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> Pat Smith Montana

Tom Karier Washington

Phil Rockefeller Washington

September 9, 2014

### **DECISION MEMORANDUM**

TO: Council Members

**FROM:** John Harrison

Information Officer

SUBJECT: Fiscal Year 2014 Annual Report to the Governors on Bonneville's Fish

and Wildlife Costs

**PROPOSED ACTION:** Approve final version of the report for publication and

submission to the governors.

**SIGNIFICANCE:** The 30-day public comment period ended on July 9, and

following revisions including three revised figures and tables,

the report is now ready for release.

### **BUDGETARY/ECONOMIC IMPACTS**

None.

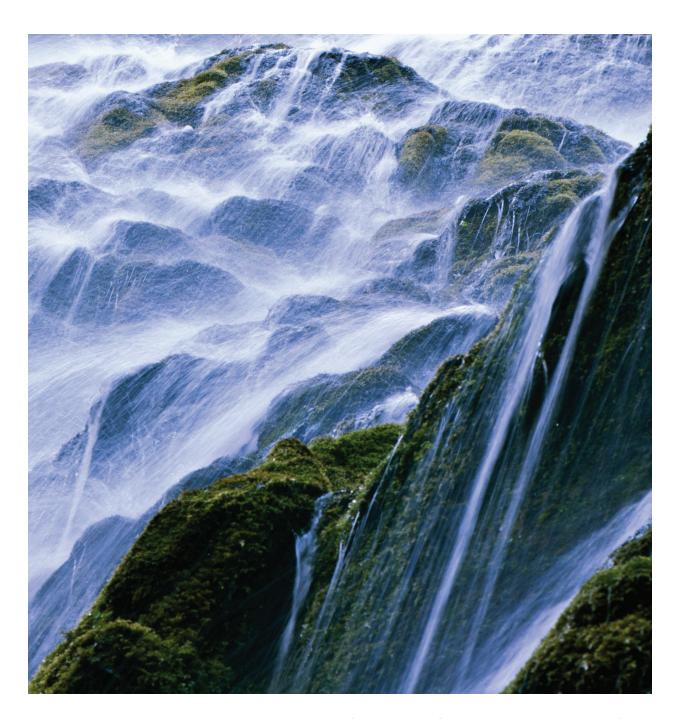
### **BACKGROUND**

2014 is the 13th year the Council has reported to the Northwest governors on Bonneville's fish and wildlife costs. The purpose of the report is to provide information, not to assess or comment on the costs. Information in the report is provided by Bonneville and is not independently verified by the Council.

Changes in the draft report following the public comment period included minor editorial revisions and complete revisions of three tables and their corresponding figures: 2A, Direct Program Costs by Species; 2C, Direct Program Costs on ESA-listed Species; and 4, Costs by Province. Bonneville staff, working with their data contractor, revised these tables and submitted new versions in late August.

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503-222-5161 800-452-5161 Fax: 503-820-2370



2013 Columbia River Basin Fish and Wildlife Program Costs Report



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### Overview

Since 2001, in response to a request from the governors of the four Northwest states, the Council has reported annually on all costs related to fish and wildlife incurred by the Bonneville Power Administration, including costs to implement the Council's Columbia River Basin Fish and Wildlife Program. In this 13th annual report, the Council provides an update of Bonneville's fish and wildlife costs in Fiscal Year 2013. This cost information was provided by Bonneville in response to requests from the Council staff and was not independently verified by the Council or its staff.

### Summary of 2013 costs

In Fiscal Year 2013, Bonneville reported total fish and wildlife costs of approximately \$682.4 million, as follows:

- \$239 million in direct (expense) costs.
- \$78.5 million in direct costs and reimbursements to the federal Treasury for expenditures by the Corps of Engineers, Bureau of Reclamation, and U.S. Fish and Wildlife Service for investments in fish passage and fish production, including direct funding of operations and maintenance expenses of federal fish hatcheries; this category also includes one-half of the Council's \$10.2 million budget in Fiscal Year 2013 (the other half is assigned to the Power Business Line budget).
- \$143.4 million in fixed costs (interest, amortization, and depreciation) of capital investments for facilities such as hatcheries, fish-passage facilities at dams, and some land purchases for fish and wildlife habitat.
- \$135.5 million in forgone hydropower sales revenue that results from dam operations that benefit fish but reduce hydropower generation.
- \$85.8 million in power purchases during periods when dam operations to protect migrating fish

reduce hydropower generation, such as by spilling water over dams in the spring or storing it behind dams in winter months in anticipation of required spring spill.

The \$682.4 million total does not include the amount Bonneville borrowed from the U.S. Treasury in 2013 totaling \$52.1 million for program-related projects, and \$103.6 million for associated federal projects, which include capital investments at dams operated by the Corps of Engineers and Bureau of Reclamation. These investments are funded by congressional appropriations and repaid by Bonneville. Including them in the same total as fixed costs would double-count some of the capital investment. The total also does not reflect a credit of \$84.1 million from the federal Treasury related to fish and wildlife costs in 2013 that Bonneville is required to take under Section 4(h)(10)(C) of the Power Act. The annual credit comprises the obligations of other federal agencies for dam purposes other than hydropower, and which Bonneville pays in full. The credit is applied to Bonneville's federal Treasury debt. Subtracting the credit reduces the total fish and wildlife costs to \$598.3 million in fiscal year 2013 (the credit is explained in more detail in the "Power System Costs" section of this report).

The total of all fish and wildlife costs reported by Bonneville in Fiscal Year 2013 (\$682.4 million) includes forgone revenue and power purchases. How large is this relative to Bonneville's other costs? In the same year, Bonneville's entire Power Business Line costs totaled approximately \$2,647,340,000 (See Figure and Table 1D). Adding the forgone revenue (\$135.5 million) to these costs brings the total to \$2,782,840,000. Bonneville's fish and wildlife costs comprised 24.5 percent of that total.

Fish and wildlife costs account for a significant portion of the rate Bonneville charges its wholesale power customers. Approximately one-third of Bonneville's wholesale rate of approximately \$30 per megawatt hour is estimated to be associated with its fish and wildlife program.



### Total costs, 1978-2013

The 2013 costs bring the grand total of all fish and wildlife costs incurred by Bonneville from 1978 when the costs began, through 2013, to \$13.75 billion. The total does not include \$2.38 billion in annual obligations to capital investments (the actual annual costs are captured in the "fixed costs" category), or \$1.87 billion in credits applied to Bonneville's Treasury debt (discussed above).

Here, in descending order, is a breakdown of the major cost categories:

- \$4.05 billion for power purchases to meet electricity-demand requirements in response to river and dam operations that benefit fish but reduce hydropower generation.
- \$3.02 billion in forgone hydropower sales revenue. Bonneville calculates the value of hydropower that could not be generated (revenue that is forgone) because of river operations to assist fish passage and improve fish survival, such as water spills at the dams when juvenile salmon and steelhead are migrating to the ocean.

- \$3.08 billion for the Council's direct program.

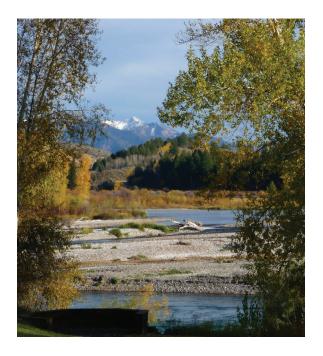
  This amount does not include annual commitments to capital investments in the direct program.
- \$2.26 billion in fixed expenses for interest, amortization, and depreciation on the capital investments.
- \$1.34 billion to: 1) directly fund fish and wildlife projects undertaken by the U.S. Army Corps of Engineers or the Bureau of Reclamation some of which predate the 1980 Northwest Power Act and for which Bonneville pays the hydropower share, consistent with the Power Act (these expenditures include, for example, operations and maintenance costs of certain fish-production facilities, fish passage facilities at dams, and research activities); and 2) reimburse the U.S. Treasury for the hydropower share of major dam modifications by the Corps of Engineers, such as installing spillway weirs, bypass systems, fish-deflection screens in front of turbine entrances, and spillway modifications to reduce dissolved

gas.

### Power system costs

The Council's program and the biological opinions on Federal Columbia River Power System operations issued by NOAA Fisheries and the U.S. Fish and Wildlife Service specify hydropower dam operations for fish that also affect power generation. These measures include river and dam operations to protect spawning and rearing areas for both anadromous and resident fish and to improve passage conditions at dams for juvenile salmon and steelhead. Sometimes these operations require Bonneville to purchase power to meet loads while at other times Bonneville simply forgoes a revenue-making opportunity. Regardless of how Bonneville handles the reduced generation, fish operations to comply with these federal requirements affect Bonneville rates for utility customers. Bonneville customers pay the cost of power Bonneville purchases to meet regional loads.

Also, compliance with these legal requirements, and others, limits the amount of revenue that would be possible from an unrestricted operation of the hydropower system. For reporting purposes, on an annual basis Bonneville calculates the value of both power purchases and forgone revenues attributable to fish operations and reports them as part of its costs to mitigate the impacts to fish and wildlife from



operation of the hydropower system. While the Council recognizes there is debate over the reporting of these power-system costs, a principle of the Act requires the Council to consider the "monetary costs and electric power issues resulting from implementation of the program," which are allocated by the Administrator. Nevertheless, this report includes forgone revenues and power purchases as reported by Bonneville, as the Council does not have the capability to audit Bonneville's financial records.

The amounts of forgone revenue and power purchases vary from year to year because the demand for power and the amount of water in the Columbia River system also vary. During some months of the year (most notably spring), the hydropower system generates sufficient power, even with fish operations, to both meet firm load and generate surplus power. During these months, the fish operations often reduce so-called "secondary" revenues from sales of surplus power. Bonneville calls these revenue reductions "forgone revenues." Among the many factors Bonneville considers in setting rates, one is the assumption of a lower amount of secondary revenue because of how the river and dams are operated for fish.

During other months of the year, and under low-water conditions, the hydropower system does not generate enough power to meet firm loads and Bonneville must supplement through purchasing electricity from other suppliers. When fish operations necessitate these additional power purchases to meet firm loads, Bonneville identifies this increment as "power purchases for fish enhancement" in its fish and wildlife costs. To calculate the annual power-generation share of forgone revenue and power purchases attributable to fish operations at the dams, Bonneville conducts two studies of hydropower generation for the relevant fiscal year. One study includes all dam-operating requirements, including those for fish, and the other has no fishprotection requirements. The differences for each month are calculated and applied to the corresponding monthly actual Mid-Columbia Dow Jones wholesale electricity market prices. Combined with assumptions of the monthly power-demand load, this provides monthly estimates of the forgone revenue and power purchases resulting from the fish-enhancement operations.

In Fiscal Year 2013, the overall annual average difference between the two studies was 953 average-megawatts. Of this, about 638 average-megawatts contributed to the estimated \$135.5 million in forgone revenue. About 315 average megawatts contributed to the estimated \$85.8 million in replacement power purchases.

