of Road Maintenance	Recreation	Existing						
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing						
Memorandum of Understanding between USFS and Applicant	Recreation	Existing						
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing						
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing						
Recreation Waste Disposal	Water Quality	Existing						
Big Game Habitat Improvement Project	Wildlife	Existing						
Powder River Arm Wildlife Management Area	Wildlife	Existing						
Powerline Modification for Raptor Protection	Wildlife	Existing						
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing						
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing						
Winter Big Game Feeding	Wildlife	Existing						
Totals			-	-	-	-	-	-

^{*} NOTE: Cost of capital figures are based on projected investment for these existing measures at the end of original license expiration, AND projected capital spending for these measures expected during the new license period.

			Capital	Capital	Capital	Capital	Capital	Capital
Marauma Danasintian	Management Code many	M	Cash Flow					
Measure_Description	Measure_Category	Measure_Type	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing						
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing						
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing						
Oxbow Fish Hatchery	Fish and Mollusc	Existing						
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing						
Rapid River Fish Hatchery	Fish and Mollusc	Existing						
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing						
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing						
Administration of the General Land Management Policies/Hells Canyon Resource Management F	Land Management and Aestetics	Existing						
Continuation of Aid to Local Law Enforcement	Recreation	Existing						
Continuation of Litter and Sanitation Plan	Recreation	Existing						
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	-	-	-	-	-	-
Continuation of Public Safety Program	Recreation	Existing						
Continuation of Road Maintenance	Recreation	Existing						
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing						
Memorandum of Understanding between USFS and Applicant	Recreation	Existing						
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing						
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing						
Recreation Waste Disposal	Water Quality	Existing						
Big Game Habitat Improvement Project	Wildlife	Existing						
Powder River Arm Wildlife Management Area	Wildlife	Existing						
Powerline Modification for Raptor Protection	Wildlife	Existing						
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing						
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing						
Winter Big Game Feeding	Wildlife	Existing						
Totals			-	-	-	-	-	-

^{*} NOTE: Cost of capital figures are based on projected investment for these existing measures at the end of original license expiration, AND projected capital spending for these measures expected during the new license period.

			Capital	Capital	Capital	Capital	Capital	Capital
			Cash Flow					
Measure_Description	Measure_Category	Measure_Type	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing						
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing						
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing						
Oxbow Fish Hatchery	Fish and Mollusc	Existing						
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing						
Rapid River Fish Hatchery	Fish and Mollusc	Existing						
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing						
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing						
Administration of the General Land Management Policies/Hells Canyon Resource Management F	Land Management and Aestetics	Existing						
Continuation of Aid to Local Law Enforcement	Recreation	Existing						
Continuation of Litter and Sanitation Plan	Recreation	Existing						
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilitie	Recreation	Existing	-	-	-	-	-	-
Continuation of Public Safety Program	Recreation	Existing						
Continuation of Road Maintenance	Recreation	Existing						
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing						
Memorandum of Understanding between USFS and Applicant	Recreation	Existing						
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing						
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing						
Recreation Waste Disposal	Water Quality	Existing						
Big Game Habitat Improvement Project	Wildlife	Existing						
Powder River Arm Wildlife Management Area	Wildlife	Existing						
Powerline Modification for Raptor Protection	Wildlife	Existing						
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing						
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing						
Winter Big Game Feeding	Wildlife	Existing						
Totals			-	-	-	-	-	-

^{*} NOTE: Cost of capital figures are based on projected investment for these existing measures at the end of original license expiration, AND projected capital spending for these measures expected during the new license period.

			Capital	Capital	Capital	Capital	Capital	Capital
		-	Cash Flow					
Measure_Description	Measure_Category	Measure_Type	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing						
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing						
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing						
Oxbow Fish Hatchery	Fish and Mollusc	Existing						
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing						
Rapid River Fish Hatchery	Fish and Mollusc	Existing						
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing						
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing						
Administration of the General Land Management Policies/Hells Canyon Resource Management F	Land Management and Aestetics	Existing						
Continuation of Aid to Local Law Enforcement	Recreation	Existing						
Continuation of Litter and Sanitation Plan	Recreation	Existing						
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilitie	Recreation	Existing	-	-	-	-	-	-
Continuation of Public Safety Program	Recreation	Existing						
Continuation of Road Maintenance	Recreation	Existing						
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing						
Memorandum of Understanding between USFS and Applicant	Recreation	Existing						
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing						
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing						
Recreation Waste Disposal	Water Quality	Existing						
Big Game Habitat Improvement Project	Wildlife	Existing						
Powder River Arm Wildlife Management Area	Wildlife	Existing						
Powerline Modification for Raptor Protection	Wildlife	Existing						
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing						
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing						
Winter Big Game Feeding	Wildlife	Existing						
Totals			-	-	-	-	-	-

^{*} NOTE: Cost of capital figures are based on projected investment for these existing measures at the end of original license expiration, AND projected capital spending for these measures expected during the new license period.

Appendix B. O&M—Existing Measures

			Without Escalation	With Escalation	Without Escalation	With Escalation
			Cash Flow	Cash Flow	Cash Flow	Cash Flow
Measure_Desc	Measure_Category	Measure_Type	Total O&M	Total O&M	Ave Annual	Ave Annual
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	75,000,000	75,000,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	3,750,000	5,979,894	125,000.00	199,329.79
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing		-		
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	22,475,000	35,839,496	749,166.67	1,194,650
Oxbow Fish Hatchery	Fish and Mollusc	Existing	6,525,000	10,405,015	217,500.00	346,834
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	13,325,000	21,248,556	444,166.67	708,285
Rapid River Fish Hatchery	Fish and Mollusc	Existing	15,950,000	25,434,481	531,666.67	847,816
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	1,500,000	2,391,957	50,000.00	79,732
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	1,800,000	2,870,349	60,000.00	95,678
Continuation of Litter and Sanitation Plan	Recreation	Existing	750,000	1,195,979	25,000.00	39,866
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	18,000,000	28,703,490	600,000.00	956,783
Continuation of Public Safety Program	Recreation	Existing	300,000	478,391	10,000.00	15,946
Continuation of Road Maintenance	Recreation	Existing	3,000,000	4,783,915	100,000.00	159,464
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	1,500,000	2,391,957	50,000.00	79,732
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	2,400,000	3,827,132	80,000.00	127,571
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-
Totals			166,275,000	220,550,612	5,542,500	7,351,687

			1	2	3	4	5	6
			Cash Flow					
Measure_Desc	Measure_Category	Measure_Type	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	749,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	217,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	444,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	531,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-
Totals			5,542,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

			7	8	9	10	11	12
			Cash Flow					
Measure_Desc	Measure_Category	Measure_Type	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	749,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	217,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	444,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	531,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-
Totals			5,542,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

			13	14	15	16	17	18
			Cash Flow					
Measure_Desc	Measure_Category	Measure_Type	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	749,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	217,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	444,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	531,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-
Totals			5,542,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

			19	20	21	22	23	24
			Cash Flow					
Measure_Desc	Measure_Category	Measure_Type	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	749,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	217,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	444,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	531,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-
Totals			5,542,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

			25	26	27	28	29	30
			Cash Flow					
Measure_Desc	Measure_Category	Measure_Type	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing						
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	749,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	217,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	444,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	531,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-
Totals			5,542,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

Appendix C. Total Costs – Existing Measures

Measure_Desc	Measure_Category	Measure_Type	Annual Measure Cost	Total Cash Flow	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	75,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	199,330	5,979,894	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	2,050,618	38,739,496	3,649,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	830,811	13,305,015	3,117,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	1,208,335	24,148,556	3,344,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	1,332,593	28,334,481	3,431,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	95,678	2,870,349	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	39,866	1,195,979	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	2,100,028	28,703,490	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	15,946	478,391	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	159,464	4,783,915	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	127,571	3,827,132	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-	-	-
Totals			10,819,705	232,150,612	17,142,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

[&]quot;Annual Measure Cost" represents the levelized cost of capital for each measure plus the average annual O&M cost for that measure.

Measure_Desc	Measure_Category	Measure_Type	Annual Measure Cost	Total Cash Flow	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	75,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	199,330	5,979,894	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	2,050,618	38,739,496	749,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	830,811	13,305,015	217,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	1,208,335	24,148,556	444,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	1,332,593	28,334,481	531,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	95,678	2,870,349	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	39,866	1,195,979	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	2,100,028	28,703,490	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	15,946	478,391	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	159,464	4,783,915	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	127,571	3,827,132	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-	-	-
Totals			10,819,705	232,150,612	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

[&]quot;Annual Measure Cost" represents the levelized cost of capital for each measure plus the average annual O&M cost for that measure.

Measure_Desc	Measure_Category	Measure_Type	Annual Measure Cost	Total Cash Flow	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	75,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	199,330	5,979,894	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	2,050,618	38,739,496	749,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	830,811	13,305,015	217,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	1,208,335	24,148,556	444,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	1,332,593	28,334,481	531,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	95,678	2,870,349	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	39,866	1,195,979	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	2,100,028	28,703,490	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	15,946	478,391	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	159,464	4,783,915	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	127,571	3,827,132	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-	-	-
Totals			10,819,705	232,150,612	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

[&]quot;Annual Measure Cost" represents the levelized cost of capital for each measure plus the average annual O&M cost for that measure.

Measure_Desc	Measure_Category	Measure_Type	Annual Measure Cost	Total Cash Flow	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	75,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	199,330	5,979,894	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	2,050,618	38,739,496	749,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	830,811	13,305,015	217,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	1,208,335	24,148,556	444,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	1,332,593	28,334,481	531,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	95,678	2,870,349	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	39,866	1,195,979	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	2,100,028	28,703,490	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	15,946	478,391	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	159,464	4,783,915	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	127,571	3,827,132	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-	-	-
Totals			10,819,705	232,150,612	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

[&]quot;Annual Measure Cost" represents the levelized cost of capital for each measure plus the average annual O&M cost for that measure.

Measure_Desc	Measure_Category	Measure_Type	Annual Measure Cost	Total Cash Flow	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Fall Chinook Plan (Opportunity Cost)	Fish and Mollusc	Existing	2,500,000	75,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Fall Chinook Salmon Redd and Temperature Monitoring	Fish and Mollusc	Existing	199,330	5,979,894	125,000	125,000	125,000	125,000	125,000	125,000
Fall Chinook Spawning and Salmon Incubation Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Niagara Springs Fish Hatchery	Fish and Mollusc	Existing	2,050,618	38,739,496	749,167	749,167	749,167	749,167	749,167	749,167
Oxbow Fish Hatchery	Fish and Mollusc	Existing	830,811	13,305,015	217,500	217,500	217,500	217,500	217,500	217,500
Pahsimeroi Fish Hatchery	Fish and Mollusc	Existing	1,208,335	24,148,556	444,167	444,167	444,167	444,167	444,167	444,167
Rapid River Fish Hatchery	Fish and Mollusc	Existing	1,332,593	28,334,481	531,667	531,667	531,667	531,667	531,667	531,667
Resident Centrarchid Spawning Protection	Fish and Mollusc	Existing	-	-	-	-	-	-	-	-
Warmwater Fish Population Monitoring	Fish and Mollusc	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Administration of the General Land Management Policies/Hells Canyon Resource Management Plan	Land Management and Aestetics	Existing	-	-	-	-	-	-	-	-
Continuation of Aid to Local Law Enforcement	Recreation	Existing	95,678	2,870,349	60,000	60,000	60,000	60,000	60,000	60,000
Continuation of Litter and Sanitation Plan	Recreation	Existing	39,866	1,195,979	25,000	25,000	25,000	25,000	25,000	25,000
Continuation of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation	Existing	2,100,028	28,703,490	600,000	600,000	600,000	600,000	600,000	600,000
Continuation of Public Safety Program	Recreation	Existing	15,946	478,391	10,000	10,000	10,000	10,000	10,000	10,000
Continuation of Road Maintenance	Recreation	Existing	159,464	4,783,915	100,000	100,000	100,000	100,000	100,000	100,000
Monitors for Flow Information Downstream of Hells Canyon Dam	Recreation	Existing	79,732	2,391,957	50,000	50,000	50,000	50,000	50,000	50,000
Memorandum of Understanding between USFS and Applicant	Recreation	Existing	127,571	3,827,132	80,000	80,000	80,000	80,000	80,000	80,000
Oxbow Bypass 100 cfs Minimum Flow	Water Quality	Existing	-	-	-	-	-	-	-	-
Preferential Use of the Upper Spillgates at Brownlee Dam During Periods of Spill	Water Quality	Existing	-	-	-	-	-	-	-	-
Recreation Waste Disposal	Water Quality	Existing	-	-	-	-	-	-	-	-
Big Game Habitat Improvement Project	Wildlife	Existing	-	-	-	-	-	-	-	-
Powder River Arm Wildlife Management Area	Wildlife	Existing	-	-	-	-	-	-	-	-
Powerline Modification for Raptor Protection	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Gold Island to State of Idaho	Wildlife	Existing	-	-	-	-	-	-	-	-
Purchase and Conveyance of Patch Island, Porter Island, and Hoffman Island to State of Oregon	Wildlife	Existing	-	-	-	-	-	-	-	-
Winter Big Game Feeding	Wildlife	Existing	-	-	-	-	-	-	-	-
Totals			10,819,705	232,150,612	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500	5,542,500

[&]quot;Annual Measure Cost" represents the levelized cost of capital for each measure plus the average annual O&M cost for that measure.

