

DRAFT

Fifth Annual Report to the Northwest Governors on Expenditures of the Bonneville Power Administration

to Implement the Columbia River Basin Fish and Wildlife Program of the
Northwest Power and Conservation Council

1978 - 2005



May 2006

Council Document 2006-09

Summary

In Fiscal Year 2004, the Bonneville Power Administration spent a total of \$493.6 million, and in Fiscal Year 2005 a total of \$576.3 million, to implement the Council's Columbia River Basin Fish and Wildlife Program. The program is designed to protect, mitigate and enhance Columbia River Basin fish and wildlife that have been affected by hydroelectric dams.

The Council's last report on Bonneville's fish and wildlife expenditures was current through Fiscal Year 2003. The current report includes expenditures through Fiscal Year 2005. The grand total of Bonneville's fish and wildlife expenditures, 1978-2005, now stands at \$7.802 billion. Expenditures are provided by Bonneville for this report and are not separately verified by the Council. Here, in descending order, is a breakdown of the expenditures, which are detailed further in the Appendix of this report:

- \$2,740,300,000 (\$191.0 million in 2004 and 110.8 million in 2005) for power purchases to meet load requirements in response to required river operations that reduce hydro-power generation.
- \$1,571,700,000 (\$137.9 million in 2004 and \$135.8 million in 2005) for the Council's direct program. The 2004 and 2005 totals are for direct expenditures only and do not include annual expenditures from the separate capital-investment budget. With capital expenditures added, total direct-program spending for 2004 is \$146.4 million, and for 2005 the total is \$148.0 million.¹
- \$1,381,500,000 (\$21.7 million in 2004 and \$182.1 million in 2005) in forgone revenue, the calculated value of hydropower that could not be generated because of required river operations to assist fish passage and improve fish survival, such as water spills at the dams.
- \$1,246,300,000 (\$85.4 million in 2004 and \$89.7 million in 2005) in fixed expenses for bonds issued by Bonneville to pay for capital investments in fish-passage facilities at the dams.

For the period 2001-2004, direct program expenditures included a total of \$16,000,000

(\$400,000 in 2004 and zero in 2005) in one-time expenditures for "high priority" and "action plan" projects. These are included in the total above. 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 (subbasin plans were submitted to the Council in 2004 and adopted into the fish and wildlife program in 2004 and 2005). 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.

Sorted by type of species, total (1978-2005) expenditures to implement the direct program are \$1,306,861,461 (\$96,206,584 in 2004 and \$101,172,351 in 2005) on anadromous fish projects; \$219,612,570 (\$18,899,368 in 2004 and \$20,236,591 in 2005) on resident fish projects, and \$175,567,671 (\$10,659,908 in 2004 and \$13,278,339 in 2005) on wildlife projects.

¹ The fish and wildlife budget has two spending categories: direct-program expenditures, which average \$139 million per year, and a capital-spending budget of \$36 million per year. Direct-program expenditures are payments Bonneville makes annually from its fund, which comprises revenue from the sale of hydropower generated at federal dams in the Columbia River Basin. Capital expenditures are in the form of debt issued on behalf of Bonneville by the U.S. Treasury. Bonneville pays back the debt over time. In general, Bonneville views capital-funding projects as those that cost more than \$1 million and have a life span of at least 15 years – construction of fish hatcheries and related facilities, for example. In this report, Tables 1 and 2, Cumulative and Total Annual Expenditures, 1978-2005, report only the direct-spending totals. Tables 3 through 5 include in their totals both direct expenditures and capital expenditures.

- \$801,600,000 (\$57.2 million in 2004 and \$57.9 million in 2005) to reimburse the U.S. Treasury for the power-generation share of other federal agency expenditures to mitigate the impact of hydropower on fish and wildlife. Primarily these reimbursements are paid to the U.S. Army Corps of Engineers, Bureau of Reclamation, and U.S. Fish and Wildlife Service for efforts to improve fish and wildlife survival apart from the Council's program, such as operation and maintenance of fish passage facilities and federal fish hatcheries.



Background

The 2005 Report

This is the fifth in a series of annual reports the Council prepares to explain funding of the Columbia River Basin Fish and Wildlife Program. The reports respond to a July 1999 request by the governors of Idaho, Oregon, Montana and Washington, the four states represented on the Council, to begin reporting annually on expenditures of the Bonneville Power Administration to implement the program.