Bonneville receives a credit under Section 4(h)(10) (C) of the Northwest Power Act as reimbursement for the non-power share of fish and wildlife costs that Bonneville pays annually, including a portion of the power purchases. Other costs are not factored into that 4(h)(10)(C) credit, such as forgone revenue, interest on Treasury borrowing, amortization and depreciation of capital projects, reimbursable expenditures, and the Council budget. Non-power purposes such as irrigation, navigation, and flood control comprise a weighted, system-wide average of 22.3 percent of the authorized purposes of the federal dams. The annual credit to Bonneville is based on this percentage. The 2013 credit was \$84.1million.

In effect, the credit reduces the fish and wildlife costs paid by electricity ratepayers. As noted earlier in this report, the grand total of all fish and wildlife costs incurred by Bonneville in 2013 was approximately \$682.4 million. Applying the 4(h)(10)(C) credit reduces Bonneville's total fish and wildlife-related costs, meaning that ratepayers were responsible for \$598.3 million and the federal government was responsible for the nonpower-purposes share of \$84.1 million.

### Background

The Pacific Northwest Electric Power Planning and Conservation Act of 1980 (16 USC 839; PL 96-501), the federal law that authorized the states of Idaho, Montana, Oregon, and Washington to form the Northwest Power and Conservation Council, directs the Council to prepare a program to protect, mitigate and enhance fish and wildlife, and related spawning grounds and habitat, of the Columbia River Basin that have been affected by hydroelectric development. The Bonneville Power Administration satisfies its Power Act responsibilities for fish and wildlife mitigation through funding of the Council's Columbia River Basin Fish

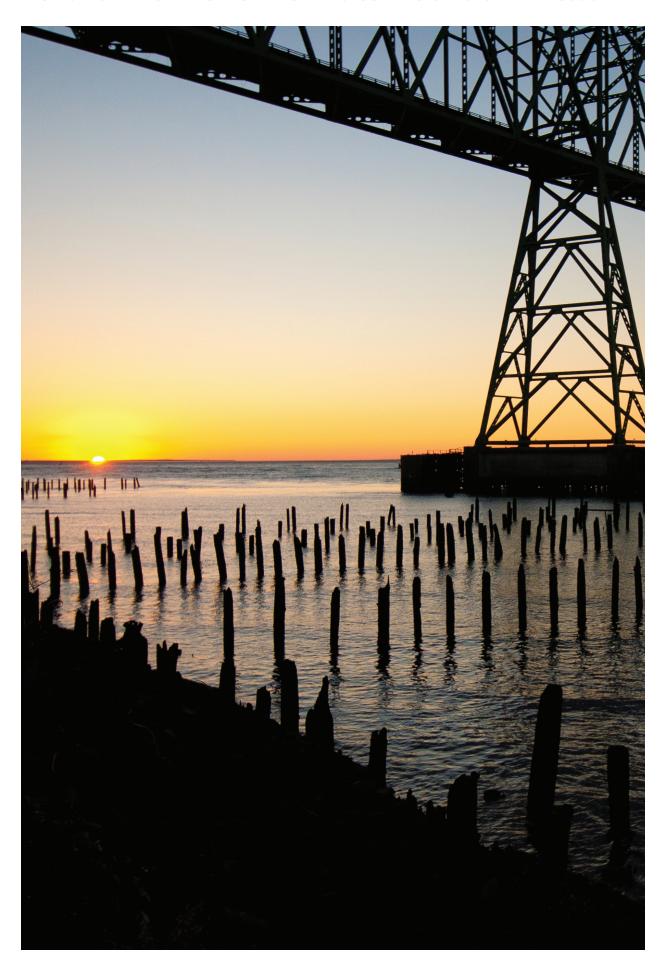


and Wildlife Program. Bonneville is a federal power marketing agency within the U.S. Department of Energy that sells wholesale electricity from 31 federal hydropower dams and one non-federal nuclear power plant in the Pacific Northwest (the Federal Columbia River Power System — FCRPS).

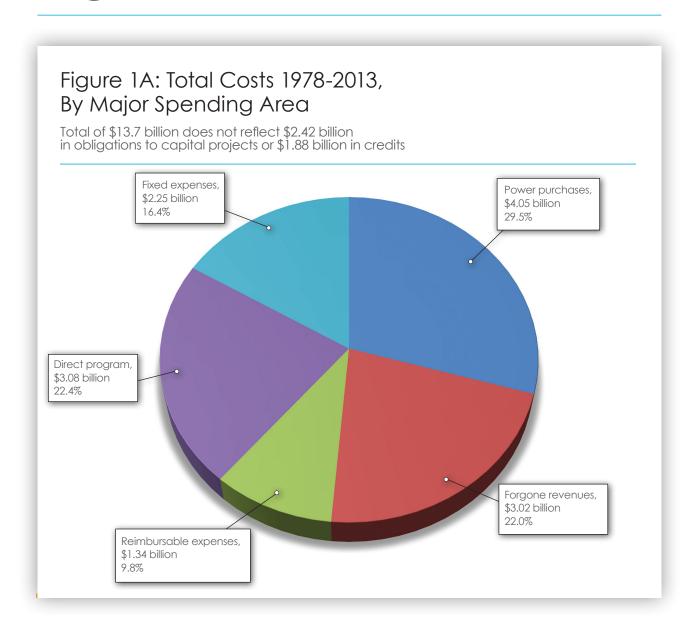
In addition to this annual report on Bonneville's fish and wildlife costs, the Council also tracks progress of fish and wildlife efforts in the Columbia River Basin using three high-level indicators. Posed as questions, they are:

- 1. Are Columbia River Basin fish species abundant, diverse, productive, spatially distributed, and sustainable?
- 2. Are operations of the mainstem Columbia and Snake River hydropower dams meeting the fish-passage survival objectives of the program?
- 3. What is being accomplished by projects that implement the Council's Fish and Wildlife Program?

Over time, the Council expects to augment and refine these initial indicators to provide a more comprehensive picture of fish and wildlife in the Columbia River Basin. For example, at this point all of the indicators for Council actions are related to habitat work. As more information becomes available, this indicator should be expanded to better reflect the breadth of actions that implement the Council's program. We also anticipate being able to provide better links to the underlying data, especially those related to fish populations. While this information stops short of providing evidence of the effectiveness of the Council's program or individual projects, the Council is separately pursuing additional approaches to shed light on that issue, as well.

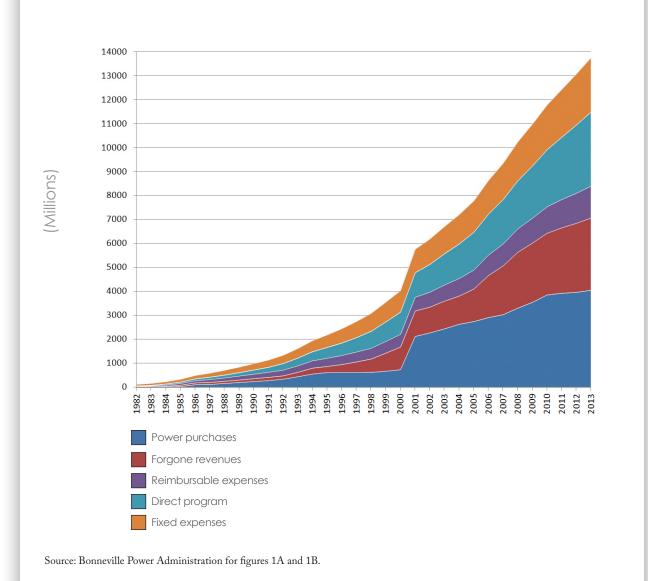


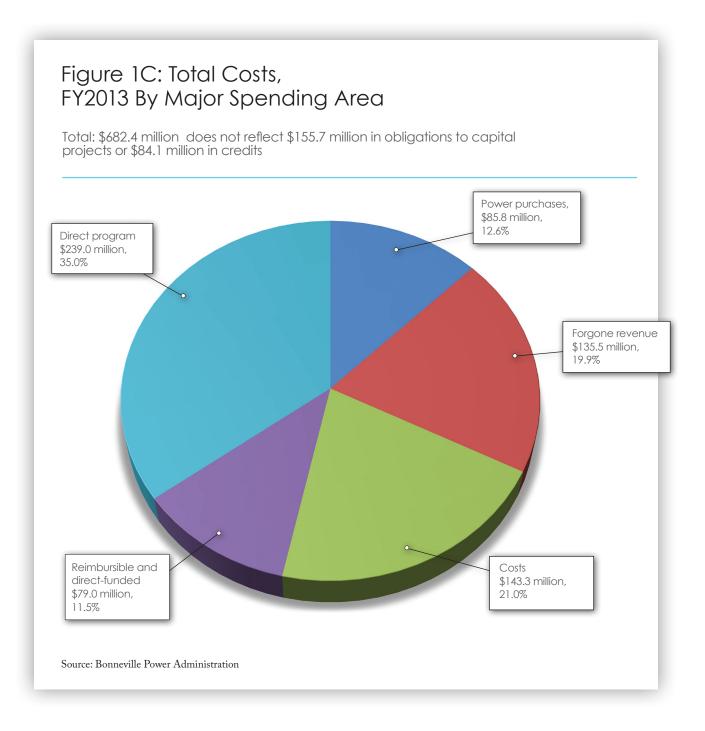
### Figures

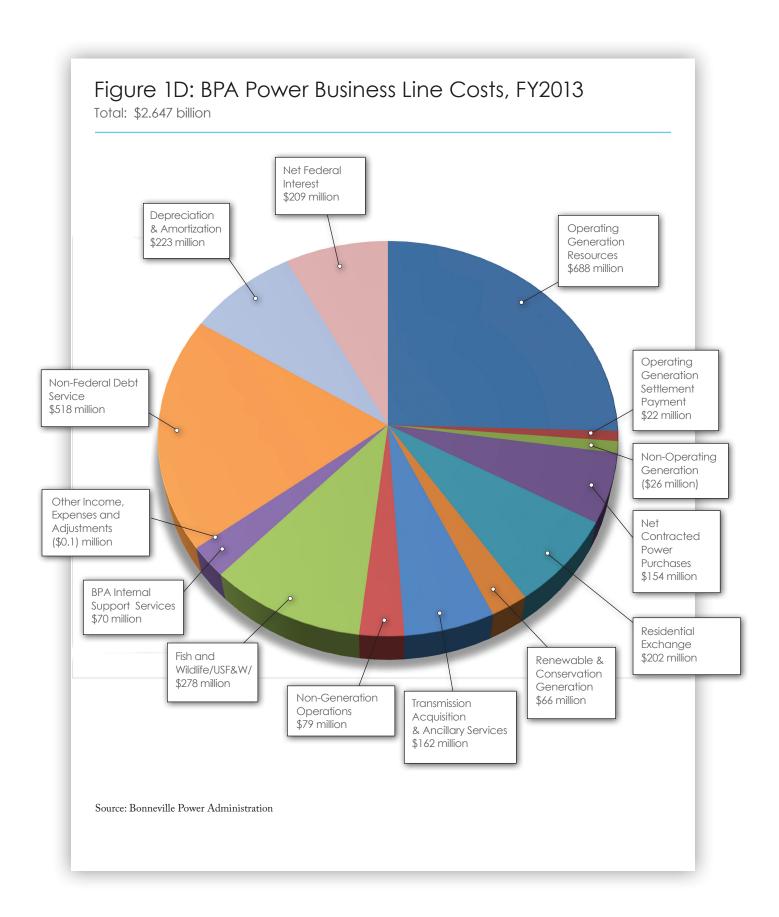


### Figure 1B: Cumulative Costs 1978-2013, By Major Spending Area

Total of \$13.7 billion does not reflect \$2.42 billion in obligations to capital projects or \$1.88 billion in credits