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Appendix D. Capital—Proposed New Measures

			Total	Present Value	Levelized (Annual)		Cash Flow				Cash Flow		Cash Flow		
leasure_Description	Measure_Category	Measure_Type	Cost of Capital	Cost of Capital	Cost of Capital	Year 1 - 30	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8 Yea	ar 9 Year 1
coperative Noxious Weed Control, Site Monitoring, and Reseeding	Botanical Measures	Proposed				-									
ooperative Protection and Monitoring of Sensitive Plant Sites evelopment and Implementation of Transmission-Line O&M Plan	Botanical Measures Botanical Measures	Proposed				-									
evenopment and imperientation or transmission-time Odivi Plan nadromous Carcass Outplants	Fish and Mollusc Measures	Proposed Proposed				-									
Iturial Bull Trout Introductions	Fish and Mollusc Measures	Proposed													
Forage and Prey Base Enhancement	Fish and Mollusc Measures	Proposed				-						-			-+-
Hells Canyon Fish Trap Modification	Fish and Mollusc Measures	Proposed	7,515,195	3,898,009	318,067	2,800,000	2,800,000								
Improvements to Niagara Springs Fish Hatchery	Fish and Mollusc Measures	Proposed	6,173,196	3,201,936	261,270		2,300,000								
Improvements to Oxbow Fish Hatchery	Fish and Mollusc Measures	Proposed	14,179,562	7,354,708	600,125	5,283,000	5,283,000								
Improvements to Pahsimeroi Fish Hatchery	Fish and Mollusc Measures	Proposed	16,962,868	8,798,364	717,923	6,320,000	6,320,000								
Improvements to Rapid River Fish Hatchery	Fish and Mollusc Measures	Proposed	8,274,766	4,291,987	350,215	3,083,000	3,083,000								
Long-Term Monitoring	Fish and Mollusc Measures	Proposed				-									
Long-Term Monitoring and Brook Trout Suppression in Indian Creek	Fish and Mollusc Measures	Proposed				-									
Oxbow Fish Trap	Fish and Mollusc Measures	Proposed	7,515,195	3,898,009	318,067	2,800,000	2,800,000								
Pathogen Surveys in Pine-Indian-Wildhorse core area	Fish and Mollusc Measures	Proposed	0.700.005	0.400.005	202.202		0.500.000								
Permanent Monitoring Weir at Pine Creek	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed	6,709,995	3,480,365	283,989	2,500,000	2,500,000								
Translocation Tributary Habitat Enhancements	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed Proposed	25,520,887	12,209,427	996,257	0.500.000	0.500.000								
inductary radulat entrancements Water Quality Assessment on Early Life Stages Between Swan Falls Dam and Brownlee Dam	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed	25,520,887	12,209,427	990,257	8,500,000	8,500,000								
water Quality Assessment on Early Life Stages between Swan Falls Dam and Browniee Dam Fish Tankers	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed	1.073.599	556.858	45,438	400,000	400,000								
FISH TAIMERS Eagle Creek Survey	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed	1,073,599	556,858	45,438	400,000	400,000								
cagle ores survey Develop Environmental Aquaculture Plan	Fish and Mollusc Measures	Proposed													
Monitor Genotypic Frequencies	Fish and Mollusc Measures	Proposed				-									$\overline{}$
Additional Section 106 Projects	Historical and Archeological Measures	Proposed				-									$\overline{}$
Asian-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	59.048	30.627	2.499	22,000	22,000								
Data Recovery at Four Archaeological Sites on Browniee Reservoir	Historical and Archeological Measures	Proposed	55,040	30,027	2,700	-	,000	-							$\overline{}$
Euro- and Asian-American Interpretive Projects	Historical and Archeological Measures	Proposed				-									
Euro-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	59,048	30,627	2,499	22,000	22,000								
Implementation of Aspects of the Cultural Resource Management Plan Not Associated with Monitoring	Historical and Archeological Measures	Proposed		,.	,	-	77								
Monitoring of Eligible Sites along Transmission Lines	Historical and Archeological Measures	Proposed				-									
Monitoring of Known Burial Site on Oxbow Reservoir	Historical and Archeological Measures	Proposed				-									
Monitoring of Known Eligible Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed				-									
Monitoring of Known Eligible Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed				-									
Monitoring of Known Eligible Sites on Oxbow and Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed				-									
Native American Interpretive Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	59,048	30,627	2,499	22,000	22,000								
Native American Interpretive Sites on Oxbow and Hells Canyon Reservoir	Historical and Archeological Measures	Proposed	29,524	15,314	1,250	11,000	11,000								
Native American Programs: Burns Paiute Tribe	Historical and Archeological Measures	Proposed				-									
Native American Programs: Confederated Tribes of the Umatilla Indian Reservation (Umatilla Tribes)	Historical and Archeological Measures	Proposed				-									
Native American Programs: Confederated Tribes of the Warm Springs Indian Reservation (Warm Springs Tribes)	Historical and Archeological Measures	Proposed				-									
Native American Programs: Nez Perce Tribe	Historical and Archeological Measures	Proposed				-									
Native American Programs: Shoshone-Bannock Tribes	Historical and Archeological Measures	Proposed				-									
Native American Programs: Shoshone-Paiute Tribes	Historical and Archeological Measures	Proposed				-									
Stabilization of Sites below Hells Canyon Dam Stabilization of Sites on Brownlee Resenoir	Historical and Archeological Measures Historical and Archeological Measures	Proposed Proposed				-									
Stabilization or Sites or brownie reservoir Design Standards and Guidelines for Landscaping	Land Management and Aestetics Measures	Proposed	53.680	27.843	2,272	20,000	20.000								
Design Standards and Guidelines for Physical Structures	Land Management and Aestetics Measures	Proposed	93,940	48,725	3,976	35,000	35,000								
Design rotariadus and Guidenines for Physical Structures Enhancement of Others' Facilities Enhancement of Others' Facilities	Land Management and Aestetics Measures	Proposed	26,840	13,921	1,136	10,000	10,000								
General Aesthetic Clean-Up Plan and Implementation	Land Management and Aestetics Measures	Proposed	577,060	299,311	24,423	215,000	215,000								$\overline{}$
Information and Education	Land Management and Aestetics Measures	Proposed	29,991	15.178	1,238	11,000	6,000	5.000							\rightarrow
Mitigation of Contrast from Project Facilities	Land Management and Aestetics Measures	Proposed	849,377	393,898	32,141	304,000	53,000	65,500	64,500	36,000	85,000	-	-	-	-
Natural and Cultural Resources	Land Management and Aestetics Measures	Proposed		,	- ,	-	,	,	. ,	,	,				
Replacement of Guardrails and Jersey Barriers	Land Management and Aestetics Measures	Proposed	453,048	195,740	15,972	160,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	
Transmission Lines	Land Management and Aestetics Measures	Proposed	53,680	27,843	2,272	20,000	20,000								
Development of Airstrip A&B Dispersed Recreation Site	Recreation Measures	Proposed	110,162	54,870	4,477	40,000	10,000	30,000							
Development of Low-Water Boat Launch at or near Swedes Landing	Recreation Measures	Proposed	692,265	336,665	27,471	250,000	50,000	100,000	100,000						
Development of Site Plan and Enhancement of Eckels Creek Dispersed Recreation Site	Recreation Measures	Proposed	82,647	40,627	3,315	30,000	10,000	10,000	10,000						
Development of Site Plan for Big Bar Recreation Site	Recreation Measures	Proposed	134,200	69,607	5,680	50,000	50,000								
Enhancement of Boat Ramp and Associated Facilities at Big Bar D Recreation Site	Recreation Measures	Proposed	688,721	338,560	27,626	250,000	83,334	83,333	83,333						
Enhancement of Bob Creek Section A Dispersed Recreation Site	Recreation Measures	Proposed	137,986	67,469	5,505	50,000	15,000	15,000	20,000						
Enhancement of Bob Creek Section B Dispersed Recreation Site	Recreation Measures	Proposed	69,227	33,667	2,747	25,000	5,000	10,000	10,000						
Enhancement of Bob Creek Section C Dispersed Recreation Site	Recreation Measures	Proposed	137,986	67,469	5,505	50,000	15,000	15,000	20,000						
Enhancement of Carters and Old Carters Landing Recreation Sites	Recreation Measures	Proposed	221,257	109,468	8,932	80,000	10,000	70,000	00.000						
Enhancement of Copper Creek Dispersed Recreation Site	Recreation Measures	Proposed	137,986	67,469	5,505	50,000	15,000	15,000	20,000						
Enhancement of Copperfield Boat Launch Area Enhancement of Eagle Bar Dispersed Recreation Site	Recreation Measures Recreation Measures	Proposed Proposed	280,327 413,233	130,563 203.136	10,654 16.575	100,000	50.000	50.000	100,000 50.000					-	$\overline{}$
ermancement of Lagie Bar Disperseo recreation Site Enhancement of Hewitt and Holcomb Parks Enhancement of Hewitt and Holcomb Parks	Recreation Measures Recreation Measures	Proposed	275,488	135.424	11,050		33,333	33,333	33,333			-			-
Emancement of newmatan oncomb Pains Enhancement of Little and Nocional Pains Enhancement of Little and Nocional Pain	Recreation Measures Recreation Measures	Proposed	161.040	83.529	6.816	60,000	60,000	33,333	30,333						
Emiral Center of Citite and Samiation Fian Figure 2 Characteristic of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation Measures	Proposed	101,040	00,029	0,010	50,000	30,000								-
Emissionement of Oxbox Boat Launch	Recreation Measures	Proposed	224,261	104,450	8,523	80,000			80,000						
Enhancement of Road Maintenance	Recreation Measures	Proposed	53,680	27,843	2,272		20,000		23,000						$\overline{}$
Enhancement of Spring Recreation Site	Recreation Measures	Proposed	1,407,727	639,269	52,163		_0,000	30,000	200,000	270,000					-
Enhancement of Swedes Landing	Recreation Measures	Proposed	209,598	99,405	8,111			25,000	50,000	2,225					
Enhancement of Westfall Dispersed Recreation Site	Recreation Measures	Proposed	165,293	81,254	6,630		20,000	20,000	20,000						
Information and Education (I&E) Plan	Recreation Measures	Proposed	3,862,003	1,798,879	146,784	1,380,000	100,000	180,000	850,000	150,000	50,000	50,000			
Law Enforcement Program	Recreation Measures	Proposed				-	,			,,,,,	,				
Provision of Boat Moorage on HCC Reservoirs	Recreation Measures	Proposed	509,139	224,944	18,355				60,000	60,000	60,000				
Reconstruction of Hells Canyon Park	Recreation Measures	Proposed	5,663,419	2,485,391	202,801				500,000	750,000	750,000				
Reconstruction of McCormick Park	Recreation Measures	Proposed	8,485,649	3,749,064	305,914				1,000,000	1,000,000	1,000,000				
Recreation Adaptive Management Plan	Recreation Measures	Proposed	3,557,029	824,801	67,302	1,200,000								3	00,000
Restriction of Public Access in Redfish Cave	Recreation Measures	Proposed				-	-								
Perform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites	Recreation Measures	Proposed				-	-	-	-	-	-	-		-	-
Brownlee Powerhouse Unit 5 turbine venting	Water Quality Measures	Proposed				-									
Brownlee Powerhouse Units 1 through 4 turbine venting	Water Quality Measures	Proposed				-									
rownlee Reservoir aeration	Water Quality Measures	Proposed				-									
lells Canyon Dam spillway flow deflectors	Water Quality Measures	Proposed	05 : :-	44.70			F 404 :	0.070.077							
Acquisition and O&M of Upland and Riparian Habitat	Wildlife Measures	Proposed	35,483,186	14,720,327	1,201,140		5,461,400	3,970,600	05.77						
cooperative enhancement of low-elevation riparian habitat and reintroduction of mountain quali in areas adjacent to the Hells Canyon Complex reservoirs.	Wildlife Measures	Proposed	278,941	130,123	10,618		20,000	20,000	20,000	20,000	20,000				
Cooperative Projects Enhancement of habitat on four Snake River islands in cooperation with the IDFG (Gold Island) and the ODFW (Hoffman, Patch, and Porter Islands)	Wildlife Measures	Proposed				-									
Development and Implementation of Transmission-Line O&M Plan	Wildlife Measures	Proposed													
Innament Programs															
Management Programs	Wildlife Measures	Proposed				-						<u>'</u>			

Appendix D. Capital—Proposed New Measures (continued)

			11 12 13 Cash Flow Cash Flow Cash Flow	14 Cook Flow	15	16	17 18			21	22	23 Cash Flow	Cook Flow	25 26 Cash Flow Cash Flow	27 28 29 Cash Flow Cash Flow Cash Flow	
Measure_Description	Measure_Category	Measure_Type	Year 11 Year 12 Year 13												Year 27 Year 28 Year 29	
Cooperative Noxious Weed Control, Site Monitoring, and Reseeding	Botanical Measures	Proposed	1001 11 1001 12 1001 10	100.14	100.10	100.10	100111	1041.10	100.20	our zr	100.22	.00. 20	100.21	100.20 100.20	1001 27 1001 20	- 100
Cooperative Protection and Monitoring of Sensitive Plant Sites	Botanical Measures	Proposed														
Development and Implementation of Transmission-Line O&M Plan	Botanical Measures	Proposed														
Anadromous Carcass Outplants	Fish and Mollusc Measures	Proposed														
Fluvial Bull Trout Introductions	Fish and Mollusc Measures	Proposed														
Forage and Prey Base Enhancement	Fish and Mollusc Measures	Proposed														
Hells Canyon Fish Trap Modification	Fish and Mollusc Measures	Proposed														
Improvements to Niagara Springs Fish Hatchery	Fish and Mollusc Measures	Proposed														
mprovements to Oxbow Fish Hatchery	Fish and Mollusc Measures	Proposed														
mprovements to Pahsimeroi Fish Hatchery	Fish and Mollusc Measures	Proposed														
nprovements to Rapid River Fish Hatchery	Fish and Mollusc Measures	Proposed														
ong-Term Monitoring	Fish and Mollusc Measures	Proposed														
ong-Term Monitoring and Brook Trout Suppression in Indian Creek	Fish and Mollusc Measures	Proposed														
Oxbow Fish Trap Pathogen Sunveys in Pine-Indian-Wildhorse core area	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed														
atnogen Surveys in Prine-Indian-vivinorose core area remanent Monitorina Weir at Prine Creek	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed Proposed								-						_
ermanent womitoring werr at Prine Creek ranslocation	Fish and Mollusc Measures	Proposed														-
Taristication in the control of the	Fish and Mollusc Measures	Proposed														
Vater Quality Assessment on Early Life Stages Between Swan Falls Dam and Brownlee Dam	Fish and Mollusc Measures	Proposed								_						_
valet udunity Assessifient on Early Ene Grages between Gwart and blowniee barn ish Tankers	Fish and Mollusc Measures	Proposed														_
Isiri dilinetis agle Creek Suvey	Fish and Mollusc Measures	Proposed								-						
delle Celes Guite Control Cont	Fish and Mollusc Measures	Proposed														_
Initiational Augustian Initiation	Fish and Mollusc Measures	Proposed		-												
tomor Genotypic Prequencies dditional Section 106 Projects	Historical and Archeological Measures	Proposed		+						-						+
uditional declind floor rigidals. sian-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed		+						-						-
isian/minimal intelligible Sites of Brownies (Abow, and/or new Carlyon Reservoirs) tata Recovery at Four Archaeological Sites on Brownies Reservoir	Historical and Archeological Measures	Proposed		+						-						-
international designation of the Projects and Project and Projects and Projects and Projects and Projects and Project and Projects and Projects and Projects and Projects and Project and Projects and P	Historical and Archeological Measures	Proposed		+						-			+			_
uro-anio Asiar-Arientaan micepiente Projectis uro-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed		+												_
underlinencial interpretes dies of bildwines, Oxbow, anufori reisa variyoni researching. Indicate the state of the Cultural Resource Management Plan Not Associated with Monitoring	Historical and Archeological Measures	Proposed		+						-						_
fonitioning of Eligible Sites along Transmission Lines	Historical and Archeological Measures	Proposed		1												_
Monitoring of Engine Sines aurign Harismission Lines Monitoring of Known Burial Site on Oxbow Reservoir	Historical and Archeological Measures	Proposed		+												_
fonitoring of Known Eligible Sites below Hells Caryon Dam	Historical and Archeological Measures	Proposed														\rightarrow
Aonitoring of Known Eligible Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed														\rightarrow
Aonitoring of Known Eligible Sites on Oxbow and Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed														_
ative American Interpretive Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed														
lative American Interpretive Sites on Oxbow and Hells Canyon Reservoir	Historical and Archeological Measures	Proposed														
ative American Programs: Burns Paiute Tribe	Historical and Archeological Measures	Proposed														
ative American Programs: Confederated Tribes of the Umatilla Indian Reservation (Umatilla Tribes)	Historical and Archeological Measures	Proposed														_
ative American Programs: Confederated Tribes of the Warm Springs Indian Reservation (Warm Springs Tribes)	Historical and Archeological Measures	Proposed														_
ative American Programs: Nez Perce Tribe	Historical and Archeological Measures	Proposed														_
tive American Programs: Shoshone-Bannock Tribes	Historical and Archeological Measures	Proposed														_
ative American Programs: Shoshone-Paiute Tribes	Historical and Archeological Measures	Proposed														
tabilization of Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed														
tabilization of Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed														
esign Standards and Guidelines for Landscaping	Land Management and Aestetics Measures	Proposed														
esign Standards and Guidelines for Physical Structures	Land Management and Aestetics Measures	Proposed														
inhancement of Others' Facilities	Land Management and Aestetics Measures	Proposed														
eneral Aesthetic Clean-Up Plan and Implementation	Land Management and Aestetics Measures	Proposed														
formation and Education	Land Management and Aestetics Measures	Proposed														
litigation of Contrast from Project Facilities	Land Management and Aestetics Measures	Proposed		-	-	-	-		-		-	-	-			-
atural and Cultural Resources	Land Management and Aestetics Measures	Proposed														
teplacement of Guardrails and Jersey Barriers	Land Management and Aestetics Measures	Proposed														
ransmission Lines	Land Management and Aestetics Measures	Proposed														
evelopment of Airstrip A&B Dispersed Recreation Site	Recreation Measures	Proposed														
evelopment of Low-Water Boat Launch at or near Swedes Landing	Recreation Measures	Proposed														
evelopment of Site Plan and Enhancement of Eckels Creek Dispersed Recreation Site	Recreation Measures	Proposed														
evelopment of Site Plan for Big Bar Recreation Site	Recreation Measures	Proposed														
inhancement of Boat Ramp and Associated Facilities at Big Bar D Recreation Site	Recreation Measures	Proposed														
nhancement of Bob Creek Section A Dispersed Recreation Site	Recreation Measures	Proposed														
nhancement of Bob Creek Section B Dispersed Recreation Site	Recreation Measures	Proposed														
nhancement of Bob Creek Section C Dispersed Recreation Site	Recreation Measures	Proposed														
inhancement of Carters and Old Carters Landing Recreation Sites	Recreation Measures	Proposed														
nhancement of Copper Creek Dispersed Recreation Site	Recreation Measures	Proposed														
nhancement of Copperfield Boat Launch Area	Recreation Measures	Proposed														
nhancement of Eagle Bar Dispersed Recreation Site	Recreation Measures	Proposed														
nhancement of Hewitt and Holcomb Parks	Recreation Measures	Proposed														
nhancement of Litter and Sanitation Plan	Recreation Measures	Proposed														
nhancement of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation Measures	Proposed														
nhancement of Oxbow Boat Launch	Recreation Measures	Proposed														
nhancement of Road Maintenance	Recreation Measures	Proposed														
nhancement of Spring Recreation Site	Recreation Measures	Proposed														
nhancement of Swedes Landing	Recreation Measures	Proposed														
hancement of Westfall Dispersed Recreation Site	Recreation Measures	Proposed														
ormation and Education (I&E) Plan	Recreation Measures	Proposed														
w Enforcement Program	Recreation Measures	Proposed														
ovision of Boat Moorage on HCC Reservoirs	Recreation Measures	Proposed														
construction of Hells Canyon Park	Recreation Measures	Proposed														
construction of McCormick Park	Recreation Measures	Proposed														
creation Adaptive Management Plan	Recreation Measures	Proposed		1	300,000					300,000					300,000	
striction of Public Access in Redfish Cave	Recreation Measures	Proposed														
rform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites	Recreation Measures	Proposed		-	-	-	-		-	-	-	-	-			
ownlee Powerhouse Unit 5 turbine venting	Water Quality Measures	Proposed														
rownlee Powerhouse Units 1 through 4 turbine venting	Water Quality Measures	Proposed														
ownlee Reservoir aeration	Water Quality Measures	Proposed														
ells Canyon Dam spillway flow deflectors	Water Quality Measures	Proposed														
cquisition and O&M of Upland and Riparian Habitat	Wildlife Measures	Proposed														
ooperative enhancement of low-elevation riparian habitat and reintroduction of mountain quail in areas adjacent to the Hells Canyon Complex reservoirs.	Wildlife Measures	Proposed														
coperative Projects Enhancement of habitat on four Snake River islands in cooperation with the IDFG (Gold Island) and the ODFW (Hoffman, Patch, and Porter Islands)	Wildlife Measures	Proposed														
Development and Implementation of Transmission-Line O&M Plan	Wildlife Measures	Proposed														
	Wildlife Measures	Proposed														
Management Programs	Wildille Weasures	Fioposeu														

Appendix E. O&M—Proposed New Measures

			Without Escalation	With Escalation	Without Escalation	With Escalation	1	2	3	4	5	6	7	8	9	10
		-	Cash Flow	Cash Flow	Cash Flow											Cash Flow
easure_Desc poperative Noxious Weed Control, Site Monitoring, and Reseeding	Measure_Category Botanical Measures	Measure_Type Proposed	Total O&M 1,500,000	Total O&M 2,391,957	Ave Annual 50,000	Ave Annual 79,732	Year 1 50,000	Year 2 50,000	Year 3 50,000	Year 4 50,000	Year 5 50,000	Year 6 50,000	Year 7 50,000	Year 8 50,000	Year 9 50,000	Year 10 50,000
Toperative Protection and Monitoring of Sensitive Plant Sites	Botanical Measures	Proposed	180,000	287,035	6,000	9,568	6,000	6,000	6,000	6,000	6,000	6,000		6,000	6,000	6,000
evelopment and Implementation of Transmission-Line O&M Plan	Botanical Measures	Proposed	125,000	199,330	4,167	6,644	4,167	4,167	4,167	4,167	4,167	4,167		4,167	4,167	4,167
nadromous Carcass Outplants	Fish and Mollusc Measures	Proposed	-	-	-	-										
uvial Bull Trout Introductions	Fish and Mollusc Measures	Proposed	-	-	-	-										
prage and Prey Base Enhancement	Fish and Mollusc Measures	Proposed	-	-	-	-										
ells Canyon Fish Trap Modification	Fish and Mollusc Measures	Proposed	11,600,000	18,710,189	386,667	623,673	-	400,000	400,000	400,000	400,000	400,000		400,000	400,000	400,000
provements to Niagara Springs Fish Hatchery	Fish and Mollusc Measures	Proposed	2,610,000	4,209,793	87,000	140,326	-	90,000	90,000	90,000	90,000	90,000		90,000	90,000	90,00
provements to Oxbow Fish Hatchery	Fish and Mollusc Measures	Proposed	2,523,000	4,069,466	84,100	135,649		87,000	87,000	87,000	87,000	87,000		87,000	87,000	87,00
provements to Pahsimeroi Fish Hatchery	Fish and Mollusc Measures	Proposed	1,803,000	2,849,024	60,100	94,967	15,000	72,000	72,000	72,000	72,000	72,000		72,000	72,000	72,00