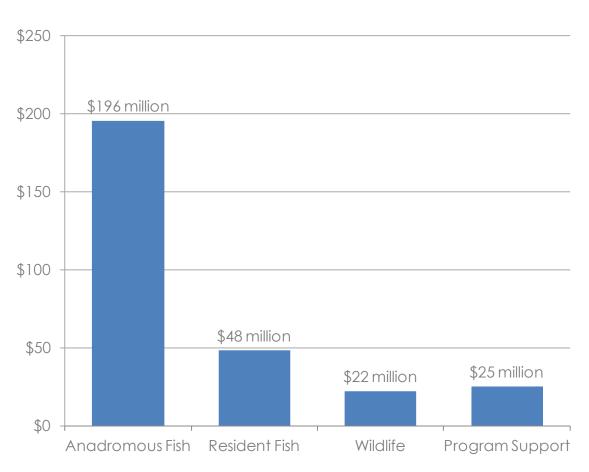






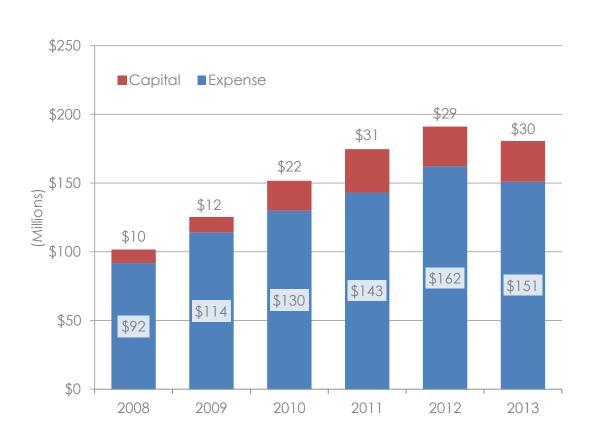
### Figure 2A: Costs by Types of Species, FY2013

Total: \$291.1 million includes \$52.1 million in obligations to capital projects



- 1) Starting in 2008, Spending can be tracked back to a work element where the contractor explicitly identified the "Primary Focal Species" benefiting from the work.
- 2) Program Support includes includes contracts that contain only administrative work elements or program level spending that could not be mapped to a specific project, as well as BPA internal overhead such as personnel costs.
- 3) Revised as of 8/15/2014 (Corrections made to Pisces reporting protocol)



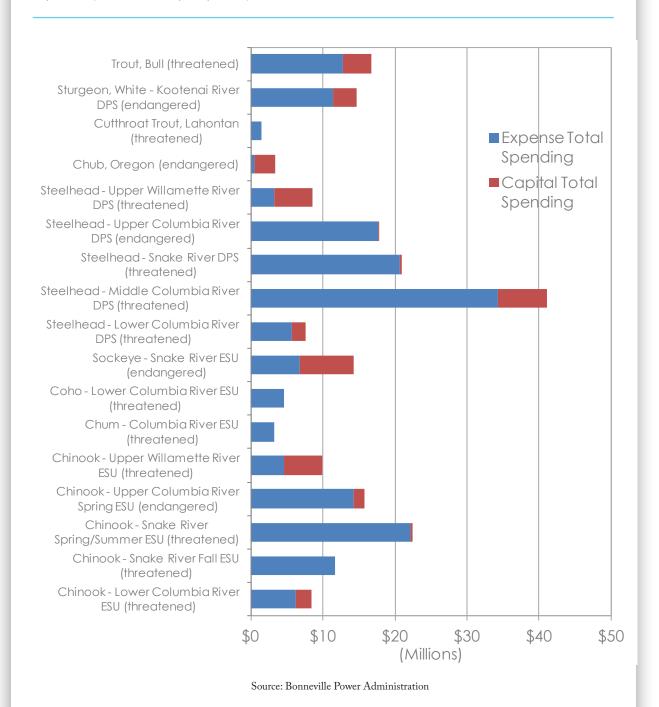


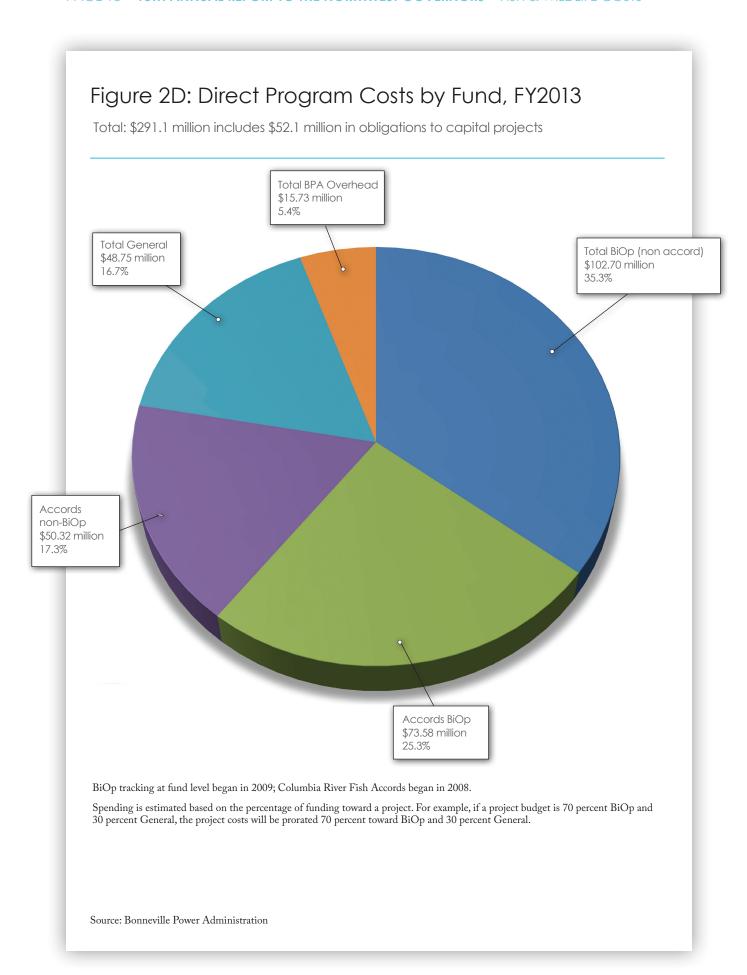
Estimated spending is based at the project level. Therefore, if a project partially supports the Federal Columbia River Power System Biological Opinion, all costs for the project are included.

### Figure 2C: Costs of ESA-Listed Fish, FY2013

Total: \$222.7 million

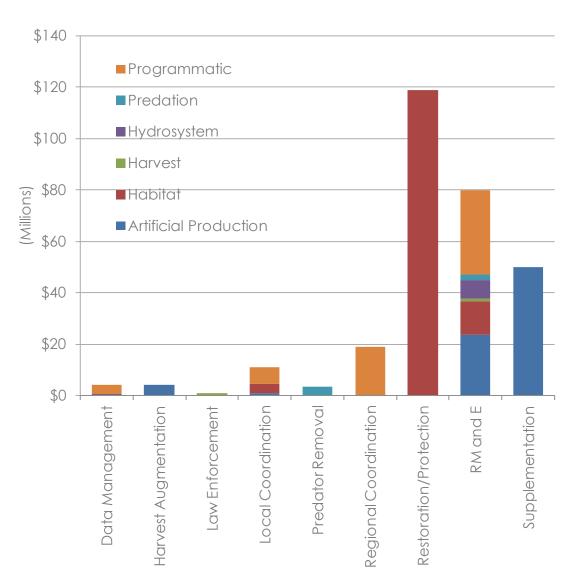
Expense: \$181.9 million | Capital: \$40.8 million





### Figure 3A: Costs by Purpose and Emphasis, FY2013

Total: \$291.1 million includes \$52.1 million in obligations to capital projects



Estimated spending is based at the project level. Therefore if a project is labeled AP, but also supports Habitat, the expenditures are counted as artificial production.

Local and regional coordination comprise efforts to better communicate, build consensus, develop policies, and improve collaboration among fish and wildlife managers and the public.

The Programmatic category includes regional coordination, status and trend monitoring, and other projects that address multiple project categories.

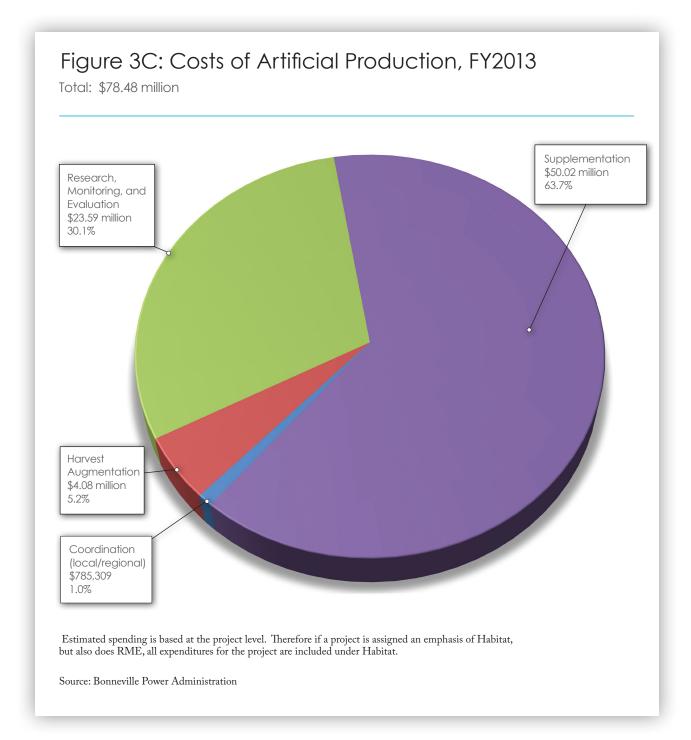
### Figure 3B: Costs by Category, FY2013 Total: \$291.1 million includes \$52.1 million in obligations to capital projects Coordination (local/regional) \$30.07 million 10.3% Research, Monitoring Data Management and Evaluation \$3.98 million \$80.05 million 1.4% 27.5% Predator Removal \$3.31 million 1.1% Law Enforcement \$750,780 <1% Production Habitat (Restoration/ (Supplementation) Protection) \$50.02 million \$118.83 million 17.2% 40.8%

Starting in 2008, as part an effort to improve how fish and wildlife program data is managed and reported, Bonneville updated some of its old project categories. The new project categories are called "Purpose" and "Emphasis," where purpose describes the general goal or purpose of the project and emphasis describes the primary types of work being employed by the project. Bonneville program support is included within Coordination; Data Management; and Research, Monitoring, and Evaluation emphasis types.