provements to Rapid River Fish Hatchery ong-Term Monitoring	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed Proposed	2,668,000 2,465,000	4,303,343 3,665,843	88,933 82,167	143,445 122,195	136.944	92,000 136,944	92,000 136,944	92,000 136,944	92,000 136,944	92,000 136,944		92,000	92,000	92,000 136.94
nig-remi wontoring nog-Tem Monitoring and Brook Trout Suppression in Indian Creek	Fish and Mollusc Measures	Proposed	1,500,000	2,361,081	50.000	78,703	100,000	130,944	100,000	130,944	100,000	130,944	100,000		100,000	130,944
ng-renn walliading and brook front Supplession in maillain Greek Khow Fish Trap	Fish and Mollusc Measures	Proposed	6,000,000	10,225,348	200,000	340,845	-	-	100,000		100,000	-	250,000	250,000	250,000	250,000
athogen Surveys in Pine-Indian-Wildhorse core area	Fish and Mollusc Measures	Proposed	1,200,000	2,010,332	40,000	67,011	-				200,000		200,000	200,000	200,000	200,000
ermanent Monitoring Weir at Pine Creek	Fish and Mollusc Measures	Proposed	2,900,000	4.677.547	96.667	155,918	-	100.000	100,000	100,000	100.000	100,000	100,000	100.000	100,000	100.00
ranslocation	Fish and Mollusc Measures	Proposed	326,000	519,852	10,867	17,328	10,867	10,867	10,867	10,867	10,867	10,867		10,867	10,867	10,86
ibutary Habitat Enhancements	Fish and Mollusc Measures	Proposed	-	-	-	-										
ater Quality Assessment on Early Life Stages Between Swan Falls Dam and Brownlee Dam	Fish and Mollusc Measures	Proposed	552,000	1,041,997	18,400	34,733	-									
sh Tankers	Fish and Mollusc Measures	Proposed	-	-	-	-	-	-	-	-	-	-	-	-	-	-
igle Creek Survey	Fish and Mollusc Measures	Proposed	600,000	665,333	20,000	22,178	200,000	200,000	200,000	-	-	-	-	-	-	-
evelop Environmental Aquaculture Plan	Fish and Mollusc Measures	Proposed	840,000	1,339,496	28,000	44,650	28,000	28,000	28,000	28,000	28,000	28,000		28,000	28,000	28,00
onitor Genotypic Frequencies	Fish and Mollusc Measures	Proposed	68,000	108,436	2,267	3,615	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,26
ditional Section 106 Projects	Historical and Archeological Measures	Proposed	-	-	-	-										
ian-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	66,000	105,246	2,200	3,508	2,200	2,200	2,200	2,200	2,200	2,200		2,200	2,200	2,20
ta Recovery at Four Archaeological Sites on Brownlee Reservoir	Historical and Archeological Measures Historical and Archeological Measures	Proposed	710,000	929,300	23,667	30,977	12,500	12,500	75,000	75,000	75,000	75,000		75,000	75,000	75,00
ro- and Asian-American Interpretive Projects ro-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Resenoirs		Proposed Proposed	174,990 66,000	279,046 105,246	5,833 2,200	9,302 3,508	5,833 2,200	5,833 2,200	5,833 2,200	5,833 2,200	5,833 2,200	5,833 2,200		5,833 2,200	5,833 2,200	5,83 2,20
ro-American Interpretive Sites on Browniee, Uxbow, and/or Heilis Carlyon Reservoirs Jelementation of Aspects of the Cultural Resource Management Plan Not Associated with Monitoring	Historical and Archeological Measures Historical and Archeological Measures	Proposed Proposed	- 66,000	105,246	2,200	3,508	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,20
prementation or Aspects of the Cutural resource Management Frantion Associated with Monitoring onlineing onlineing of Eligible Sites along Transmission Lines	Historical and Archeological Measures	Proposed	75,000	120,811	2,500	4,027	1,500	1,500	4,500	1,500	1,500	4,500	1,500	1,500	4,500	1,50
onitoring of Known Burial Site on Oxbow Reservoir	Historical and Archeological Measures	Proposed	22,500	35,879	750	1,196	750	750	750	750	750	750		750	750	75
onitoring of Known Eligible Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed	1,950,000	3,109,545	65.000	103,651	65,000	65.000	65.000	65.000	65.000	65,000		65.000	65,000	65,00
onitoring of Known Eligible Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	563,000	880,747	18,767	29,358	34,600	34,600	18,600	17,100	17,100	18,600	17,100	17,100	18,600	17,10
onitoring of Known Eligible Sites on Oxbow and Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	597,500	941,273	19,917	31,376	18,000	31,750	34,750	18,000	18,000	21,000	18,000	18,000	21,000	18,00
tive American Interpretive Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	66,000	105,246	2,200	3,508	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,20
tive American Interpretive Sites on Oxbow and Hells Canyon Reservoir	Historical and Archeological Measures	Proposed	33,000	52,623	1,100	1,754	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,10
tive American Programs: Burns Paiute Tribe	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,33
tive American Programs: Confederated Tribes of the Umatilla Indian Reservation (Umatilla Tribes)	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333		33,333	33,333	33,33
tive American Programs: Confederated Tribes of the Warm Springs Indian Reservation (Warm Springs Tribes)	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333		33,333	33,333	33,33
tive American Programs: Nez Perce Tribe	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333		33,333	33,333	33,33
titive American Programs: Shoshone-Bannock Tribes	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333		33,333	33,333	33,33
titive American Programs: Shoshone-Paiute Tribes	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333		33,333	33,333	33,33
abilization of Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed	3,200,000	5,102,843	106,667	170,095	106,667	106,667	106,667	106,667	106,667	106,667		106,667	106,667	106,667
abilization of Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	520,000	593,239	17,333	19,775	104,000	104,000	104,000	104,000	104,000	-	-		-	-
sign Standards and Guidelines for Landscaping	Land Management and Aestetics Measures	Proposed	-	-	-	-										
esign Standards and Guidelines for Physical Structures hancement of Others' Facilities	Land Management and Asstetics Measures	Proposed	-	-	-	-										
inancement or unters racinities nearly desthetic Clean-Up Plan and Implementation eneral Aesthetic Clean-Up Plan and Implementation	Land Management and Aestetics Measures Land Management and Aestetics Measures	Proposed Proposed	145,000	233.877	4,833	7,796		5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
ormation and Education	Land Management and Aestetics Measures	Proposed	145,000	233,077	4,033	7,790		3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
idigation of Contrast from Project Facilities	Land Management and Aestetics Measures	Proposed	78,000	104,541	2,600	3,485	10,000	10,000	13,000	10,000	10,000	-				1,19
atural and Cultural Resources	Land Management and Aestetics Measures	Proposed	2,100,000	3,348,740	70,000	111,625	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,00
placement of Guardrails and Jersey Barriers	Land Management and Aestetics Measures	Proposed	-,111,111	-	-		,	,	,		,	,	,		,	,
ansmission Lines	Land Management and Aestetics Measures	Proposed	50,000	57,042	1,667	1,901	10,000	10,000	10,000	10,000	10,000					
velopment of Airstrip A&B Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
velopment of Low-Water Boat Launch at or near Swedes Landing	Recreation Measures	Proposed	-	-		-										
velopment of Site Plan and Enhancement of Eckels Creek Dispersed Recreation Site	Recreation Measures	Proposed	-	-		-										
velopment of Site Plan for Big Bar Recreation Site	Recreation Measures	Proposed	-	-	-	-										
hancement of Boat Ramp and Associated Facilities at Big Bar D Recreation Site	Recreation Measures	Proposed	-	-	-	-										
hancement of Bob Creek Section A Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
hancement of Bob Creek Section B Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
hancement of Bob Creek Section C Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
hancement of Carters and Old Carters Landing Recreation Sites	Recreation Measures	Proposed	-	-	-	-										
hancement of Copper Creek Dispersed Recreation Site hancement of Copperfield Boat Launch Area	Recreation Measures Recreation Measures	Proposed Proposed	-	-		-										
nancement of Copement obset Launch Area hancement of Eagle Bar Dispersed Recreation Site	Recreation Measures Recreation Measures	Proposed Proposed	-	-	-	-							-			
indicerient of Eagle bar Unspersed recreation is te	Recreation Measures	Proposed		-	-	-										
hancement of Litter and Sanitation Plan	Recreation Measures	Proposed	1,650,000	2,631,153	55,000	87,705	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,00
hancement of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation Measures	Proposed	2,800,000	4,565,795	93,333	152,193	,000	22,300	100,000	100,000	100,000	100,000		100,000	100,000	100,00
hancement of Oxbow Boat Launch	Recreation Measures	Proposed	-	-	-	-			,	,	,	,				
hancement of Road Maintenance	Recreation Measures	Proposed	840,000	1,369,738	28,000	45,658			30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,00
hancement of Spring Recreation Site	Recreation Measures	Proposed	-	-	-	-										
hancement of Swedes Landing	Recreation Measures	Proposed	-	-		-										
hancement of Westfall Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
ormation and Education (I&E) Plan	Recreation Measures	Proposed	720,000	1,227,042	24,000	40,901							30,000	30,000	30,000	30,00
w Enforcement Program	Recreation Measures	Proposed	450,000	717,587	15,000	23,920	15,000	15,000	15,000	15,000	15,000	15,000		15,000	15,000	15,00
vision of Boat Moorage on HCC Reservoirs	Recreation Measures	Proposed	120,000	203,474	4,000	6,782	-					24,000				
construction of Hells Canyon Park	Recreation Measures	Proposed	-	-	-	-										
construction of McCommick Park	Recreation Measures	Proposed	4 000 000	0.044.400		- 00.704						450.000				
creation Adaptive Management Plan striction of Public Access in Redfish Cave	Recreation Measures Recreation Measures	Proposed Proposed	1,800,000	2,811,122	60,000	93,704	-					450,000	-			
Striction or Public Access in Reclaims Cave	Recreation Measures Recreation Measures	Proposed	2,800,000	4,565,795	93,333	152,193			100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,00
norm Oam or Applicant-crimance but and USES Reservoir-Related Recreation Sites while Powerhouse Unit is furbine ventiles.	Water Quality Measures	Proposed	2,000,000	4,565,795	90,033	102,193			100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,00
winee Fowerhouse Units 1 through 4 turbine venting	Water Quality Measures Water Quality Measures	Proposed	-	-	-									\rightarrow		
white Proventious offits I through 4 dubine venting white Reservoir aeration	Water Quality Measures Water Quality Measures	Proposed	-		-											
white reserving actional is a contract of the	Water Quality Measures Water Quality Measures	Proposed	-	-	-	-		-								
guisition and O&M of Upland and Riparian Habitat	Wildlife Measures	Proposed	19,500,000	31,095,447	650,000	1,036,515	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,00
operative enhancement of low-elevation riparian habitat and reintroduction of mountain quail in areas adjacent to the Hells Canyon Complex reservoirs.	Wildlife Measures	Proposed	-	- 1,000,111	-	-,555,515	220,000	223,000	220,000	220,000	230,000	200,000	223,000	223,000		500,00
operative Projects Enhancement of habitat on four Snake River islands in cooperation with the IDFG (Gold Island) and the ODFW (Hoffman, Patch, and Porter Islands)	Wildlife Measures	Proposed	780,000	1,243,818	26,000	41,461	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,00
				263,115	5,500	8,771	5,500	5,500	5,500	5,500	5,500	5,500	,	5,500	5,500	5,500
evelopment and Implementation of Transmission-Line O&M Plan	Wildlife Measures	Proposed	165,000	203,113	3,300											
velopment and Implementation of Transmission-Line O&M Plan inagement Programs	Wildlife Measures Wildlife Measures	Proposed Proposed	4,370,000	6,968,569	145,667	232,286	145,667	145,667	145,667	145,667	145,667	145,667		145,667	145,667	145,66

Appendix E. O&M—Proposed New Measures (continued)

			Without Escalation	With Escalation	Without Escalation	With Escalation	11	12	13	14	15	16	17	18	19	20
Measure Desc	Measure_Category	Measure Type	Cash Flow Total O&M	Cash Flow Total O&M	Cash Flow Ave Annual	Cash Flow Ave Annual	Cash Flow Year 11	Cash Flow Year 12	Cash Flow Year 13	Cash Flow Year 14	Cash Flow Year 15	Cash Flow Year 16	Cash Flow C	Cash Flow Year 18	Cash Flow C	Cash Flow Year 20
Cooperative Noxious Weed Control, Site Monitoring, and Reseeding	Botanical Measures	Proposed	1,500,000	2,391,957	50,000	79,732	50,000	50,000	50,000	50,000	50,000	50,000		50,000		50,00
Cooperative Protection and Monitoring of Sensitive Plant Sites	Botanical Measures	Proposed	180,000	287,035	6,000	9,568	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,00
Development and Implementation of Transmission-Line O&M Plan	Botanical Measures	Proposed	125,000	199,330	4,167	6,644	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,1
unadromous Carcass Outplants	Fish and Mollusc Measures	Proposed	-	-	-	-										
luvial Bull Trout Introductions	Fish and Mollusc Measures	Proposed	-	-	-	-										
Forage and Prey Base Enhancement	Fish and Mollusc Measures	Proposed	-	-	-	-										
Hells Canyon Fish Trap Modification	Fish and Mollusc Measures	Proposed	11,600,000	18,710,189	386,667				400,000	400,000	400,000			400,000		400,0
mprovements to Niagara Springs Fish Hatchery	Fish and Mollusc Measures	Proposed	2,610,000	4,209,793	87,000	140,326	90,000		90,000		90,000			90,000		90,0
Improvements to Oxbow Fish Hatchery	Fish and Mollusc Measures	Proposed	2,523,000	4,069,466	84,100	135,649			87,000		87,000			87,000		87,0
mprovements to Pahsimeroi Fish Hatchery	Fish and Mollusc Measures	Proposed	1,803,000	2,849,024	60,100	94,967	57,000	57,000	57,000		57,000			57,000		57,0
mprovements to Rapid River Fish Hatchery	Fish and Mollusc Measures	Proposed	2,668,000	4,303,343	88,933	143,445	92,000	92,000	92,000		92,000		92,000	92,000	92,000	92,0
ong-Term Monitoring	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed Proposed	2,465,000 1,500,000	3,665,843 2,361,081	82,167 50,000	122,195 78,703	136,944 100,000	136,944	136,944 100.000	136,944	136,944 100.000		100.000		100.000	136,9
ong-Term Monitoring and Brook Trout Suppression in Indian Creek Dxbow Fish Trap	Fish and Mollusc Measures	Proposed	6,000,000	10,225,348	200,000	340,845		250,000	250,000	250,000	250,000			250,000	,	250,0
Zabowi isin inap Pathogen Surveys in Pine-Indian-Wildhorse core area	Fish and Mollusc Measures	Proposed	1,200,000	2,010,332	40,000	67,011	250,000	230,000	230,000	250,000	200,000		250,000	230,000	250,000	200,0
Permanent Monitoring Wei at Pine Creek	Fish and Mollusc Measures	Proposed	2,900,000	4,677,547	96,667	155,918	100,000	100,000	100,000	100,000	100,000		100,000	100,000	100,000	100,0
Emalication without at time decay	Fish and Mollusc Measures	Proposed	326,000	519,852	10,867	17,328		10,867	10,867		10,867			10,867		10,
Tributary Habitat Enhancements	Fish and Mollusc Measures	Proposed	-		-		10,007	10,001	10,007	10,007	10,001	10,001	10,001	10,007	10,007	,
Water Quality Assessment on Early Life Stages Between Swan Falls Dam and Brownlee Dam	Fish and Mollusc Measures	Proposed	552,000	1,041,997	18,400	34,733						36,800	36,800	36,800	36,800	36,8
ish Tankers	Fish and Mollusc Measures	Proposed	-	- 1,0.1,001	-	-	-	-	-	-	-	-				
Eagle Creek Survey	Fish and Mollusc Measures	Proposed	600,000	665,333	20,000	22,178	-	-	-	-	-	-	-	-	-	
Develop Environmental Aquaculture Plan	Fish and Mollusc Measures	Proposed	840,000	1,339,496	28,000			28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,0
Monitor Genotypic Frequencies	Fish and Mollusc Measures	Proposed	68,000	108,436	2,267	3,615	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267		2,2
Additional Section 106 Projects	Historical and Archeological Measures	Proposed	-	-	-	-										
Asian-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	66,000	105,246	2,200			2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,2
Data Recovery at Four Archaeological Sites on Browniee Reservoir	Historical and Archeological Measures	Proposed	710,000	929,300	23,667	30,977	4,250		4,250	4,250	4,250	4,250	4,250	4,250		4,2
Euro- and Asian-American Interpretive Projects	Historical and Archeological Measures	Proposed	174,990	279,046	5,833				5,833					5,833		
euro-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	66,000	105,246	2,200	3,508	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,
mplementation of Aspects of the Cultural Resource Management Plan Not Associated with Monitoring	Historical and Archeological Measures	Proposed	-	-	-	-										
Monitoring of Eligible Sites along Transmission Lines	Historical and Archeological Measures	Proposed	75,000	120,811	2,500		1,500	4,500	1,500		4,500			4,500		1,
Monitoring of Known Burial Site on Oxbow Reservoir	Historical and Archeological Measures	Proposed	22,500	35,879	750		750	750	750		750			750		
Monitoring of Known Eligible Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed	1,950,000	3,109,545	65,000		65,000		65,000		65,000			65,000		
Monitoring of Known Eligible Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	563,000	880,747	18,767	29,358			17,100					18,600		
Monitoring of Known Eligible Sites on Oxbow and Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	597,500	941,273	19,917	31,376	18,000	21,000	18,000		21,000			21,000		18,0
Native American Interpretive Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	66,000	105,246	2,200				2,200		2,200			2,200		2,2
lative American Interpretive Sites on Oxbow and Hells Canyon Reservoir	Historical and Archeological Measures	Proposed	33,000	52,623	1,100				1,100					1,100		1,1
lative American Programs: Burns Paiute Tribe	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333				33,333	,		,	,	33,333		33,3
Native American Programs: Confederated Tribes of the Umatilla Indian Reservation (Umatilla Tribes)	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333		33,333		33,333	33,333	33,333			33,333		33,3
Native American Programs: Confederated Tribes of the Warm Springs Indian Reservation (Warm Springs Tribes) Native American Programs: Nez Perce Tribe	Historical and Archeological Measures Historical and Archeological Measures	Proposed Proposed	1,000,000	1,594,639 1,594,639	33,333 33,333	53,155 53,155	33,333 33,333		33,333 33,333	33,333 33,333	33,333 33,333			33,333 33,333		33,3
wative American Programs: Nez-Perce intoe		Proposed	1,000,000	1,594,639	33,333				33,333		33,333			33,333		33,3
value American Programs. Sustince-Parinton Times Autive American Programs Sustince-Parinton Times Autive American Programs. Sustince-Parinte Times Autive American Programs.	Historical and Archeological Measures Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333				33,333		33,333			33,333		33,3
value aniericani roganiis. Sinstonieri ariue nites Stabilization of Sites below Helis Canyon Dam	Historical and Archeological Measures	Proposed	3,200,000	5,102,843	106,667	170,095			106,667		106,667			106,667		
Stabilization of Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	520,000	593,239	17,333			-	100,007	100,007	100,007	100,007	100,007	100,007	100,007	100,0
Design Standards and Guidelines for Landscaping	Land Management and Aestetics Measures	Proposed		-	- 17,000	- 13,770										
Design Standards and Guidelines for Physical Structures	Land Management and Aestetics Measures	Proposed		-	-	-										
Enhancement of Others' Facilities	Land Management and Aestetics Measures	Proposed	-													
General Assthetic Clean-Up Plan and Implementation	Land Management and Aestetics Measures	Proposed	145,000	233,877	4,833	7,796	5,000	5,000	5,000	5.000	5,000	5,000	5,000	5,000	5,000	5,0
nformation and Education	Land Management and Aestetics Measures	Proposed	-	-	-	-	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,	.,	.,	.,,					
Mitigation of Contrast from Project Facilities	Land Management and Aestetics Measures	Proposed	78,000	104,541	2,600	3,485	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,1
Natural and Cultural Resources	Land Management and Aestetics Measures	Proposed	2,100,000	3,348,740	70,000				70,000	70,000	70,000			70,000	70,000	70,0
Replacement of Guardrails and Jersey Barriers	Land Management and Aestetics Measures	Proposed	-	- 1	-	-										
Transmission Lines	Land Management and Aestetics Measures	Proposed	50,000	57,042	1,667	1,901										
Development of Airstrip A&B Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
Development of Low-Water Boat Launch at or near Swedes Landing	Recreation Measures	Proposed	-	-	-	-										
Development of Site Plan and Enhancement of Eckels Creek Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
Development of Site Plan for Big Bar Recreation Site	Recreation Measures	Proposed	-	-	-	-										
Enhancement of Boat Ramp and Associated Facilities at Big Bar D Recreation Site	Recreation Measures	Proposed	-	-	-	-										
Enhancement of Bob Creek Section A Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
Enhancement of Bob Creek Section B Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-						1				-
Enhancement of Bob Creek Section C Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
Enhancement of Carters and Old Carters Landing Recreation Sites	Recreation Measures	Proposed		-	•	-						-	+		-	-
Enhancement of Copper Creek Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-									-	-
Inhancement of Copperfield Boat Launch Area Enhancement of Eagle Bar Dispersed Recreation Site	Recreation Measures	Proposed	-		-	-						-	+			-
-nnancement of Eagle Bar Dispersed Recreation Site -nnancement of Hewitt and Holcomb Parks	Recreation Measures Recreation Measures	Proposed Proposed	-	-	•	-							+			
nnancement of Hewitt and Holomb Parks inhancement of Litter and Sanitation Plan	Recreation Measures Recreation Measures	Proposed Proposed	1,650,000	2,631,153	55,000	87,705	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55.0
Ennancement of Litter and Sanitedinon Plan Table 10 Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation Measures Recreation Measures	Proposed	2,800,000	4,565,795	93,333				100,000		100,000			100,000		
marcement of Oxbox Boat Launch	Recreation Measures	Proposed	2,000,000	4,000,790	- 30,000	132,193	100,000	100,000	100,000	100,000	100,000	100,000	100,000	150,000	100,000	100,0
Initial certaint of Cook Modification Control	Recreation Measures	Proposed	840,000	1,369,738	28,000	45,658	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,0
Inhancement of Spring Recreation Site	Recreation Measures	Proposed	-	-	-		55,550	55,550	55,550	55,550	55,550	33,500	50,000	20,000	20,000	55,0
Inhancement of Swedes Landing	Recreation Measures	Proposed	-	-		-										
inhancement of Westfall Dispersed Recreation Site	Recreation Measures	Proposed		-							Î					
nformation and Education (I&E) Plan	Recreation Measures	Proposed	720,000	1,227,042	24,000	40,901	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,0
aw Enforcement Program	Recreation Measures	Proposed	450,000	717,587	15,000				15,000					15,000		
Provision of Boat Moorage on HCC Reservoirs	Recreation Measures	Proposed	120,000	203,474	4,000	6,782		24,000						24,000		
Reconstruction of Hells Canyon Park	Recreation Measures	Proposed	-	-		-										
Reconstruction of McCormick Park	Recreation Measures	Proposed	-	-		-										
tecreation Adaptive Management Plan	Recreation Measures	Proposed	1,800,000	2,811,122	60,000	93,704		450,000						450,000	1	
Restriction of Public Access in Redfish Cave	Recreation Measures	Proposed	-		<u> </u>											
Perform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites	Recreation Measures	Proposed	2,800,000	4,565,795	93,333	152,193	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,
rownlee Powerhouse Unit 5 turbine venting	Water Quality Measures	Proposed	•	-	•	-							+		-	-
	Water Quality Measures	Proposed	-	-	-	-							+			-
	Water Quality Measures	Proposed	-	-	-	-										-
rownlee Reservoir aeration		Proposed	-	-	-	4 000 5:-	050 051	050.05	050.00	050 053	050.05	050 0	050 000	050 05-	050 005	055
trownlee Resenoir aeration lells Canyon Dam spillway flow deflectors	Water Quality Measures	n .				1,036,515	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,
rownlee Reservoir aeration felis Canyon Dam spillway flow deflectors coquisition and O&M of Upland and Riparian Habitat	Wildlife Measures	Proposed	19,500,000	31,095,447	650,000	1,000,010	000,000	000,000	000,000	000,000	000,000	000,000	000,000	000,000		
Brownlee Reservoir aeration fells Canyon Dam spillway flow deflectors coquisition and O&M of Upland and Riparian Habitat Cooperative enhancement of low-elevation riparian habitat and reintroduction of mountain quail in areas adjacent to the Hells Canyon Complex reservoirs.	Wildlife Measures Wildlife Measures	Proposed	-	-	-	-									00.005	00.
Brownlee Reservoir aeration fells Canyon Dam spillway flow deflectors kcquisition and O&M of Upland and Riparian Habitat Cooperative enhancement of low-elevation riparian habitat and reintroduction of mountain quail in areas adjacent to the Hells Canyon Complex reservoirs. Cooperative Projects Enhancement of habitat on four Snake River islands in cooperation with the IDFG (Gold Island) and the ODFW (Hoffman, Patch, and Porter Islands)	Wildlife Measures Wildlife Measures Wildlife Measures	Proposed Proposed	780,000	1,243,818	- 26,000	41,461	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000		
Brownlee Powerhouse Units 1 through 4 turbine venting Brownlee Researonic aeration Hells Canyon Dam spillway flow deflectors Acquisition and O&M of Upland and Riparian Habitat Cooperative enhancement of low-elevation riparian habitat and reintroduction of mountain quail in areas adjacent to the Hells Canyon Complex reservoirs. Cooperative Projects Enhancement of habitat on four Snake River islands in cooperation with the IDFG (Gold Island) and the ODFW (Hoffman, Patch, and Porter Islands) Development and Implementation of Transmission-Line O&M Plan Management Programs	Wildlife Measures Wildlife Measures	Proposed	-	-	-	41,461 8,771	26,000 5,500	26,000 5,500		26,000 5,500	26,000 5,500	26,000 5,500	26,000 5,500		5,500	