Harvest Augmentation

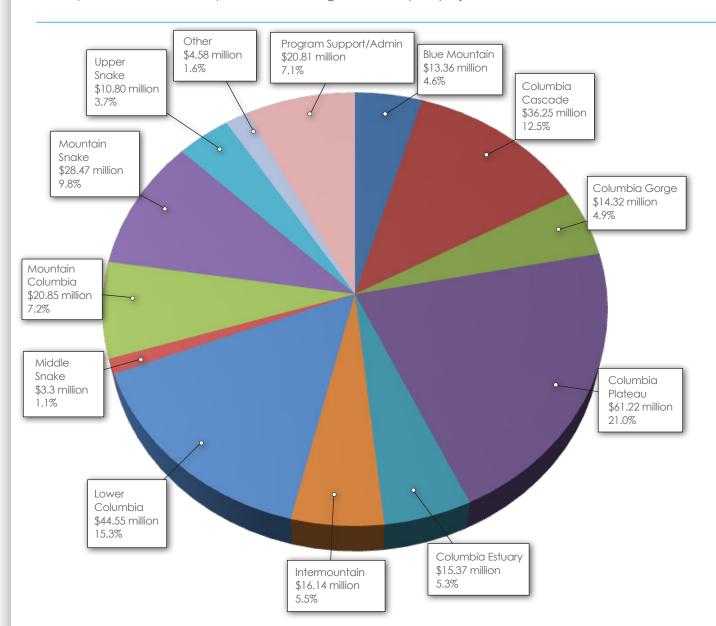
\$4.077 million 1.4%

Estimated spending is based at the project level. Therefore if a project is assigned an emphasis of Habitat, but also does RME, all expenditures for the project are included under Habitat.



### Figure 4: Costs by Province, FY2013

Total: \$291.1 million includes \$52.1 million in obligations to capital projects

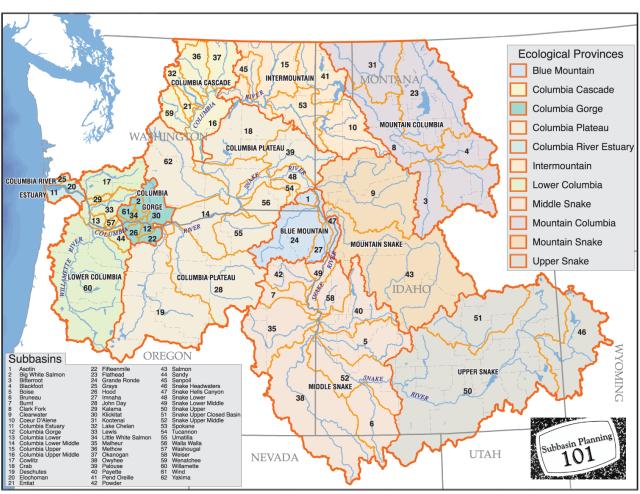


Starting in 2008, spending by province is tracked in Pisces (www.cbfish.org) based on where the contractor explicitly identified the work location.

Other includes "undetermined" locations such as ocean, Canada; and provinces not recognized by the Council.

Program Support/Admin/Other includes spending that cannot be traced back to a contract that has at least one work element requiring location; contracts without any work elements at all; program level spending not mapped to a specific project; and Bonneville overhead.

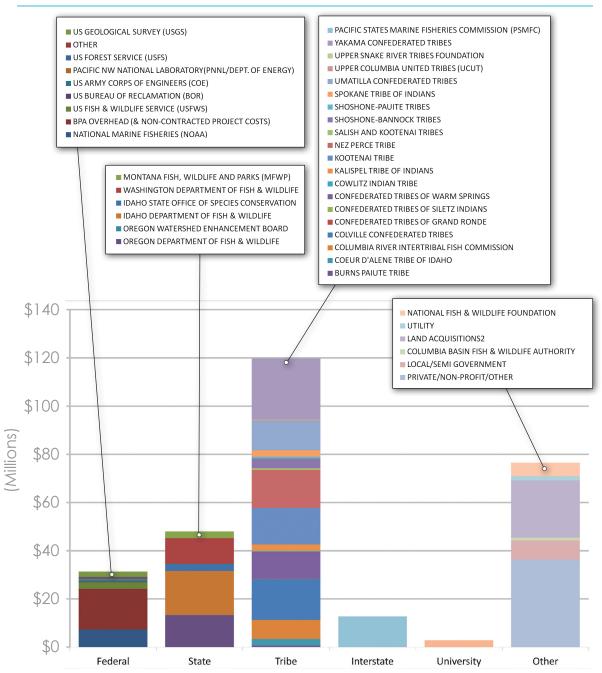
### Province Map



Map by Bonneville Power Administration Geographical Information System

### Figure 5: Costs by Contractor Types, FY2013

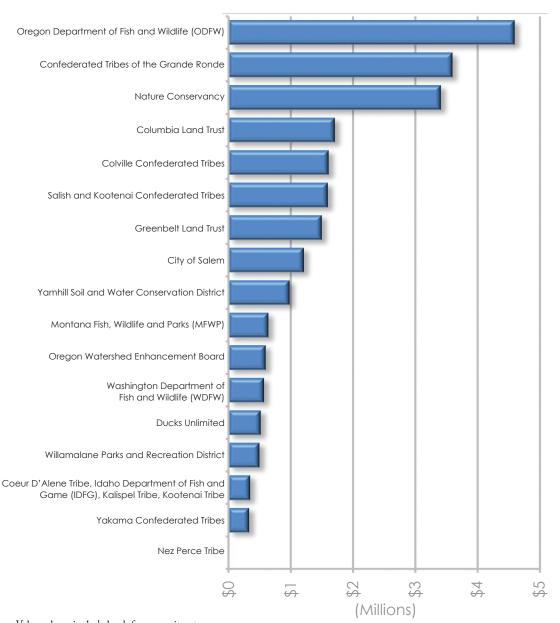
Total: \$291.1 million includes \$52.1 million in obligations to capital projects



- 1. Values above include accruals.
- 2. Starting in FY13, land acquisition values may include stewardship costs for long-term operations and maintenance (O&M).
- 3. In this table and figure, "Other" includes Bonneville's project-related payments to contractors that don't fit in the defined categories including, for example, private individuals; local governments; the Columbia Basin Fish and Wildlife Authority; electric utilities; the National Fish and Wildlife Foundation; mapping services; the costs of real estate surveys and assessments; and land acquisitions. In the Federal category, "Other" is a catch-all for entities not listed separately.
- 4. Non-contracted proejct costs refer to internal Bonneville costs such as land acquisition real estate costs performed within Bonneville but not within the Fish and Wildlife Division.

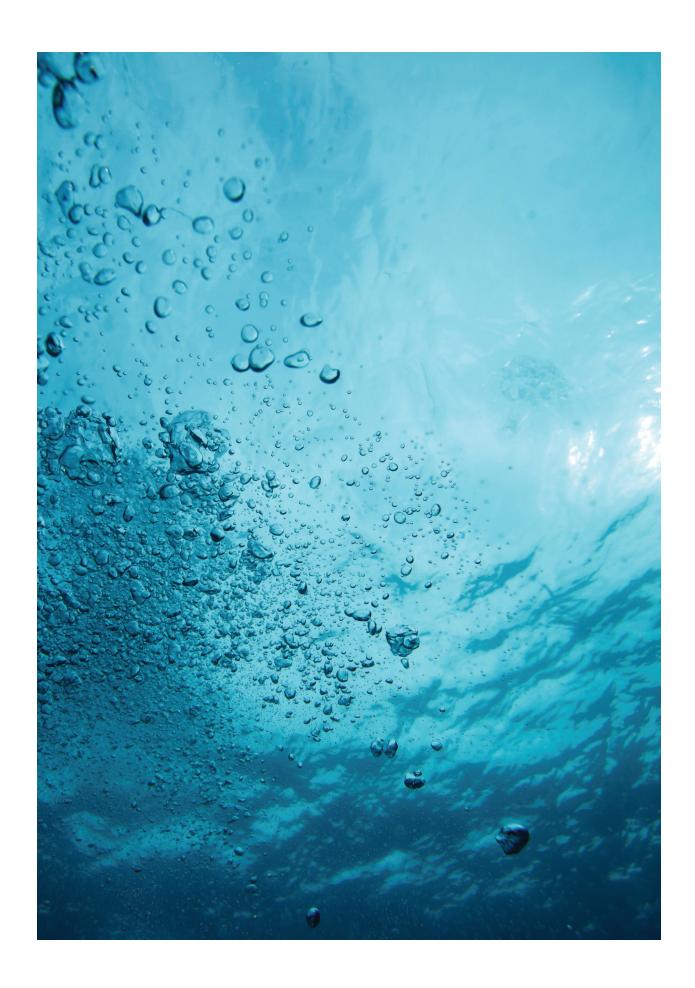


Total: \$23.74 million



Values above include bank fees, permits, etc.

Starting in FY13, land acquisition values may include stewardship costs for long-term operations and maintenance (O&M).



### Endnotes

<sup>1</sup> Direct program costs also can include supplemental mitigation expenses, which in the past included so-called "action-plan," "high-priority," and "fast-track" projects. For the period 2001-2004, direct program costs included a total of \$16 million in one-time expenditures for "high priority" and "action plan" projects. The "action-plan" projects were intended to bring immediate benefits to ESA-listed salmon and steelhead that were affected by altered hydropower dam operations in the spring and early summer of 2001, when the flow of the Columbia River was at a near-record low. The "high-priority" projects were intended to bring immediate benefits to all species listed for protection under the Endangered Species Act in advance of subbasin planning (the initial subbasin plans were submitted to the Council in 2004 and adopted into the Fish and Wildlife Program in 2004 and 2005). The action-plan and high-priority expenditures were included in the calculation of 1978-2009 total spending. "Fast Track" projects were identified under the Columbia Basin Research, Monitoring, and Evaluation Collaboration process and workshops in 2009. The projects were intended to meet high-priority gaps in the Reasonable and Prudent Alternative of the 2008 Federal Columbia River Power System Biological Opinion for salmon and steelhead by being implemented as quickly as possible. The projects can be found in the AA/NOAA/NPCC BiOp RM&E Workgroup Recommendations Report, http://bit.ly/aWn7PR.

ii Capital projects are financed over time with appropriated debt. In Bonneville's fish and wildlife budget, the amounts are called "obligations" as opposed to project expenditures through the direct-funded part of the program. Capital projects include construction of fish hatcheries, fish and wildlife habitat improvements, and land purchases for wildlife. Capital investments in Bonneville's budget also include those for "associated federal projects," which include Bonneville's share of the cost of the projects in the U.S. Army Corps of Engineers' Columbia River Fish Mitigation Program. These projects include, among others, fish-passage improvements at the federal dams, barge transportation of juvenile salmon and steelhead, research in the Columbia River estuary, and the effort to relocate Caspian tern and double-crested cormorant nesting areas from the estuary to other locations in the Northwest.