Appendix E. O&M—Proposed New Measures (continued)

			Without Escalation	With Escalation	Without Escalation	With Escalation	21	22	23	24	25	26	27	28	29	30
Daniel Danie	Manager Catalana	M T	Cash Flow	Cash Flow	Cash Flow											Cash Flow
easure_Desc poperative Noxious Weed Control, Site Monitoring, and Reseeding	Measure_Category Botanical Measures	Measure_Type Proposed	Total O&M 1,500,000	Total O&M 2.391.957	Ave Annual 50,000	Ave Annual 79,732	Year 21 50,000	Year 22 50,000	Year 23 50,000	Year 24 50.000	Year 25 50,000	Year 26 50.000	Year 27 50.000	Year 28 50,000	Year 29 50,000	Year 30 50,00
uplerative rounds wheat control, site wordings and researching operative Protection and Monitoring of Sensitive Plant Sites	Botanical Measures Botanical Measures	Proposed	1,500,000	287,035	6,000	9,732	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,0
operative indection and womaning or definitive maint offers velopment and implementation of transmission-Line O&M Plan	Botanical Measures	Proposed	125,000	199,330	4,167	6,644	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167		4,1
adromous Carcass Outplants	Fish and Mollusc Measures	Proposed	-	-	- 1,101		1,107	1,107	1,101	1,101	1,101	1,101	1,101	1,107	1,107	
uvial Bull Trout Introductions	Fish and Mollusc Measures	Proposed	-	-	-	-										
prage and Prey Base Enhancement	Fish and Mollusc Measures	Proposed	-	-	-	-										
ells Canyon Fish Trap Modification	Fish and Mollusc Measures	Proposed	11,600,000	18,710,189	386,667	623,673	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,0
provements to Niagara Springs Fish Hatchery	Fish and Mollusc Measures	Proposed	2,610,000	4,209,793	87,000	140,326	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,0
provements to Oxbow Fish Hatchery	Fish and Mollusc Measures	Proposed	2,523,000	4,069,466	84,100	135,649	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,0
provements to Pahsimeroi Fish Hatchery	Fish and Mollusc Measures	Proposed	1,803,000	2,849,024	60,100	94,967	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,0
provements to Rapid River Fish Hatchery	Fish and Mollusc Measures	Proposed	2,668,000	4,303,343	88,933	143,445	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,0
ong-Term Monitoring	Fish and Mollusc Measures	Proposed	2,465,000	3,665,843	82,167	122,195	136,944	136,944	136,944	136,944	136,944					
ng-Term Monitoring and Brook Trout Suppression in Indian Creek	Fish and Mollusc Measures	Proposed	1,500,000	2,361,081	50,000	78,703	100,000		100,000		100,000		100,000		100,000	
xbow Fish Trap	Fish and Mollusc Measures	Proposed	6,000,000	10,225,348	200,000	340,845	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,0
athogen Suneys in Pine-Indian-Wildhorse core area	Fish and Mollusc Measures	Proposed	1,200,000	2,010,332	40,000	67,011					200,000					200,0
ermanent Monitoring Weir at Pine Creek	Fish and Mollusc Measures	Proposed	2,900,000	4,677,547	96,667	155,918	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,0
anslocation	Fish and Mollusc Measures	Proposed	326,000	519,852	10,867	17,328	10,867	10,867	10,867	10,867	10,867	10,867	10,867	10,867	10,867	10,8
butary Habitat Enhancements	Fish and Mollusc Measures	Proposed	-	- 4 044 007	- 40.400	- 04.700	00.000	00.000	00.000	00.000	00.000	00.000	00.000	20.000	20.000	
ater Quality Assessment on Early Life Stages Between Swan Falls Dam and Brownlee Dam	Fish and Mollusc Measures	Proposed	552,000	1,041,997	18,400	34,733	36,800	36,800	36,800	36,800	36,800	36,800	36,800	36,800	36,800	36,8
sh Tankers	Fish and Mollusc Measures	Proposed	600,000	665,333	20,000	22,178	-	-	-	-	-	-	-	-	-	
agle Creek Survey evelop Environmental Aquaculture Plan	Fish and Mollusc Measures	Proposed	840,000	1,339,496	28,000	44,650	28,000	28,000	28,000	28.000	28,000	28,000	28,000	28,000	28,000	28,0
verior environmental adjustantive Francointon Control	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed	68,000	108,436	2,267	3,615	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	20,0
ontor centrolytic requencies diditional Section 106 Projects	Historical and Archeological Measures	Proposed Proposed	- 68,000	100,430	2,207	3,013	2,201	2,201	۷,۷۵/	2,207	۷,۷۵/	2,207	۷,۷۵۱	۷,۷۵۱	2,201	
Juliuliar Gestiuli no Projects sian-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	66,000	105,246	2,200	3,508	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2.2
ata Recovery at Four Archaeological Sites on Browniere Association (Fig. 2).	Historical and Archeological Measures	Proposed	710,000	929,300	23,667	30,977	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250		4,2
ta recovery at 1 our Architectorigation since or Distribution of Control of the Control of Control	Historical and Archeological Measures	Proposed	174,990	279,046	5,833	9,302	5,833	5,833	5,833	5,833	5,833	5,833	5,833	5,833		5,
ro-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	66,000	105,246	2,200	3,508	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,
elementation of Aspects of the Cultural Resource Management Plan Not Associated with Monitoring	Historical and Archeological Measures	Proposed		-	2,200		2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	
nitoring of Eligible Sites along Transmission Lines	Historical and Archeological Measures	Proposed	75,000	120,811	2,500	4,027	4,500	1,500	1,500	4,500	1,500	1,500	4,500	1,500	1,500	4,5
ontoring of Engine Orice and International Enter	Historical and Archeological Measures	Proposed	22,500	35,879	750	1,196	750	750	750	750	750	750	750	750		,-
initioning of Known Eligible Sites below Hells Carryon Dam	Historical and Archeological Measures	Proposed	1,950,000	3,109,545	65,000	103,651	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000		65,
nitoring of Known Eligible Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	563,000	880,747	18.767	29,358	18,600	17,100	17,100	18,600	17,100	17,100	18,600	17,100		18,6
nitoring of Known Eligible Sites on Oxbow and Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	597,500	941,273	19,917	31,376	21,000	18,000	18,000	21,000	18,000	18,000	21,000	18,000		21,0
tive American Interpretive Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	66,000	105,246	2,200	3,508	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,
tive American Interpretive Sites on Oxbow and Hells Canyon Reservoir	Historical and Archeological Measures	Proposed	33,000	52,623	1,100	1,754	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,
tive American Programs: Burns Paiute Tribe	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33.3
tive American Programs: Confederated Tribes of the Umatilla Indian Reservation (Umatilla Tribes)	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,3
tive American Programs: Confederated Tribes of the Warm Springs Indian Reservation (Warm Springs Tribes)	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,3
tive American Programs: Nez Perce Tribe	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,3
tive American Programs: Shoshone-Bannock Tribes	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,3
ative American Programs: Shoshone-Paiute Tribes	Historical and Archeological Measures	Proposed	1,000,000	1,594,639	33,333	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,3
abilization of Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed	3,200,000	5,102,843	106,667	170,095	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,6
abilization of Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	520,000	593,239	17,333	19,775	-	-	-	-	-	-	-	-	-	-
esign Standards and Guidelines for Landscaping	Land Management and Aestetics Measures	Proposed	-	-	-	-										
esign Standards and Guidelines for Physical Structures	Land Management and Aestetics Measures	Proposed	-	-	-	-										
nhancement of Others' Facilities	Land Management and Aestetics Measures	Proposed	-	-	-	-										
eneral Aesthetic Clean-Up Plan and Implementation	Land Management and Aestetics Measures	Proposed	145,000	233,877	4,833	7,796	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,0
formation and Education	Land Management and Aestetics Measures	Proposed	-	-	-	-										
itigation of Contrast from Project Facilities	Land Management and Aestetics Measures	Proposed	78,000	104,541	2,600	3,485	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,1
atural and Cultural Resources	Land Management and Aestetics Measures	Proposed	2,100,000	3,348,740	70,000	111,625	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,0
eplacement of Guardrails and Jersey Barriers	Land Management and Aestetics Measures	Proposed	-	-	-	-										
ansmission Lines	Land Management and Aestetics Measures		50,000		1,667	1,901										
evelopment of Airstrip A&B Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
evelopment of Low-Water Boat Launch at or near Swedes Landing	Recreation Measures	Proposed	-	-	-	-										
velopment of Site Plan and Enhancement of Eckels Creek Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
velopment of Site Plan for Big Bar Recreation Site	Recreation Measures	Proposed	-	-	-	-										
nhancement of Boat Ramp and Associated Facilities at Big Bar D Recreation Site	Recreation Measures	Proposed	-	-	-	•										
hancement of Bob Creek Section A Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-										
hancement of Bob Creek Section B Dispersed Recreation Site shancement of Bob Creek Section C Dispersed Recreation Site	Recreation Measures	Proposed	-	-	-	-	-									
	Recreation Measures	Proposed	-	-	-	-										
hancement of Carters and Old Carters Landing Recreation Sites thancement of Copper Creek Dispersed Recreation Site	Recreation Measures Recreation Measures	Proposed	-	-	-											
mancement of Copperfield Boat Launch Area	Recreation Measures Recreation Measures	Proposed Proposed	-		-											
hancement of Eagle Bar Dispersed Recreation Site	Recreation Measures	Proposed		-	-											
hancement of lewitt and Holcomb Parks	Recreation Measures	Proposed		-	-	-										
hancement of Litter and Sanitation Plan	Recreation Measures	Proposed	1,650,000	2,631,153	55,000	87.705	55.000	55,000	55,000	55,000	55,000	55,000	55.000	55,000	55,000	55.0
hancement of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation Measures	Proposed	2,800,000	4,565,795	93,333	152,193	100,000	100,000	100,000		100,000	100,000	100,000	100,000		100,0
hancement of Oxbow Boat Launch	Recreation Measures	Proposed	_,		-		,	,	,,,,,,,	11,110	22,220	,	,		22,220	,
hancement of Road Maintenance	Recreation Measures	Proposed	840,000	1,369,738	28,000	45,658	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,0
nhancement of Spring Recreation Site	Recreation Measures	Proposed	-	- 1,000,100	,,,,,,	-			.,	,	,	,	.,,	.,	,	
shancement of Swedes Landing	Recreation Measures	Proposed		-	-	-										
hancement of Westfall Dispersed Recreation Site	Recreation Measures	Proposed		-	-	-										
	Recreation Measures	Proposed	720,000	1,227,042	24,000	40,901	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,0
ormation and Education (I&E) Plan	Recreation Measures	Proposed	450,000	717,587	15,000	23,920	15,000	15,000	15,000		15,000	15,000	15,000	15,000		15,0
v Enforcement Program	Recreation Measures	Proposed	120,000	203,474	4,000	6,782				24,000						24,0
v Enforcement Program vision of Boat Moorage on HCC Reservoirs		Proposed	-	-	-	-										
w Enforcement Program ovision of Boat Moorage on HCC Reservoirs construction of Helis Canyon Park	Recreation Measures			-	-	-										
w Enforcement Program vision of Boat Moorage on HCC Reservoirs construction of Hells Caryon Park construction of McCormick Park	Recreation Measures	Proposed				93,704										
w Enforcement Program vision of Boat Moorage on HCC Reservoirs construction of Hells Canyon Park construction of McCormick Park creation Adaptive Management Plan	Recreation Measures Recreation Measures	Proposed	1,800,000	2,811,122	60,000	30,704				450,000						
w Enforcement Program by Construction of Boat Movoarge on HCC Reservoirs construction of Hells Canyon Park construction of McCormick Park construction Adaptive Management Plan striction of Public Access in Redfish Cave	Recreation Measures Recreation Measures Recreation Measures	Proposed Proposed	1,800,000	-	-	-										
w Enforcement Program okision of Boat Moorage on HCC Reservoirs construction of Hells Caryon Park construction of McCormick Park construction of McCormick Park construction of McCormick Park striction of Public Access in Redfish Cave rform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites	Recreation Measures Recreation Measures Recreation Measures Recreation Measures	Proposed Proposed Proposed	1,800,000	4,565,795	93,333	152,193	100,000	100,000	100,000		100,000	100,000	100,000	100,000	100,000	100,0
w Enforcement Program wision of Boat Moorage on HCC Reservoirs construction of Hells Canyon Park construction of McCormick Park construction of McCormick Park creation Adaptive Management Plan striction of Public Access in Redfish Cave from O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites whole Powerhouse Unit 5 turbine venting	Recreation Measures Recreation Measures Recreation Measures Recreation Measures Water Quality Measures	Proposed Proposed Proposed Proposed	1,800,000	-	-	-	100,000	100,000	100,000		100,000	100,000	100,000	100,000	100,000	100,
W Enforcement Program vision of Boat Moorage on HCC Reservoirs construction of Hells Carryon Park construction of McCormick Park creation Adaptive Management Plan striction of Public Access in Redfish Cave form O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites vanilee Powerhouse Units 1 through 4 turbine ventting vanilee Powerhouse Units 1 through 4 turbine ventting	Recreation Measures Recreation Measures Recreation Measures Recreation Measures Water Quality Measures Water Quality Measures	Proposed Proposed Proposed Proposed Proposed	1,800,000 - 2,800,000 - -	4,565,795	-	152,193	100,000	100,000	100,000		100,000	100,000	100,000	100,000	100,000	100,
w Enforcement Program vision of Boat Moorage on HCC Reservoirs construction of Hells Carryon Park construction of McCormick Park creation Adaptive Management Plan striction of Public Access in Redifish Cave rform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites vanilee Powerhouse Unit 5 turbine venting vanilee Reservoir aeration	Recreation Measures Recreation Measures Recreation Measures Recreation Measures Water Quality Measures Water Quality Measures Water Quality Measures	Proposed Proposed Proposed Proposed Proposed Proposed Proposed	1,800,000	4,565,795 - -	-	-	100,000	100,000	100,000		100,000	100,000	100,000	100,000	100,000	100,
V Enforcement Program vision of Boat Moorage on HCC Reservoirs construction of Hells Canyon Park construction of McCormick Park construction of McCormick Park construction of McCormick Park creation Adaptive Management Plan striction of Public Access in Redfish Cave form O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites winele Powerhouse Unit 5 uthinia ventring winlee Powerhouse Units 1 through 4 turbine ventring winlee Reservoir aeration is Canyon Dam spillway flow deflectors	Recreation Measures Recreation Measures Recreation Measures Recreation Measures Water Quality Measures Water Quality Measures Water Quality Measures Water Quality Measures	Proposed Proposed Proposed Proposed Proposed Proposed Proposed Proposed	1,800,000 - 2,800,000 - - - -	4,565,795	93,333 - - - -	152,193				100,000						,
w Enforcement Program w Enforcement Program construction of Hoelt Canyon Park construction of McCormick Park construction of McCormick Park construction of Public Access in Redfish Cave riorm O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites construction of Public Access in Redfish Cave riorm O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites consider Powerhouse Unit 5 turbine venting consider Powerhouse Unit 5 turbine venting consider Reservoir aeration Ils Canyon Dam spillway flow deflectors quisition and O&M of Upland and Riparian Habitat	Recreation Measures Recreation Measures Recreation Measures Recreation Measures Water Quality Measures Wildliff Measures Wildliff Measures	Proposed	1,800,000 - 2,800,000 - -	4,565,795	-	152,193	100,000	100,000	100,000		100,000	100,000	100,000	100,000	100,000	
formation and Education (&E) Plan we Enforcement Program rovision of Boat Moorage on HCC Reservoirs econstruction of Hells Canyon Park econstruction of McCornick Park ecenstruction of McCornick Park escreation Adaptive Management Plan estriction of Public Access in Redfish Cave enform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites ownlee Powerhouse Unit 5 turbine venting ownlee Powerhouse Units 1 through 4 turbine venting ownlee Reservoir aeration ells Canyon Dam spillway flow deflectors quisition and O&M of Upland and Riparian Habitat poperative enhancement of low-elevation riparian habitat and reintroduction of mountain quali in areas adjacent to the Hells Canyon Complex reservoirs.	Recreation Measures Recreation Measures Recreation Measures Recreation Measures Recreation Measures Water Quality Measures Water Quality Measures Water Quality Measures Water Quality Measures Widlife Measures Wildlife Measures Wildlife Measures	Proposed	1,800,000 - 2,800,000 - - - 19,500,000	4,565,795	93,333 - - - - - 650,000	152,193 - - - - 1,036,515	650,000	650,000	650,000	100,000	650,000	650,000	650,000	650,000	650,000	650,0
w Enforcement Program ovision of Boat Moorage on HCC Reservoirs econstruction of Helis Canyon Park econstruction of Melormick Park econstruction of McCormick Park econstruction of McCormick Park econstruction of McCormick Park econstruction of Public Access in Redfish Cave riform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites ownlee Powerhouse Unit is turbine venting ownlee Powerhouse Unit is 1 through 4 turbine venting ownlee Powerhouse Units 1 through 4 turbine venting ownlee Reservoir aeration Ils Canyon Dam spillway flow deflectors quisition and O&M of Upland and Riparian Habitat operative enhancement of low-elevation riparian habitat and reintroduction of mountain quali in areas adjacent to the Hells Canyon Complex reservoirs. opperative Projects Enhancement of habitat on four Snake River islands in cooperation with the IDFG (Gold Island) and the ODFW (Hoffman, Patch, and Porter Islands)	Recreation Measures Recreation Measures Recreation Measures Recreation Measures Recreation Measures Water Quality Measures Water Quality Measures Water Quality Measures Water Quality Measures Water Mater Quality Measures Wildlife Measures Wildlife Measures Wildlife Measures Wildlife Measures Wildlife Measures	Proposed	1,800,000 - 2,800,000 - - - - - 19,500,000 780,000	4,565,795 - - - 31,095,447 - 1,243,818	93,333 - - - 650,000 - 26,000	152,193 - - - - 1,036,515 - 41,461	650,000	650,000 26,000	650,000	100,000 650,000 26,000	650,000	650,000	650,000 26,000	650,000 26,000	650,000 26,000	650,0 26,0
w Enforcement Program vision of Boat Moorage on HCC Reservoirs construction of Hells Canyon Park construction of Hells Canyon Park construction of McCormick Park creation Adaptive Management Plan striction of Public Access in Redifish Cave rform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites vaniele Powerhouse Unit 5 turbine venting vaniele Powerhouse Unit 5 turbine venting vaniele Reservoir aeration lis Canyon Dam spillway flow deflectors quisition and O&M of Upland and Riparian Habitat operative enhancement of low-elevation riparian habitat and reintroduction of mountain quail in areas adjacent to the Hells Canyon Complex reservoirs.	Recreation Measures Recreation Measures Recreation Measures Recreation Measures Recreation Measures Water Quality Measures Water Quality Measures Water Quality Measures Water Quality Measures Widlife Measures Wildlife Measures Wildlife Measures	Proposed	1,800,000 - 2,800,000 - - - 19,500,000	4,565,795	93,333 - - - - - 650,000	152,193 - - - - 1,036,515	650,000	650,000	650,000	100,000	650,000	650,000	650,000	650,000	650,000 26,000 5,500	650,

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Appendix F. Total Costs – Proposed New Measures