Table 1A: Total Costs of Fish and Wildlife Actions 1978-2013

Cost Element	1978-1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
CAPITAL INVESTMENTS											
BPA FISH AND WILDLIFE			,	,	,	10	00	2	00	∞	16
BPA SOFTWARE DEVELOPMENT COSTS	•		1	1			1	1	1		1
ASSOCIATED PROJECTS (FEDERAL HYDRO)	30	18	62	55	6	46	6	79	∞	22	5
TOTAL CAPITAL INVESTMENTS	30	18	62	55	6	27	17	83	15	14	21
PROGRAM EXPENSES											
BPA DIRECT FISH AND WILDLIFE PROGRAM	2	2	5	6	20	16	20	22	19	23	33
SUPPLEMENTAL MITIGATION PROGRAM EXPENSES <sup>2</sup>	•	•		,		•	,	,			
REIMBURSABLE/DIRECT-FUNDED PROJECTS <sup>3</sup>	•	•	•	•		•	1	•	1	•	1
O & M LOWER SNAKE RIVER HATCHERIES			-	2	4	5	5	9	5	∞	80
O & M CORPS OF ENGINEERS	15	5	∞	6	10	Ξ	16	21	Ξ	12	12
O & M BUREAU OF RECLAMATION							,				
OTHER (NW POWER AND CONSERVATION COUNCIL)	•	1	က	က	2	က	က	က	က	4	4
SUBTOTAL (REIMB/DIRECT-FUNDED)	15	9	12	4	16	20	24	30	19	24	23
TOTAL OPERATING EXPENSES	17	00	16	23	36	38	43	52	38	47	56
PROGRAM RELATED FIXED EXPENSES⁴											
INTEREST EXPENSE	15	9	6	12	13	15	17	22	24	25	26
AMORTIZATION EXPENSE	•	1	1	1	1	1	1	1	-	2	2
DEPRECIATION EXPENSE	6	2	e	4	4	4	5	9	9	9	9
TOTAL FIXED EXPENSES	24	6	12	16	17	20	22	29	31	32	34
GRAND TOTAL PROGRAM EXPENSES	4	17	29	39	52	26	65	80	69	79	91
FORGONE REVENUES AND POWER PURCHASES											
FOREGONE REVENUES	•	8	14	_	∞	27	19	6	10	15	15
BPA POWER PURCH, FOR FISH ENHANCEMENT	,	,	,	,	12	17	74	Ξ	40	40	40
TOTAL FOREGONE REVENUES AND POWER PURCHASES	•	က	14	_	20	44	93	20	20	55	55
TOTAL PROGRAM EXPENSES, FOREGONE REVENUES, & POWER PURCHASES	4	20	43	40	72	100	158	100	119	134	146
CREDITS											
4(H)(10)(C)	1	1	1	1	1	1	1	1			1
FISH COST CONTINGENCY FUND	1	1	1	,	•	1	1	1	1	,	1
TOTAL CREDITS		1	1	1	•	1	1	1		•	1

Table 1A: Total Costs of Fish and Wildlife Actions 1978-2013 (Continued)

Cost Element	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
CAPITAL INVESTMENTS <sup>1</sup>											
BPA FISH AND WILDLIFE	18	=	17	21	33	26	28	22	15	14	17
BPA SOFTWARE DEVELOPMENT COSTS	•	1	1	•	•	1	1		1	1	,
ASSOCIATED PROJECTS (FEDERAL HYDRO)	4		98	39	39	45	-43	٠	14	47	9
TOTAL CAPITAL INVESTMENTS	22	12	103	09	72	7.1	-15	22	29	61	23
PROGRAM EXPENSES											
BPA DIRECT FISH AND WILDLIFE PROGRAM	33	29	50	28	71	69	82	105	108	108	101
SUPPLEMENTAL MITIGATION PROGRAM EXPENSES <sup>2</sup>	•	•			٠			٠	٠		က
REIMBURSABLE/DIRECT-FUNDED PROJECTS <sup>3</sup>	1	1	1	1	1	1	1	1	1	1	•
O & M LOWER SNAKE RIVER HATCHERIES	6	Ξ	Ξ	12	13	12	12	Ξ	13	12	13
O & M CORPS OF ENGINEERS	12	13	14	17	18	18	19	19	20	20	23
O & M BUREAU OF RECLAMATION	1	1	-	-	-	2	2	8	т	2	က
OTHER (NW POWER AND CONSERVATION COUNCIL)	4	4	4	4	4	4	4	4	m	4	4
SUBTOTAL (REIMB/DIRECT-FUNDED)	24	28	31	35	36	35	36	36	39	38	43
TOTAL OPERATING EXPENSES	57	95	80	91	108	104	118	141	147	146	147
PROGRAM RELATED FIXED EXPENSES											
INTEREST EXPENSE	29	31	4	46	45	51	52	49	48	48	49
AMORTIZATION EXPENSE	4	5	9	7	6	11	12	14	15	16	17
DEPRECIATION EXPENSE	5	9	∞	∞	10	Ξ	12	Ξ	Ξ	12	12
TOTAL FIXED EXPENSES	38	42	54	19	64	73	76	74	76	76	78
GRAND TOTAL PROGRAM EXPENSES	96	137	134	152	171	177	194	215	223	222	225
FORGONE REVENUES AND POWER PURCHASES											
FOREGONE REVENUES	15	23	45	62	7	82	108	117	198	193	116
BPA POWER PURCH. FOR FISH ENHANCEMENT	40	59	104	112	64	1	1	5	48	99	1,390
TOTAL FOREGONE REVENUES AND POWER PURCHASES	55	82	149	174	71	82	108	122	245	258	1,506
TOTAL PROGRAM EXPENSES, FOREGONE REVENUES, & POWER PURCHASES	151	219	283	326	242	259	302	337	469	480	1,730
CREDITS											
4(H)(10)(C)	1	1	1	1	-45	-26	-30	-36	-46	-20	-337
FISH COST CONTINGENCY FUND	•	•	•	1	•	•	•	•	•		-247
TOTAL CREDITS	1	1	1	1	-45	-26	-30	-36	-46	-50	-583

Table 1A: Total Costs of Fish and Wildlife Actions 1978-2013 (Continued)

Cost Element	2002	2003	2004	2005	2008	2007	2008	2009	2010	2011	2012	2013
CAPITAL INVESTMENTS <sup>1</sup>												
BPA FISH AND WILDLIFE	9	12	6	12	35	35	26	27	40	06	22	52
BPA SOFTWARE DEVELOPMENT COSTS	1	1	1	1	1	_	_	1	_	1	•	•
ASSOCIATED PROJECTS (FEDERAL HYDRO)	6	89	76	54	360	09	37	136	56	103	115	104
TOTAL CAPITAL INVESTMENTS	15	80	84	99	396	67	64	164	86	194	172	156
PROGRAM EXPENSES												
BPA DIRECT FISH AND WILDLIFE PROGRAM	137	141	138	136	138	139	149	178	200	221	249	239
SUPPLEMENTAL MITIGATION PROGRAM EXPENSES <sup>2</sup>	7	7	∞		•							
REIMBURSABLE/DIRECT-FUNDED PROJECTS <sup>3</sup>												
O & M LOWER SNAKE RIVER HATCHERIES	15	15	17	17	20	19	19	21	23	25	22	29
O & M CORPS OF ENGINEERS	28	30	32	33	32	33	34	34	37	40	41	39
O & M BUREAU OF RECLAMATION	4	е	4	4	5	4	4	5	5	5	5	9
OTHER (NW POWER AND CONSERVATION COUNCIL)	4	4	4	4	4	4	4	5	5	4	2	2
SUBTOTAL (REIMB/DIRECT-FUNDED)	51	53	57	58	19	09	62	64	70	74	73	78
TOTAL OPERATING EXPENSES	195	200	203	194	199	200	211	242	269	295	322	318
PROGRAM RELATED FIXED EXPENSES⁴												
INTEREST EXPENSE	49	20	53	56	53	76	77	79	81	79	8	88
AMORTIZATION EXPENSE	17	17	18	17	17	23	24	25	25	28	30	36
DEPRECIATION EXPENSE	13	13	15	16	17	14	15	17	18	20	21	19
TOTAL FIXED EXPENSES	78	81	85	06	88	113	116	120	124	127	132	143
GRAND TOTAL PROGRAM EXPENSES	273	280	288	283	286	313	327	362	393	422	453	461
FORGONE REVENUES AND POWER PURCHASES												
FOREGONE REVENUES	13	79	22	182	397	283	274	143	66	157	152	135
BPA POWER PURCH, FOR FISH ENHANCEMENT	148	171	191	Ξ	168	121	275	240	310	71	39	98
TOTAL FOREGONE REVENUES AND POWER PURCHASES	160	250	213	293	299	403	548	383	409	227	191	221
TOTAL PROGRAM EXPENSES, FOREGONE REVENUES, & POWER PURCHASES	434	531	501	576	852	716	876	745	802	920	644	682
CREDITS												
4(H)(10)(C)	99-	-74	-77	-58	-76	99-	-101	66-	-123	-85	-77	-84
FISH COST CONTINGENCY FUND	1	-79	1	1	•	ı	1	1	ı	•	•	•
TOTAL CREDITS	99-	-152	-77	-58	-76	99-	-101	66-	-123	-85	-77	-84

149

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This information has been made publicly available by BPA on 12/20/12. The figures shown are consistent with audited actuals that contain Agency approved financial information, except for forgone revenues and power purchases which are estimates and do not contain Agency approved financial information.

1) Capital Investments include both BPA's direct Fish and Wildlife Program capital investments, funded by BPA's Treasury borrowing, and "Associated Projects", which include capital investments at Corps of Engineers' and Bureau of Reclamation projects, funded by appropriations and repaid by BPA. The negative amount in FY 1997 reflects a decision to reverse "plant-in-service" investment that was never actually placed

into service. The annual expenses associated with these investments are included in "Program-Related Fixed Expenses", below.