Measure_Desc Cooperative Noxious Weed Control, Site Monitoring, and Reseeding	Measure_Category Botanical Measures	Proposed Annual Measure	Cost Total Cas 79,732	1,500,000	Year 1 50,000	Year 2 50,000	Year 3 50,000	Year 4 50,000	Year 5 50,000	Year 6 50,000	Year 7 50,000	Year 8 50,000	Year 9 50,000	Year 10 50,000	Year 11 50,000	Year 12 50,000	Year 13 50,000	Year 14 50,000	
perative Protection and Monitoring of Sensitive Plant Sites	Botanical Measures	Proposed	9,568	180,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	0 6,0
elopment and Implementation of Transmission-Line O&M Plan	Botanical Measures	Proposed	6,644	125,000	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	7 4
adromous Carcass Outplants	Fish and Mollusc Measures	Proposed	-	-	-	-	-	-	-	-	-	-	-	-	-			-	
vial Bull Trout Introductions	Fish and Mollusc Measures	Proposed	-	-	-	-	-	-	-	-	-	-	-	-	-		-		
orage and Prey Base Enhancement ells Canyon Fish Trap Modification	Fish and Mollusc Measures	Proposed	941,740	14.400.000	2.800.000	400,000	400,000	400.000	400.000	400.000	400.000	400.000	400.000	400.000	400,000	400.000	400.000	400.000	0 400.
eins Cariyon Fish Hap woonication provements to Niagara Springs Fish Hatchery	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed Proposed	401,596	,,	2,300,000	90,000	90,000	,	90,000	90.000	90,000	90,000	90,000	90,000	400,000 90,000	90,000	90,000	,	
Inprovements to Oxbox Fish Hatchery	Fish and Mollusc Measures	Proposed	735,774		5,283,000	87,000	87,000	87,000	87,000	,	87.000	87,000	87,000	87,000	87,000	87,000		87,000	
nprovements to Pahsimeroi Fish Hatchery	Fish and Mollusc Measures	Proposed	812,891		6,335,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	57,000	57,000		57,000	
nprovements to Rapid River Fish Hatchery	Fish and Mollusc Measures	Proposed	493,660	5,751,000	3,083,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,0
ong-Term Monitoring	Fish and Mollusc Measures	Proposed	122,195	2,465,000	136,944	136,944	136,944	136,944	136,944	136,944	-	-	-	136,944	136,944	136,944	136,944	136,944	4 136,9
ong-Term Monitoring and Brook Trout Suppression in Indian Creek	Fish and Mollusc Measures	Proposed	78,703	1,500,000	100,000	-	100,000	-	100,000	-	100,000	-	100,000	-	100,000	-	100,000		100,0
Dxbow Fish Trap	Fish and Mollusc Measures	Proposed	658,912	0,000,000	2,800,000	-	-	-	-	-	250,000	250,000	250,000		250,000				,
Athogen Suneys in Pine-Indian Pine Credit	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed	67,011 439,907	1,200,000 5,400,000	2,500,000	100,000	100,000	100.000	200,000 100,000	100,000	100,000	100,000	100.000	200,000 100,000	100,000	100,000	100,000	100.000	200,0
remanent Monitoring Weir at Pine Creek ranslocation	Fish and Mollusc Measures	Proposed Proposed	17,328	326,000	10,867	10,867	100,000	100,000	100,000	10,867	100,000	10,867	10,867	10,867	100,000				
initiation Habitat Enhancements	Fish and Mollusc Measures	Proposed	996,257		8,500,000	- 10,007	- 10,007	- 10,007	-	10,007	-	-	- 10,007	- 10,007	10,007	- 10,007	10,007	- 10,007	10,
Vater Quality Assessment on Early Life Stages Between Swan Falls Dam and Brownlee Dam	Fish and Mollusc Measures	Proposed	34,733	552,000	-	-	-	-	-	-	-	-	-	-	-			-	+
ish Tankers	Fish and Mollusc Measures	Proposed	45,438	400,000	400,000	-	-	-	-	-	-	-	-	-	-			-	_
agle Creek Survey	Fish and Mollusc Measures	Proposed	22,178	600,000	200,000	200,000	200,000	-	-	-	-	-	-	-	-	- 1	- '	- 1	
Develop Environmental Aquaculture Plan	Fish and Mollusc Measures	Proposed	44,650	840,000	28,000	28,000	28,000		28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	,	
Monitor Genotypic Frequencies	Fish and Mollusc Measures	Proposed	3,615	68,000	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	7 2,
dditional Section 106 Projects	Historical and Archeological Measures	Proposed	-	-	-	-	-	-	-	-	-	-	-	-	-			-	
sian-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	6,007	88,000	24,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200		
Data Recovery at Four Archaeological Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	30,977	710,000	12,500	12,500	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	4,250	4,250	4,250		
uro- and Asian-American Interpretive Projects	Historical and Archeological Measures	Proposed Proposed	9,302	174,990 88,000	5,833	5,833	5,833	5,833	5,833	5,833 2,200	5,833	5,833	5,833	5,833	5,833	5,833			
curo-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Resenoirs mplementation of Aspects of the Cultural Resource Management Plan Not Associated with Monitoring	Historical and Archeological Measures Historical and Archeological Measures	Proposed Proposed	6,007	00,000	24,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	+ 2
inperinentation or Aspects or the Cutural resource waitagement Plan Not Associated with wontrolling fortification or Associated with wontrolling fortification of Eligible Sites along Transmission Lines	Historical and Archeological Measures	Proposed	4.027	75,000	1,500	1,500	4,500	1.500	1,500	4,500	1,500	1,500	4,500	1.500	1,500	4,500	1,500	1.500	0 4
Anitoring of English Sites along interstination Enlies Anitoring of English Sites on Oxbow Reservoir	Historical and Archeological Measures	Proposed	1,196	22,500	750	750	750	750	750	750	750	750	750	750	750	750	750		
Agnitoring of Known Eligible Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed	103,651	1,950,000	65,000	65,000	65,000		65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000			
Agnitoring of Known Eligible Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	29,358	563,000	34,600	34,600	18,600	17,100	17,100	18,600	17,100	17,100	18,600	17,100	17,100	18,600		17,100	
funitoring of Known Eligible Sites on Oxbow and Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	31,376	597,500	18,000	31,750	34,750	18,000	18,000	21,000	18,000	18,000	21,000	18,000	18,000	21,000	18,000	18,000	21
lative American Interpretive Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	6,007	88,000	24,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200		
lative American Interpretive Sites on Oxbow and Hells Canyon Reservoir	Historical and Archeological Measures	Proposed	3,004	44,000	12,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100		-
lative American Programs: Burns Paiute Tribe	Historical and Archeological Measures	Proposed	53,155	1,000,000	33,333	33,333	33,333		33,333	33,333	33,333	33,333	33,333		33,333	33,333			
lative American Programs: Confederated Tribes of the Umatilla Indian Reservation (Umatilla Tribes)	Historical and Archeological Measures	Proposed	53,155	1,000,000	33,333	33,333	33,333		33,333	33,333	33,333	33,333	33,333		33,333	33,333		33,333	
lative American Programs: Confederated Tribes of the Warm Springs Indian Reservation (Warm Springs Tribes)	Historical and Archeological Measures	Proposed	53,155	1,000,000	33,333	33,333	33,333		33,333	33,333	33,333	33,333	33,333			33,333			
lative American Programs: Nez Perce Tribe Lative American Programs: Shoshone-Bannock Tribes	Historical and Archeological Measures Historical and Archeological Measures	Proposed Proposed	53,155 53,155	1,000,000	33,333	33,333 33,333	33,333 33,333	33,333 33,333	33,333 33,333	33,333 33,333	33,333 33,333	33,333 33,333	33,333	33,333 33,333	33,333 33,333	33,333 33,333		33,333	
anne American Programs. Shoshone-Painte Tribes attive American Programs: Shoshone-Painte Tribes	Historical and Archeological Measures	Proposed	53,155	1,000,000	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333			
Itabilization of Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed	170,095	3,200,000	106,667	106,667	106,667	106,667	106,667	106.667	106,667	106,667	106,667	106,667	106,667	106,667			
stabilization of Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	19,775	520,000	104,000	104,000	104,000		104,000	- 100,007	-	-	-	-	-	-	-	-	100,0
lesign Standards and Guidelines for Landscaping	Land Management and Aestetics Measures	Proposed	2,272	20,000	20,000	-	-	-	-	-	-	-	-	-	-		-	-	_
Design Standards and Guidelines for Physical Structures	Land Management and Aestetics Measures	Proposed	3,976	35,000	35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	1
nhancement of Others' Facilities	Land Management and Aestetics Measures	Proposed	1,136	10,000	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	
Seneral Aesthetic Clean-Up Plan and Implementation	Land Management and Aestetics Measures	Proposed	32,219	360,000	215,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,0
formation and Education	Land Management and Aestetics Measures	Proposed	1,238	11,000	6,000	5,000	-	-	-	-	-	-	-		-		<u> </u>		
ditigation of Contrast from Project Facilities	Land Management and Aestetics Measures	Proposed	35,626	382,000	63,000	75,500	77,500		95,000	70.000	70.000	70.000	70.000	1,190	1,190	1,190		,	
Alatural and Cultural Resources Replacement of Guardrails and Jersey Barriers	Land Management and Aestetics Measures Land Management and Aestetics Measures	Proposed Proposed	111,625 15,972	2,100,000 160,000	70,000 20,000	70,000 20,000	70,000 20,000		70,000 20,000	70,000	70,000 20,000	70,000 20,000	70,000	70,000	70,000	70,000	70,000	70,000	70,0
representation times	Land Management and Aestetics Measures	Proposed	4,173	70,000	30,000	10,000	10,000		10,000	20,000	20,000	20,000	-				-		+
Teachingson Line A&B Dispersed Recreation Site	Recreation Measures	Proposed	4,477	40,000	10.000	30.000	-	- 10,000	-	-	-	-	-	-	-	-	-	-	_
Development of Low-Water Boat Launch at or near Swedes Landing	Recreation Measures	Proposed	27,471	250,000	50,000	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-	
levelopment of Site Plan and Enhancement of Eckels Creek Dispersed Recreation Site	Recreation Measures	Proposed	3,315	30,000	10,000	10,000	10,000	-	-	-	-	-	-	-	-		-	-	
Development of Site Plan for Big Bar Recreation Site	Recreation Measures	Proposed	5,680	50,000	50,000	-	-	-	-	-	-	-	-	-	-	- 1	-	- 1	
Inhancement of Boat Ramp and Associated Facilities at Big Bar D Recreation Site	Recreation Measures	Proposed	27,626	250,000	83,334	83,333	83,333	-	-	-	-	-	-	-	-		-	-	
Inhancement of Bob Creek Section A Dispersed Recreation Site	Recreation Measures	Proposed	5,505	50,000	15,000	15,000	20,000	-	-	-	-	-	-	-	-	-	-	-	
nhancement of Bob Creek Section B Dispersed Recreation Site	Recreation Measures	Proposed	2,747	25,000	5,000	10,000	10,000	-	-	-	-	-	-	-	-	-	ļ'		
nhancement of Bob Creek Section C Dispersed Recreation Site	Recreation Measures	Proposed	5,505	50,000	15,000	15,000	20,000	-	-	-	-	-	-	-	-		-		
nhancement of Carters and Old Carters Landing Recreation Sites	Recreation Measures	Proposed	8,932 5,505	80,000 50,000	10,000 15,000	70,000		-	-	-	-	-	-	-	-	-	-	-	
Inhancement of Copper Creek Dispersed Recreation Site Inhancement of Copperfield Boat Launch Area	Recreation Measures Recreation Measures	Proposed Proposed	10,654	100,000	15,000	15,000	20,000	-	-	-			-	-			-		+
Timaricement of Eagle Bar Dispersed Recreation Site	Recreation Measures	Proposed	16,575	150,000	50,000	50,000	50,000	<u> </u>	-				-		$ \vdots$			-	+
nhancement of Hewitt and Holcomb Parks	Recreation Measures	Proposed	11,050	100,000	33,333	33,333	33,333	-	-	-	-	-	-	-					+
nhancement of Litter and Sanitation Plan	Recreation Measures	Proposed	94,521	1,710,000	115,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,
inhancement of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation Measures	Proposed	152,193	2,800,000	- 1		100,000		100,000	100,000	100,000	100,000	100,000						
nhancement of Oxbow Boat Launch	Recreation Measures	Proposed	8,523	80,000	-	-	80,000	-	-	-	-	-	-	-	-	- 1	- '	-	
nhancement of Road Maintenance	Recreation Measures	Proposed	47,930	860,000	20,000		30,000				30,000	30,000	30,000						_
nhancement of Spring Recreation Site	Recreation Measures	Proposed	52,163	500,000	-	30,000		270,000	-	-	-	-	-	-	-	-	-	-	
nhancement of Swedes Landing	Recreation Measures	Proposed	8,111	75,000	- 20,000	25,000		-	-	-	-	-	-	-	-	-	-	-	+
hancement of Westfall Dispersed Recreation Site	Recreation Measures	Proposed	6,630 187.685	60,000 2,100,000	20,000	20,000 180,000		450.000	50,000	50,000	- 20.000	30,000	- 20.000	- 20.000	- 20.000	30,000	30,000	30,000	
formation and Education (I&E) Plan aw Enforcement Program	Recreation Measures Recreation Measures	Proposed Proposed	23,920	450,000	15,000	15,000	15,000				30,000 15,000	15,000	30,000 15,000		30,000 15,000				
volsion of Boat Moorage on HCC Reservoirs	Recreation Measures	Proposed	25,137	300,000	15,000	13,000	60,000				13,000	10,000	13,000	13,000	15,000	24,000		13,000	15
econstruction of Helis Canyon Park	Recreation Measures	Proposed	202,801	2,000,000			500,000			24,000				-	$ \vdots$	27,000	-	-	+
econstruction of McCormick Park	Recreation Measures	Proposed	305,914	3,000,000	-	-		1,000,000		-	-	-	-	-	-	-	-	-	+
ecreation Adaptive Management Plan	Recreation Measures	Proposed	161,006	3,000,000	-	-	-		-	450,000	-	-	300,000	-	-	450,000	-	-	300
estriction of Public Access in Redfish Cave	Recreation Measures	Proposed	-	-		-	-	-	-	- 1		- 1		-	-		-	-	
erform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites	Recreation Measures	Proposed	152,193	2,800,000	-	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,
rownlee Powerhouse Unit 5 turbine venting	Water Quality Measures	Proposed	-	-	-	-	-	-	-	-	-	-	-	-		-			
rownlee Powerhouse Units 1 through 4 turbine venting	Water Quality Measures	Proposed	-	-	-	-	-	-	-	-	-	-	-	-			-		
rownlee Reservoir aeration	Water Quality Measures	Proposed	-	-	-	-	-	-	-	- 1	-	-	-	-	1				
ells Canyon Dam spillway flow deflectors	Water Quality Measures	Proposed	- 007.055	-		4.000.555	-	-	-	-	-	-	-	-	-	-	050	050	
equisition and O&M of Upland and Riparian Habitat	Wildlife Measures		2,237,655		6,111,400				650,000	650,000	650,000	650,000	650,000	,					_
cooperative enhancement of low-elevation riparian habitat and reintroduction of mountain quali in areas adjacent to the Hells Canyon Complex reservoirs. Consensition Consense Conse	Wildlife Measures	Proposed	10,618	100,000	20,000	20,000				26.000	- 26 000	- 26 000	- 26 000	- 26 000	- 26 000	- 26,000	26.000	- 26,000	
Cooperative Projects Enhancement of habitat on four Snake River islands in cooperation with the IDFG (Gold Island) and the ODFW (Hoffman, Patch, and Porter Islands) Development and Implementation of Transmission-Line O&M Plan	Wildlife Measures Wildlife Measures	Proposed Proposed	41,461 8,771	780,000 165,000	26,000 5,500	26,000 5,500	26,000 5,500		26,000 5,500		26,000 5,500	26,000 5,500	26,000 5,500		26,000 5,500				
	VITIUME INCASULES	i iohosea	0,111	100,000															
Management Programs	Wildlife Measures	Proposed	232,286	4,370,000	145,667	145,667	145,667	145,667	145,667	145,667	145,667	145,667	145,667	145,667	145,667	145,667	145,667		

[&]quot;Annual Measure Cost" represents the levelized cost of capital for each measure plus the average annual O&M cost for that measure.

Appendix F. Total Costs – Proposed New Measures (continued)

poperative Noxious Weed Control, Site Monitoring, and Reseeding	Measure_Category Botanical Measures	Measure_Type Proposed	Annual Measure Cost 79.732	Year 16 50,000	Year 17 50,000	Year 18 50,000	Year 19 50,000	Year 20 50,000	Year 21 50.000	Year 22 50.000	Year 23 50,000	Year 24 50.000	Year 25 50,000	Year 26 50,000	Year 27 50,000	Year 28	Year 29 50.000	Year 30 50,00
operative Protection and Monitoring of Sensitive Plant Sites	Botanical Measures Botanical Measures	Proposed	9,732	,	6,000	6,000	6,000	6,000	6.000	6.000	6,000	6.000	,	,	,		6,000	6,00
velopment and Implementation of Transmission-Line O&M Plan	Botanical Measures	Proposed	6,644	-7	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167					4,167	4,1
adromous Carcass Outplants	Fish and Mollusc Measures	Proposed	-		-						,	,		- 1,101	- 1,141	- 1	- 1,101	
rvial Bull Trout Introductions	Fish and Mollusc Measures	Proposed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
rage and Prey Base Enhancement	Fish and Mollusc Measures	Proposed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ells Canyon Fish Trap Modification	Fish and Mollusc Measures	Proposed	941,740	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,0
provements to Niagara Springs Fish Hatchery	Fish and Mollusc Measures	Proposed	401,596	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	
provements to Oxbow Fish Hatchery	Fish and Mollusc Measures	Proposed	735,774		87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000		0.,000		0.,000	87,000	
provements to Pahsimeroi Fish Hatchery	Fish and Mollusc Measures	Proposed	812,891	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000					57,000	
provements to Rapid River Fish Hatchery	Fish and Mollusc Measures	Proposed	493,660		92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000			92,000	92,000	92,000	92,00
ng-Term Monitoring	Fish and Mollusc Measures	Proposed	122,195		-	-	-	136,944	136,944	136,944	136,944	136,944					-	
ng-Term Monitoring and Brook Trout Suppression in Indian Creek	Fish and Mollusc Measures	Proposed	78,703		100,000		100,000		100,000	-	100,000	-	100,000		100,000		100,000	
xbow Fish Trap	Fish and Mollusc Measures	Proposed	658,912	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000			250,000	250,000	250,000	
athogen Surveys in Pine-Indian-Wildhorse core area	Fish and Mollusc Measures	Proposed	67,011	400,000	400.000	400.000	400.000	200,000	400.000	400.000	400.000	400.000	200,000		400.000	400,000	400.000	200,00
ermanent Monitoring Weir at Pine Creek anslocation	Fish and Mollusc Measures Fish and Mollusc Measures	Proposed Proposed	439,907 17,328		100,000 10,867	100,000 10,867	100,000	100,000	100,000	100,000	100,000	100,000	100,000				100,000 10,867	100,0
ansiocation ibutary Habitat Enhancements	Fish and Mollusc Measures	Proposed	996,257	10,007	10,007	10,007	10,007	10,007	10,007	10,007	10,007	10,007	10,007	10,007	10,007	10,007	10,007	10,86
uoutary riadotat critatricetierius. Ater Quality Assessment on Early Life Stages Between Swan Falls Dam and Brownlee Dam	Fish and Mollusc Measures	Proposed	34,733	36.800	36.800	36.800	36.800	36,800	36,800	36,800	36,800	36,800	36,800	36,800	36,800	36,800	36,800	36,80
ater quality Assessment on Lany Life Stages between Swarr and browniee banns sh Tankers	Fish and Mollusc Measures	Proposed	45,438		30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,00
an le inkeris	Fish and Mollusc Measures	Proposed	22,178			-		-										
selo Environmental Aquaculture Plan	Fish and Mollusc Measures	Proposed	44.650		28.000	28.000	28.000	28.000	28.000	28.000	28,000	28.000	28.000	28,000	28.000	28,000	28.000	28.00
onitor Genotypic Frequencies	Fish and Mollusc Measures	Proposed	3,615		2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	,	2,267	,	2,267	2,2
dditional Section 106 Projects	Historical and Archeological Measures	Proposed			-		-		-	-	-	-		-				
sian-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	6,007	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,2
ata Recovery at Four Archaeological Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	30,977	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250			4,250		4,250	4,2
uro- and Asian-American Interpretive Projects	Historical and Archeological Measures	Proposed	9,302		5,833	5,833	5,833	5,833	5,833	5,833	5,833	5,833					5,833	5,8
uro-American Interpretive Sites on Brownlee, Oxbow, and/or Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	6,007	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200					2,200	
plementation of Aspects of the Cultural Resource Management Plan Not Associated with Monitoring	Historical and Archeological Measures	Proposed			-		-	-	-	-	-	-	- ,					
onitoring of Eligible Sites along Transmission Lines	Historical and Archeological Measures	Proposed	4,027	1,500	1,500	4,500	1,500	1,500	4,500	1,500	1,500	4,500	1,500	1,500	4,500	1,500	1,500	4,5
onitoring of Known Burial Site on Oxbow Reservoir	Historical and Archeological Measures	Proposed	1,196	750	750	750	750	750	750	750	750	750	750	750	750	750	750	1
onitoring of Known Eligible Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed	103,651	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000					65,000	65,0
onitoring of Known Eligible Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	29,358	17,100	17,100	18,600	17,100	17,100	18,600	17,100	17,100	18,600	17,100	17,100	18,600	17,100	17,100	18,6
onitoring of Known Eligible Sites on Oxbow and Hells Canyon Reservoirs	Historical and Archeological Measures	Proposed	31,376	18,000	18,000	21,000	18,000	18,000	21,000	18,000	18,000	21,000	18,000	18,000	21,000	18,000	18,000	21,0
ative American Interpretive Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	6,007	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,2
ative American Interpretive Sites on Oxbow and Hells Canyon Reservoir	Historical and Archeological Measures	Proposed	3,004	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,1
ative American Programs: Burns Paiute Tribe	Historical and Archeological Measures	Proposed	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,3
ative American Programs: Confederated Tribes of the Umatilla Indian Reservation (Umatilla Tribes)	Historical and Archeological Measures	Proposed	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,33
ative American Programs: Confederated Tribes of the Warm Springs Indian Reservation (Warm Springs Tribes)	Historical and Archeological Measures	Proposed	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,33
ative American Programs: Nez Perce Tribe	Historical and Archeological Measures	Proposed	53,155	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,33
ative American Programs: Shoshone-Bannock Tribes	Historical and Archeological Measures	Proposed	53,155		33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333					33,333	
ative American Programs: Shoshone-Paiute Tribes	Historical and Archeological Measures	Proposed	53,155		33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333				33,333	33,33
abilization of Sites below Hells Canyon Dam	Historical and Archeological Measures	Proposed	170,095	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,667	106,66
abilization of Sites on Brownlee Reservoir	Historical and Archeological Measures	Proposed	19,775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
esign Standards and Guidelines for Landscaping	Land Management and Aestetics Measures	Proposed	2,272	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
esign Standards and Guidelines for Physical Structures	Land Management and Aestetics Measures	Proposed	3,976	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nhancement of Others' Facilities	Land Management and Aestetics Measures	Proposed	1,136		-	-	-	-	-	-	-	-	-	-	-	-	-	-
eneral Aesthetic Clean-Up Plan and Implementation	Land Management and Aestetics Measures	Proposed	32,219	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,00
formation and Education	Land Management and Aestetics Measures	Proposed	1,238		-	-	-	-	-	-	-	-	-	-	-	-	-	-
itigation of Contrast from Project Facilities	Land Management and Aestetics Measures	Proposed	35,626		1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190			1,190		1,190	1,19
atural and Cultural Resources	Land Management and Aestetics Measures	Proposed	111,625		70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,00
eplacement of Guardrails and Jersey Barriers	Land Management and Aestetics Measures	Proposed	15,972		-	-	-	-	-	-	-	-	-	-	-	-	-	-
ansmission Lines	Land Management and Aestetics Measures	Proposed	4,173		-	-	-	-	-	-	-	-	-	-	-	-	-	-
evelopment of Airstrip A&B Dispersed Recreation Site	Recreation Measures	Proposed	4,477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
evelopment of Low-Water Boat Launch at or near Swedes Landing	Recreation Measures	Proposed	27,471	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
evelopment of Site Plan and Enhancement of Eckels Creek Dispersed Recreation Site	Recreation Measures	Proposed	3,315		-	-	-	-	-	-	-	-		-	-	-	-	
evelopment of Site Plan for Big Bar Recreation Site	Recreation Measures	Proposed	5,680		-	-	-	-	-	-	-	-	-	-	-	-	-	
nhancement of Boat Ramp and Associated Facilities at Big Bar D Recreation Site	Recreation Measures	Proposed	27,626		-	-	-	-	-	-	-	-		-			-	
hancement of Bob Creek Section A Dispersed Recreation Site	Recreation Measures	Proposed	5,505		-	-	-	-	-	-	-	-		-			-	
nhancement of Bob Creek Section B Dispersed Recreation Site	Recreation Measures	Proposed	2,747		-	-	-	-	-	-	-	-		-				-
nhancement of Bob Creek Section C Dispersed Recreation Site	Recreation Measures	Proposed	5,505		-	-	-	-	-	-	-	-	-	-			-	-
nhancement of Carters and Old Carters Landing Recreation Sites	Recreation Measures	Proposed	8,932	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
nhancement of Copper Creek Dispersed Recreation Site	Recreation Measures	Proposed	5,505		-	-	-	-	-	-	-	-	-			-	-	-
hancement of Copperfield Boat Launch Area	Recreation Measures	Proposed	10,654	-	-	-	-	-	-	-	-	-	-	-	-	++		
hancement of Eagle Bar Dispersed Recreation Site	Recreation Measures	Proposed	16,575	-	-	-	-	-	-	-	-	-	-	-	-	++		-
nhancement of Hewitt and Holcomb Parks herecoment of Little and Cociteties Plans	Recreation Measures	Proposed	11,050	- EF 000	- EF 000	- -	- EE 000	- FF 000			- FF 000							
hancement of Litter and Sanitation Plan hancement of Operation and Maintenance of Applicant Managed Parks and Recreation Facilities	Recreation Measures	Proposed	94,521		55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000					55,000	
nhancement of Operation and Maintenance of Applicant-Managed Parks and Recreation Facilities	Recreation Measures Recreation Measures	Proposed Proposed	152,193 8,523	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,0
nancement of Xxxx State Control State Contro	Recreation Measures Recreation Measures	Proposed	8,523 47,930		30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,0
hancement of Soan Maintenance hance hancement of Soan Maintenance hancement of Spring Recreation Site	Recreation Measures Recreation Measures	Proposed Proposed	47,930 52,163		30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,0
inancement of spring recreation site hancement of Swedes Landing	Recreation Measures Recreation Measures	Proposed	8,111		-	-		-		-	-	-	-	-	-	-	-	+
Intelligentaria of Westfall Dispersed Recreation Site	Recreation Measures	Proposed	6,630		-	-		-		-		-			_ <u>-</u>	+ +++++++++++++++++++++++++++++++++++++		_
formation and Education (IRE) Plan	Recreation Measures	Proposed	187.685		30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30.00
ormation and Education (see) Frian	Recreation Measures Recreation Measures	Proposed	23,920		15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000					15,000	
wision of Boat Moorage on HCC Reservoirs	Recreation Measures	Proposed	25,137			24,000					-	24,000		- 13,000		5,000		24,0
owspirit or boat wordings of the Chestwins seconstruction of Helis Canyon Park	Recreation Measures	Proposed	202,801			,000	-	-		-	-	-	-	-	-	++	-	2-4,0
econstruction of McCornick Park	Recreation Measures	Proposed	305,914		-	-	-	-	-	-	-	-	-			-	-	
ecreation Adaptive Management Plan	Recreation Measures	Proposed	161,006		-	450,000	-	-	300,000	-	-	450,000					-	-
estriction of Public Access in Redfish Cave	Recreation Measures	Proposed	-		-	-	-	-	- 1	-	-	- 1	-		-		-	-
erform O&M of Applicant-Enhanced BLM and USFS Reservoir-Related Recreation Sites	Recreation Measures	Proposed	152,193	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,0
rownlee Powerhouse Unit 5 turbine venting	Water Quality Measures	Proposed	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
rownlee Powerhouse Units 1 through 4 turbine venting	Water Quality Measures	Proposed	-	-	-	-	-	-	- 1	-	-	-	-		-	-	-	_
Owniee F Oweniouse Onits 1 through 4 turbine venting	Water Quality Measures	Proposed	-		-	-	-	-	- 1	-	-	-	-		-		-	
owniee roweniouse crisis i introdui 4 tubine enting	Water Quality Measures	Proposed	-	-	-	-	-	-	- 1	-	-	-	-		-	-	-	
ownlee Reservoir aeration ells Canyon Dam spillway flow deflectors		Proposed	2,237,655	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,0
ownlee Reservoir aeration ells Canyon Dam spillway flow deflectors	Wildlife Measures			-	-	-	-	-	-	-	-	-		-			-	
rownlee Reservoir aeration	Wildlife Measures Wildlife Measures	Proposed	10,618										1		1			
ownlee Reservoir aeration ellis Canyon Dam spillway flow deflectors quisition and O&M of Upland and Riparian Habitat		Proposed Proposed	10,618 41,461	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000				26,000	26,000	26.0
rownlee Reservoir aeration ells Canyon Dam spillway flow deflectors cquisition and O&M of Upland and Riparian Habitat operative enhancement of low-elevation riparian habitat and reintroduction of mountain quail in areas adjacent to the Hells Canyon Complex reservoirs.	Wildlife Measures			26,000	26,000 5,500	26,000	26,000	26,000		26,000 5,500								
rownlee Reservoir aeration ells Canyon Dam spillway flow deflectors cquisition and O&M of Upland and Riparian Habitat coperative enhancement of low-elevation riparian habitat and reintroduction of mountain quail in areas adjacent to the Hells Canyon Complex reservoirs. coperative Projects Enhancement of habitat on four Snake River islands in cooperation with the IDFG (Gold Island) and the ODFW (Hoffman, Patch, and Porter Islands)	Wildlife Measures Wildlife Measures	Proposed	41,461	26,000 5,500									26,000 5,500	26,000 5,500	26,000 5,500	5,500		5,5
ownlee Reservoir aeration allocation and O&M of Upland and Riparian Habitat coperative enhancement of low-elevation riparian habitat and reintroduction of mountain quail in areas adjacent to the Hells Canyon Complex reservoirs. coperative Projects Enhancement of Industrian four Snake River islands in cooperative Projects Enhancement of habitat on four Snake River islands in cooperative Projects Enhancement of habitat on four Snake River islands in cooperative Projects Enhancement of habitat on four Snake River islands in cooperative Projects Enhancement of Industrian Country (Note Projects Enhancement Only (Note Projects Enhanc	Wildlife Measures Wildlife Measures Wildlife Measures	Proposed Proposed	41,461 8,771 232,286	26,000 5,500 145,667	5,500 145,667	26,000 5,500 145,667	26,000 5,500 145,667	26,000 5,500 145,667	5,500	5,500 145,667	5,5 145,6							

[&]quot;Annual Measure Cost" represents the levelized cost of capital for each measure plus the average annual O&M cost for that measure.