- 2) Includes High Priority and Action Plan Expenses and other supplemental programs.
- "Reimbursable/Direct-Funded Projects" includes the portion of costs BPA pays to or on behalf of other entities that is determined to be for fish and wildlife purposes.
- 4) "Fixed Expenses" include depreciation, amortization and interest on investments on the Corps of Engineers' projects, and amortization and interest on the investments associated with BPA's direct Fish and Wildlife Program.

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Cost Element	1978-80	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	
POWER PURCHASES	0	0	0	0	12	29	103	114	154	194	234	
FORGONE REVENUES	0	ю	17	18	26	53	72	79	88	104	119	
REIMBURSABLE EXPENSES	15	21	33	47	63	83	106	136	155	179	202	
DIRECT PROGRAM	2	5	6	18	38	54	73	96	114	137	170	
FIXED EXPENSES	24	33	61	77	94	114	135	164	195	227	261	
TOTAL	14	77	168	248	312	449	602	757	198	926	1,108	
Cost Element	1661	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
POWER PURCHASES	274	333	437	549	612	612	612	618	999	730	2,120	
FORGONE REVENUES	134	137	182	244	251	333	441	557	755	948	1,064	
REIMBURSABLE EXPENSES	226	255	285	320	356	392	428	464	503	540	583	
DIRECT PROGRAM	203	270	320	376	447	516	298	703	811	919	1,020	
FIXED EXPENSES	299	341	395	456	520	593	699	743	819	968	974	
TOTAL	1,242	1,431	1,763	2,088	2,337	2,594	2806	3,091	3,512	3,992	5,719	
Cost Element	2002	2003	2004	2005	2008	2007	2008	2009	2010	2011	2012	2013
POWER PURCHASES	2,267	2,439	2,630	2,740	2,909	3,029	3,304	3,544	3,855	3,925	3,964	4,04
FORGONE REVENUES	1,077	1156	1,177	1,360	1,757	2,040	2335	2,478	2,577	2,734	2,886	3,02
REIMBURSABLE EXPENSES	634	989	744	802	862	923	985	1,049	1,114	1,188	1,261	1,34
DIRECT PROGRAM	1,157	1,298	1,436	1,572	1,709	1,849	1998	2,176	2,376	2,597	2,846	3,08
FIXED EXPENSES	1,052	1,133	1,218	1,308	1,395	1,508	1621	1,741	1,864	1,991	2,123	2,25
TOTAL	6,146	0/9'9	7,163	7,739	8,590	908'6	10,182	10,927	11,730	12,435	13,079	13,75

## Table 1C: Total Costs FY 2013, By Major Spending Area

Category	Total in Millions
POWER PURCHASES	85.8
FORGONE REVENUES	135.5
REIMBURSIBLE EXPENSES	79.0
DIRECT PROGRAM	239.0
FIXED EXPENSES	143.3

### Table 1D: BPA Power Business Line Costs, FY 2013

Category	Total in Millions
OPERATING GENERATION RESOURCES	889
OPERATING GENERATION SETTLEMENT PAYMENT	22
NON-OPERATING GENERATION	-28
NET CONTRACTED POWER PURCHASES	154
RESIDENTIAL EXCHANGE/IOU SETTLEMENT BENEFITS	202
renewable & Conservation Generation	67
transmission acquisition & ancillary services	162
non-generation operations	79
FISH AND WILDLIFE/USF&W/COUNCIL/ENV. REQUIREMENTS	278
BPA INTERNAL SUPPORT	70
OTHER INCOME, EXPENSES, & ADJUSTMENTS/BAD DEBT	0
NON-FEDERAL DEBT SERVICE	519
DEPRECIATION & AMORTIZATION	223
NET FEDERAL INTEREST	209
TOTAL	2,647

Costs in millions; total: \$2.64 billion. This information has been made publicly available by BPA on 3/20/2013 and is consistent with audited actuals that contain Agency approved financial information.

### Table 2A: Direct Program Costs by Species, FY2013

Species Type	2006	2007	2008	2009	2010	2011	2012	2013
anadromous fish	106,630,937	105,122,394	102,755,054	126,571,326	153,831,281	209,043,953	205,632,268	195,567,545
RESIDENT FISH	25,688,291	21,444,665	31,010,039	41,225,300	35,247,221	58,944,235	53,678,573	48,176,233
WILDLIFE	26,842,908	33,363,535	16,679,586	13,752,725	19,731,203	30,708,322	29,067,757	22,218,005
PROGRAM SUPPORT	14,114,412	14,499,336	23,968,329	23,722,454	30,778,248	18,177,206	21,172,811	25,140,109
CJH COST SHARE		,	,	1	ı	-5,658,821	-3,141,637	1
IOTAL	173,276,548	174,429,930	174,413,008	205,271,805	239,587,953	311,214,895	306,409,772	291,101,892

Total: \$291.1 million includes \$52.1 million in obligations to capital projects.

1) Starting in 2008, Spending can be tracked back to a work element where the contractor explicitly identified the "Primary Focal Species" benefiting from the work.

2) Program Support includes includes confracts that contain only administrative work elements or program level spending that could not be mapped to a specific project, as well as BPA internal overhead such as personnel costs.

3) Revised as of 8/15/2014 (Corrections made to Pisces reporting protocol)

## Table 2B: Direct Program Costs of FCRPS BiOp Projects, FY2008-2013

Sategory	2008	2009	2010	2011	2012	2013
	91,806,508	113,900,603	129,758,323	143,477,289	162,060,445	151,277,961
	260'698'6	11,668,863	21,761,323	31,297,548	29,240,867	29,683,425
	101,675,605	125,569,466	151,519,646	174,774,837	191,301,312	80,961,386

1) Estimated spending is based at the project level. Therefore, if a project partially supports the FCRPS BiOp, all expenditures for the project are included.

## Table 2C: Direct Program Costs on ESA-Listed Species, FY2013

ESA Listed Focal Species Name	Expense "Direct" Spending	Expense "Contract Administration" Spending	Expense Total Spending	Capital "Direct" Spending	Capital "Contract Administration" Spending	Capital Total Spending	Total Spending
CHINOOK - LOWER COLUMBIA RIVER ESU (THREATENED)	4,732,628	1,539,967	6,272,595	2,019,304	56,174	2,075,479	8,348,074
CHINOOK - SNAKE RIVER FALL ESU (THREATENED)	8,081,185	3,655,841	11,737,026	(209)	0	(209)	11,736,817
CHINOOK - SNAKE RIVER SPRING/SUMMER ESU (THREATENED)	17,171,483	5,017,838	22,189,321	229,046	47,311	276,357	22,465,678
CHINOOK - UPPER COLUMBIA RIVER SPRING ESU (ENDANGERED)	9,263,007	4,933,954	14,196,961	1,055,848	450,955	1,506,803	15,703,764
CHINOOK - UPPER WILLAMETTE RIVER ESU (THREATENED)	2,982,992	1,665,732	4,648,725	3,234,019	1,983,894	5,217,913	9,866,638
CHUM - COLUMBIA RIVER ESU (THREATENED)	2,663,337	180,103	3,164,418	0	0	0	3,164,418
COHO - LOWER COLUMBIA RIVER ESU (THREATENED)	3,501,789	1,109,537	4,611,326	(14)	0	(14)	4,611,312
SOCKEYE - SNAKE RIVER ESU (ENDANGERED)	5,402,565	1,367,590	6,770,155	7,456,827	14,824	7,471,651	14,241,806
STEELHEAD - LOWER COLUMBIA RIVER DPS (THREATENED)	4,371,650	1,319,983	5,691,633	1,865,756	52,784	1,918,541	7,610,174
Steelhead - middle columbia river dps (threatened)	23,906,524	10,422,279	34,328,803	5,783,454	1,009,092	6,792,547	41,121,350
STEELHEAD - SNAKE RIVER DPS (THREATENED)	15,922,264	4,796,094	20,718,358	230,300	47,314	277,614	20,995,972
Steelhead - upper columbia river dps (endangered)	13,894,182	3,763,137	618'259'21	65,720	6,357	72,077	17,729,396
STEELHEAD - UPPER WILLAMETTE RIVER DPS (THREATENED)	2,084,566	1,209,757	3,294,323	3,234,172	1,983,897	5,218,069	8,512,392
CHUB, OREGON (ENDANGERED)	190,638	333,039	523,677	1,812,812	1,002,765	2,815,578	3,339,255
CUTTHROAT TROUT, LAHONTAN (THREATENED)	859,495	576,169	1,435,664	0	0	0	1,435,664
STURGEON, WHITE - KOOTENAI RIVER DPS (ENDANGERED)	9,187,450	2,155,654	11,343,104	3,301,865	1,034	3,302,899	14,646,003
TROUT, BULL (THREATENED)	7,790,907	4,983,977	12,774,884	3,794,467	95,805	3,890,272	16,665,156
TOTAL	132,006,662	49,351,630	181,358,293	34,083,369	6,752,207	40,835,575	222,193,868

<sup>1)</sup> Direct spending can be tracked back to a work element where the contractor explicitely identified the "Primary Focal Species" benefiting from the work.

<sup>2)</sup> Contract Administration spending can be tracked back to a work element that did not require the contractor to identify the "Primary Focal Species" benefiting from the work.

<sup>3)</sup> Revised as of 8/15/2014 (Corrections made to Pisces reporting protocol)

### Table 2D: Direct Program Costs by Fund, FY2013

Fund	2008	2009	2010	2011	2012	2013
TOTAL BIOP (NON ACCORD)	,	75,084,433	88,120,408	105,257,648	109,818,406	102,706,034
TOTAL ACCORDS <sup>1</sup>	31,917,878	ı	1	1	ı	1
TOTAL ACCORDS - BIOP	,	35,655,361	64,187,623	79,829,739	76,351,240	73,586,794
TOTAL ACCORDS - NON-BIOP	1	18,896,601	20,983,783	37,606,835	45,782,424	50,323,633
TOTAL GENERAL	130,932,844	62,498,937	51,765,457	73,608,793	58,956,587	48,754,951
TOTAL BPA OVERHEAD	11,562,285	13,137,473	14,530,682	14,911,880	15,501,115	15,730,481
TOTAL PROGRAM	174,413,007	205,272,805	239,587,953	311,214,895	306,409,772	291,101,892

1) BiOp tracking at fund level began in 2009, Accords began in 2008.

2) Spending is estimated based on the % of funding towards a project. For example, if a project budget is 70% BiOp and 30% General, the project expenditures will be prorated 70% towards BiOp and 30% General.

## Table 3A: Direct Program Costs by Purpose & Emphasis, FY2013

Programmatic	3,550,034	1	ı	6,462,661	ı	19,001,075	•	33,161,752	1	62,175,522
Progr										
Predation	1	1	1	1	3,309,064	1	1	2,062,170	1	5,371,233
Hydrosystem	296,792	1	1	1	1	1	1	7,218,238	1	7,515,029
Harvest	1	1	750,780	1	1	•	1	1,053,094	1	1,803,874
Habitat	133,525	•	•	3,745,868	•	79,248	118,831,309	12,969,685	•	135,759,634
Artificial Production	,	4,077,995	1	785,309	1	•	1	23,588,530	50,024,766	78,476,600
Purpose & Emphasis	DATA MANAGEMENT	HARVEST AUGMENTATION	LAW ENFORCEMENT	LOCAL COORDINATION	PREDATOR REMOVAL	REGIONAL COORDINATION	RESTORATION/PROTECTION	RM AND E	SUPPLEMENTATION	TOTAL

1) Estimated spending is based at the project level. Therefore if a project is labeled AP, but also supports Habitat, the expenditures are counted as AP.

### Table 3B: Direct Program Costs by Category, FY2013

	1000		0000	0.00			
Category	7007	2008	2009	2010	7011	2012	2013
COORDINATION (LOCAL/REGIONAL)	7,393,717	15,227,116	-3,902	22,462,594	25,185,796	28,135,259	30,074,160
DATA MANAGEMENT	206,545	2,803,385	3,964,851	4,199,379	4,319,007	4,130,748	3,980,351
Habitat (restoration/protection)	65,391,135	60,793,513	76,781,454	80,386,909	123,373,947	122,609,228	118,831,309
HARVEST AUGMENTATION	447,385	3,674,945	3,417,255	3,241,566	3,599,302	4,429,624	4,077,995
MAINSTEM SURVIVAL	4,164,020	1	ı	1	,	1	1
MONITORING	22,794,198	1	1	1	1	1	1
PRODUCTION (SUPPLEMENTATION)	36,296,240	25,638,528	28,175,648	45,271,831	61,846,889	53,165,835	50,024,766
research and evaluation	26,811,186	1	1	ı	1	1	1
BPA PROGRAM SUPPORT	11,152,430	1	ı	ı	1	ı	1
LAW ENFORCEMENT	1	1,119,159	705,064	656,356	805,250	853,122	750,780
PREDATOR REMOVAL	1	3,208,172	3,284,130	3,549,112	2,983,190	3,558,732	3,309,064
research, monitoring and evalua- tion	1	61,948,189	70,325,233	79,820,206	89,101,514	89,527,224	80,053,469
TOTAL	174,656,855	174,413,007	205,271,805	239,587,953	311,214,895	306,409,772	291,101,892
Total: \$291.1 million includes \$52.1 million in obligations to capital projects	utions to capital proje	ects	Coordination	ı; Data Managemer	Coordination; Data Management; and Research, Monitoring, and Evaluation emphasis	onitoring, and Evaluc	tion emphasis
1) Starting in 2008, as part an effort to improve how fish and wildlife program data is managed and reported, Bonneville updated some of its old project categories. The new project categories are called "Purpose" and "Emphasis," where purpose describes the general goal or purpose of the project and emphasis describes the primary types of work being employed by the project. Bonneville program support is included within	now fish and wildlife ome of its old project and "Emphasis," whe emphasis describes	program data is t categories. The re purpose describes the primary types this included within	2) Estimated : emphasis of H Habitat.	spending is based c Habitat, but also do	Types.  2) Estimated spending is based at the project level. Therefore if a project is assigned an emphasis of Habitat, but also does RME, all expenditures for the project are included under Habitat.	herefore if a project ures for the project a	is assigned an re included under

## Table 3C: Direct Program Costs of Artificial Production, FY2007-2013

Category	2007	2008	2009	2010	2011	2012	2013
COORDINATION (LOCAL/REGIONAL)	641,817	764,148	607,260	640,554	684,891	664,088	785,309
harvest augmentation	3,054,888	3,256,692	3,417,255	3,241,566	3,599,302	4,429,624	4,077,995
RM AND E	19,614,680	17,739,370	17,335,478	22,318,040	22,583,163	25,176,585	23,588,530
SUPPLEMENTATION	22,334,339	26,177,769	28,175,648	45,271,831	61,846,889	53,165,835	50,024,766
TOTAL	45,645,724	47,937,980	48,924,480	71,471,991	88,714,245	83,436,132	78,476,600

1) Estimated spending is based at the project level. Therefore if a project is assigned an emphasis of Habitat, but also does RME, all expenditures for the project are included under Habitat.

### Table 3D: Direct Program Support, FY2013

Area	Emphasis Ivpe	BPA Program Support	Non-BPA Program Support	Grand Total, Capital and Expense
BASINWIDE	DATA MANAGEMENT	908:396	2.503.128	3 468 934
	INEMETOR CENE WAL		170.974	170974
	LOCAL COORDINATION		553,140	553,140
	REGIONAL COORDINATION	14,485,255	3,788,348	18,273,603
	RESTORATION/PROTECTION		4,103,954	4,103,954
	RM AND E	2,093,605	25,461,461	27,555,066
	SUPPLEMENTATION		1,043,309	1,043,309
BASINWIDE TOTAL		17,544,667	37,624,314	55,168,981
BASINWIDE/MAINSTEM	RM AND E		723,111	723,111
BASINWIDE/MAINSTEM TOTAL		0	723,111	723,111
BASINWIDE/OCEAN	RM AND E		12,161	12,161
BASINWIDE/OCEAN TOTAL		0	12,161	12,161
MAINSTEM	DATA MANAGEMENT		402,891	402,891
	HARVEST AUGMENTATION		187,125	187,125
	LAW ENFORCEMENT		446,734	446,734
	PREDATOR REMOVAL		3,309,064	3,309,064
	RM AND E		3,355,482	3,355,482
MAINSTEM TOTAL		0	7,701,296	7,701,296
MAINSTEM/PROVINCIAL	LOCAL COORDINATION		3,153,454	3,153,454
	RM AND E		305,854	305,854
MAINSTEM/PROVINCIAL TOTAL		0	3,459,308	3,459,308
OCEAN	RM AND E		821,015	821,015
OCEAN TOTAL		0	821,015	821,015
PROVINCIAL	DATA MANAGEMENT		108,525	108,525
	HARVEST AUGMENTATION		3,890,870	3,890,870
	LAW ENFORCEMENT		133,071	133,071
	LOCAL COORDINATION		7,287,243	7,287,243
	REGIONAL COORDINATION		806,720	806,720
	RESTORATION/PROTECTION		114,727,355	114,727,355
	RM AND E		47,280,780	47,280,780
	SUPPLEMENTATION		48,981,457	48,981,457
PROVINCIAL TOTAL		0	223,216,021	223,216,021
GRAND TOTAL		17,544,667	273,557,226	291,101,892
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<sup>1)</sup> Estimated spending is based at the project level. Therefore if a project is assigned an emphasis of Habitat, but also does RME, all expenditures for the project are included under Habitat.

<sup>2)</sup> Bonneville's contracts with program sponsors, and its own internal program support costs, are not budgeted according to the focal species (Table 2C) or geographic (province, Table 4) categories provided in breakouts in this report. In providing the breakouts, Bonneville had to make decisions about allocations to one category or another. For instance, in Table 3A, Direct Program Expenditures by Purpose and Emphasis, a project that primarily supports supplementation but also includes habitat work is assigned to the supplementation category. Footnotes to the individual tables describe these allocations and account for the differences among the categories variously labeled "Program Support/Admin/Overhead/Other."

Table 4: Direct Program Costs by Province, FY2007-FY2013

Province	2007	2008	2009	2010	2011	2012	2013
BLUE MOUNTAIN	9,489,802	9,336,015	10,063,271	12,243,309	12,902,246	13,511,362	13,355,793
COLUMBIA CASCADE	7,340,355	9,192,920	18,334,391	26,543,346	52,832,124	51,194,212	36,247,930
COLUMBIA GORGE	4,993,260	8,354,049	13,046,970	16,165,914	19,738,963	13,620,951	14,318,184
COLUMBIA PLATEAU	28,768,912	37,188,905	42,706,871	50,405,309	56,128,670	61,555,564	61,217,505
COLUMBIA ESTUARY	5,229,672	6,075,054	8,056,193	6,848,834	9,461,038	10,827,753	15,368,597
INTERMOUNTAIN	25,281,129	14,497,055	12,350,282	15,702,284	15,419,147	19,797,254	16,144,888
LOWER COLUMBIA	13,533,874	14,744,699	11,181,219	15,259,843	11,034,734	33,637,544	44,550,850
MIDDLE SNAKE	1,782,913	6,659,039	3,299,192	5,224,071	4,420,199	13,219,048	3,298,160
MOUNTAIN COLUMBIA	9,497,889	11,347,198	21,341,820	11,427,897	10,772,169	21,972,279	20,849,803
MOUNTAIN SNAKE	16,791,815	19,398,012	21,934,884	22,917,641	28,263,483	30,190,401	28,471,158
UPPER SNAKE	701,439	1,184,634	1,466,476	7,248,075	4,904,675	13,213,441	10,801,603
SYSTEMWIDE	40,015,709						
OTHER		6,167,509	7,274,724	6,826,368	7,862,967	6,927,247	4,578,007
PROGRAM SUPPORT/ADMIN/OVER- HEAD/OTHER	11,230,086	30,267,918	34,215,512	42,775,062	77,474,481	16,742,715	21,899,413
TOTAL	174,656,855	174,413,007	205,271,805	239,587,953	311,214,896	306,409,772	291,101,892

Total: \$291.1 million includes \$52.1 million in obligations to capital projects

1) Starting in 2008, spending by province is tracked in Pisces based on where the contractor explicitly identified work location.

contract that has at least one work element requiring location; contracts without any work elements at all; program level spending not mapped to a specific project; and BPA 3) Program Support/Admin/Other includes spending that cannot be traced back to a

Overhead.

2) Other includes "Undetermined" locations such as Ocean, Canada; and provinces not recognized by NPCC.

Table 5: Direct Program Costs by Contractor Type, FY2007-FY2013

Contractor Type	Prime Contractor	2007	2008	2009	2010	2011	2012	2013
FEDERAL	national marine fisheries (noaa)	9,179,793	7,980,293	8,959,831	8,214,596	10,011,126	10,226,672	7,294,105
	BPA OVERHEAD (& NON-CONTRACTED PROJECT COSTS)	11,152,430	7,762,161	15,428,883	18,886,192	16,437,276	15,281,324	16,789,765
	us fish & wildlife service (usfws)	2,880,400	3,150,827	3,079,231	2,640,768	2,842,702	2,472,046	2,845,424
	us bureau of reclamation (bor)	279,721	152,309	202,092	180,104	160,153	237,486	181,862
	us army corp of engineers (coe)	1,519,667	20,924	235,612	205,064	358,523	358,214	604,602
	PACIFIC NW NATIONAL LABORATORY (PNNL/DEPT. OF ENERGY)	1,165,186	1,605,398	1,769,676	1,476,028	750,143	573,645	381,427
	US FOREST SERVICE (USFS)	728,324	1,410,740	3,668,543	1,649,120	1,124,508	851,567	819,258
	OTHER	403,411	454,711	434,000	444,850	904,925	ı	178,002
	US GEOLOGICAL SURVEY (USGS)	1,256,474	1,722,389	1,835,708	1,760,653	2,385,971	3,135,564	2,209,567
FEDERAL TOTAL		28,565,406	24,259,752	35,613,576	35,457,375	34,975,327	33,136,516	31,304,010
STATE	OREGON DEPARTMENT OF FISH & WILDLIFE	11,114,130	10,237,010	10,170,389	13,269,950	10,238,326	15,805,509	13,248,075
	OREGON WATERSHED ENHANCEMENT BOARD						59,516	76,367
	OREGON SUBTOTAL	11,114,130	10,237,010	10,170,389	13,269,950	10,238,326	15,865,025	13,324,441
	IDAHO DEPARTMENT OF FISH & GAME	7,139,047	11,072,547	8,429,207	9,174,578	10,847,630	17,836,561	18,281,036
	idaho soil & water conservation commission	91,398	84,952	91,275	796'99		ı	
	IDAHO STATE OFFICE OF SPECIES CONSERVATION	,	199,247	923,272	1,397,773	2,551,533	2,487,433	2,905,500
	IDAHO SUBTOTAL	7,230,445	11,356,746	9,443,754	10,639,318	13,399,163	20,323,994	21,186,535
	WASHINGTON DEPARTMENT OF FISH & WILDLIFE	6,615,256	5,912,604	6,134,350	7,712,743	9,148,722	11,855,753	10,691,474
	WASHINGTON DEPARTMENT OF ECOLOGY	90,223	211,309	150,324	181,562	43,689	ı	
	WASHINGTON SUBTOTAL	6,705,479	6,123,913	6,284,673	7,894,305	9,192,411	11,855,753	10,691,474
	MONTANA FISH, WILDLIFE AND PARKS (MFWP)	2,234,653	2,762,721	2,829,533	2,913,118	2,414,914	2,382,531	2,777,167
	montana subtotal	2,234,653	2,762,721	2,829,533	2,913,118	2,414,914	2,382,531	2,777,167
STATE TOTAL		27,284,708	30,480,390	28,728,349	34,716,691	35,244,814	50,427,303	47,979,618

(Continued on next page.)

Table 5: Direct Program Costs by Contractor Type, FY2007-FY2013 (Continued)

Contractor Type	Prime Contractor	2007	2008	2009	2010	2011	2012	2013
TRIBE	BURNS PAIUTE TRIBE	733,424	687,603	636,144	716,460	658,775	831,697	610,972
	COEUR D'ALENE TRIBE OF IDAHO	2,148,587	2,537,247	2,552,550	2,444,908	2,340,704	2,668,551	2,714,055
	COLUMBIA RIVER INTERTRIBAL FISH COMMISSION	1,005,653	1,776,526	4,329,842	6,034,143	7,660,904	8,747,388	7,939,587
	COLVILLE CONFEDERATED TRIBES	6,570,667	4,519,814	10,594,008	10,278,445	16,189,398	21,993,516	16,872,698
	CONFEDERATED TRIBES OF GRAND RONDE	1	•	1	93,475	124,703	158,296	110,571
	Confederated tribes of siletz indians							68,134
	Confederated tribes of warm springs	5,441,199	3,373,196	6,142,650	6,078,270	6,859,314	7,223,659	11,203,330
	COWLITZ INDIAN TRIBE		•	1	1	34,325	118,229	364,937
	KALISPEL TRIBE OF INDIANS	1,752,834	1,633,522	1,790,852	1,928,048	2,066,331	2,575,344	2,709,448
	KOOTENAI TRIBE	5,491,017	7,402,457	6,541,035	6,938,439	8,537,716	12,321,474	15,094,788
	NEZ PERCE TRIBE	11,959,023	11,552,934	12,037,027	12,664,313	15,349,520	16,073,605	15,800,876
	Salish and Kootenai tribes	39,627	1,176,490	483,878	560,467	430,107	453,175	755,839
	SHOSHONE-BANNOCK TRIBES	1,114,874	1,749,602	1,579,829	2,438,482	2,830,660	2,837,601	4,009,231
	SHOSHONE-PAUITE TRIBES	742,121	684,324	790,837	749,767	841,382	1,147,875	694,692
	SPOKANE TRIBE OF INDIANS	2,420,625	2,726,944	2,744,981	2,761,856	2,803,647	2,932,796	2,709,870
	UMATILLA CONFEDERATED TRIBES	5,421,899	6,158,492	6,593,550	8,881,642	11,365,123	9,951,477	12,122,357
	UPPER COLUMBIA UNITED TRIBES (UCUT)	1	162,707	251,327	516,803	427,731	403,540	389,914
	UPPER SNAKE RIVER TRIBES FOUNDATION	1	20,776	145,822	131,067	148,610	162,735	206,529
	YAKAMA CONFEDERATED TRIBES	10,974,057	10,793,537	17,438,231	24,319,364	32,944,242	25,813,516	25,447,029
TRIBE TOTAL		55,815,607	56,956,171	74,652,563	87,535,949	111,613,192	116,414,475	119,824,856
INTERSTATE COMPACT	Pacific States marine fisheries commission (PSMFC)	13,690,125	13,283,337	14,452,104	13,812,821	13,908,430	14,053,990	12,711,728
UNIVERSITY	UNIVERSITY	4,252,999	3,461,552	4,355,304	3,939,562	3,662,199	3,384,748	\$2,800,350

## Table 5: Direct Program Costs by Contractor Type, FY2007-FY2013 (Continued)

Contractor Type	Prime Contractor	2007	2008	2009	2010	2011	2012	2013
OTHER	PRIVATE/NON-PROFIT/OTHER	9,329,690	15,999,893	16,476,097	24,562,878	51,870,632	37,603,355	36,314,947
	LOCAL/SEMI GOVERNMENT	4,257,817	5,628,187	8,355,797	7,141,882	5,933,917	8,235,814	7,854,727
	COLUMBIA BASIN FISH & WILDLIFE AUTHORITY	3,220,918	2,875,372	2,102,582	2,162,548	1,748,321	1,611,166	1,231,260
	LAND ACQUISITIONS		16,605,994	16,937,766	26,741,905	52,203,712	38,048,400	23,741,722
	UTILITY	1,207,766	897,497	36,104	44,731	935,038	1,802,447	1,810,123
	NATIONAL FISH & WILDLIFE FOUNDATION	3,613,020	3,964,862	3,561,562	3,471,611	4,778,134	4,833,194	5,528,550
	CHIEF JOSEPH HATCHERY COST SHARE (GRANT PUD)			1	1	-5,658,821	-3,141,637	ı
OTHER TOTAL		21,629,211	45,971,805	47,469,909	64,125,555	111,810,933	88,992,739	76,481,330
GRAND TOTAL		151,238,055	174,413,007	205,271,805	239,587,953	311,214,895	306,409,772	291,101,892

1) Values above include accruals.

2) Starting in FY13, land acquisition values may include stewardship costs for long-term operations and maintenance (O&M).

3) Non-contracted proejct costs refer to internal Bonneville costs such as land acquisition real estate costs performed within Bonneville but not within the Fish and Wildlife Division.

4) The Private/Non-Profit/Other category includes consulting firms and environmental/interest groups such as, for example, the Columbia River Estuary Study Task Force and Falling Springs LLC.

# Table 6: Direct Program Costs of Land Purchases for Fish and Wildlife Habitat, FY2007-FY2013

Project Proponent(s)	2007	2008	2009	2010	2011	2012	2013
CITY OF EUGENE	٠	•	٠	•	•	1,075,000	
CITY OF SALEM							1,212,330
COEUR D'ALENE TRIBE, IDAHO DEPARTMENT OF FISH AND GAME (IDFG), KALISPEL TRIBE, KOOTENAI TRIBE	7,302,119	4,072,206	3,326,183	2,286,471	1,750,665	1,675,162	348,570
COLUMBIA LAND TRUST						5,306,043	1,711,235
COLVILLE CONFEDERATED TRIBES	1,487,578	220,318	1,144,839	3,441,315	720,811	1,743,906	1,611,630
CONFEDERATED TRIBES OF THE GRANDE RONDE		1				54,305	3,596,391
DUCKS UNLIMITED							520,081
GREENBELT LAND TRUST	ı		ı		ı	772,500	1,500,000
IDAHO DEPARTMENT OF FISH AND GAME (IDFG)	,	2,279,851	,	4,750,821		5,059,268	
IDAHO OFFICE OF SPECIES CONSERVATION	1	1	1	3,426,523	1	1	
KITITAS CONSERVATION TRUST	ı	130,000	ı	•	ı	ı	
LOWER COLUMBIA RIVER ESTUARY PARTNERSHIP (LCREP)	1	67,130	608,223		1	946,739	
MCKENZIE RIVER TRUST	ı	1	,	,	1	52,986	
METHOW SALMON RECOVERY FOUNDATION	1	1	182,000	1	1	1	
MONTANA FISH, WILDLIFE AND PARKS (MFWP)	,	,	,		9,750,112	1,349,403	642,763
national fish and wildlife foundation	•	415,000	389,000	•			
nature conservancy	4,900,500	1,001,875		2,245,363	20,851,010		3,412,000
NEZ PERCE TRIBE	13,186	7,297	7,751	540,992	5,788	820	5,000
OREGON DEPARTMENT OF FISH AND WILDLIFE (ODFW)	5,000,000	3,904,011	1,075,108	1,330,361	9,716,071	,	4,595,329
OREGON WATERSHED ENHANCEMENT BOARD	•	1	•	779,252	•	•	900,009
S CENTRAL WASHINGTON RESOURCE CONSERVATION AND DEVELOPMENT	•	ı	14,500	33,800	•	•	
Salish and Kootenai Confederated tribes		4,217,842	9,385,802	1,394,127	4,068,146	6,370,226	1,596,594
SHOSHONE-BANNOCK TRIBES	•	ı	546,610	•	1,996,948	3,666,163	
SHOSHONE-PAIUTE TRIBES		1		2,259,937		3,156,008	
SPOKANE TRIBE	5,685,884	1	•	•		•	
UMATILLA CONFEDERATED TRIBES (CTUIR)	1	1	•	2,114,907	1	15,382	
us fish and wildlife service (usfws)				1,005,967			
WASHINGTON DEPARTMENT OF FISH AND WILDLIFE (WDFW)	1	801,221	752	51	1	2,365,285	572,469
WILLAMALANE PARKS AND RECREATION DISTRICT							500,509
Yakama confederated tribes	2,216	372,234	262,257	1,132,019	3,344,161	4,437,146	333,123
Yamhill Soil and water conservation district							983,699
GRAND TOTAL	24,391,484	17,488,983	16,943,025	26,741,905	52,203,712	38,046,341	23,741,722

<sup>1)</sup> Values above include bank fees, permits, etc. 2) Starting in FY13, land acquisition values may include stewardship costs for long-term operations and maintenance (O&M).