In this fifth annual report, the Council provides an update of Bonneville's funding through Fiscal Year 2005. The report also includes information about salmon and steelhead in the Columbia River Basin. Financial information was provided by Bonneville in response to requests from the Council. Information about salmon and steelhead was compiled from reports by the U.S. Army Corps of Engineers, NOAA Fisheries, the states of Washington and Oregon through the Columbia River Compact, and the University of Washington Joint Institute for the Study of the Atmosphere and Oceans.

The Northwest Power and Conservation Council

The Northwest Power Act of 1980, a federal law, authorized the states of Idaho, Montana, Oregon, and Washington to form the Northwest Power and Conservation Council (it was known until 2003 as the Northwest Power Planning Council). The Act directs the Council to prepare a program to protect, mitigate and enhance fish and wildlife of the Columbia River Basin that have been affected by hydropower. The Act also directs the Administrator of the Bonneville Power Administration, the federal agency that sells electricity generated at federal dams in the Columbia River Basin, to use the Bonneville fund in a manner consistent with

the Council's program to protect, mitigate and enhance fish and wildlife.

The Columbia River Basin Fish and Wildlife Program

The Council is a planning, policy-making and reviewing body. Consistent with the Northwest Power Act, the Council develops the fish and wildlife program and monitors its implementation. The program is implemented primarily by Bonneville but also by the region's fish and wildlife agencies and tribes, the U.S. Army Corps of Engineers, the Bureau of Reclamation and the Federal Energy Regulatory Commission and its licensees. The program addresses hydropower impacts on anadromous fish, resident fish and wildlife. Anadromous fish are those that spawn in freshwater, migrate to the Columbia River estuary as juveniles, spend their adult lives in the Pacific Ocean, and then return to their freshwater birthplaces to spawn and die. Resident fish are those that live and migrate within freshwater rivers, streams, and lakes.

The program directs scientific research; habitat protection, including acquisitions and easements²; and construction projects to improve habitat and fish passage and to build and operate hatcheries.

The program also establishes certain reservoir elevations and flow requirements to protect anadromous and resident fish and their habitat. Other measures call for using stored water to maintain appropriate water temperatures and protect streambeds. The program focuses most of the mitigation activities on anadromous fish, consistent with language in the Northwest Power Act. Section 2.6 of the Act states that anadromous fish "are of significant importance to the social and economic well-being of the Pacific

² Habitat acquisitions for wildlife are credited against identified habitat losses attributable to the construction of hydropower dams. The crediting unit is called a "Habitat Unit," which is a measure of both the quantity and quality of the acquired site and, thus, its suitability for targeted species. In 2004, the Council and Bonneville continued negotiations that began in 2003 over two important issues: 1) whether, and if so how, to change the formula for calculating habitat unit acquisitions against identified losses, and 2) whether Bonneville should use its capital borrowing authority to acquire habitat for fish.

Northwest and the Nation” and that these fish “are dependent on suitable environmental conditions substantially obtainable from the management and operation” of dams on the Columbia River and its tributaries. Primarily these are salmon and steelhead, but anadromous Pacific lamprey and sturgeon also are found in the Columbia system.

Through a collaborative process, the Council and Bonneville solicit projects to implement the program. The Council submits project proposals for review by the fish and wildlife managers, the Independent Scientific Review Panel³ and the general public and then recommends projects to Bonneville for funding. The Council also requests NOAA Fisheries and the U.S. Fish and Wildlife Service to provide input on projects required to meet their Endangered Species Act obligations for threatened and endangered fish species.

Beginning in Fiscal Year 2007, projects that implement the program will be based on needs identified in subbasin plans and funded for three years at a time rather than one year. There are 57 subbasin plans, developed locally over a two-year period (2002-2004). The Council amended the plans into the fish and wildlife program in late 2004 and early 2005.

³ The Independent Scientific Review Panel was created by the Council in response to a 1996 amendment to the Northwest Power Act that called for greater scientific scrutiny and public accountability of expenditures through the Council’s program. The 11 members of the Panel are nominated by the National Academy of Sciences and appointed by the Council.

Expenditures by Category, Fiscal Years 2004 and 2005

Direct program expenditures

Direct program expenditures pay for projects that are reviewed by the ISRP, fish and wildlife managers, and the public, and then are recommended by the Council to Bonneville for funding. For 2004, Bonneville reported direct program expenditures of \$146.4 million and for 2005, \$148 million. Those amounts include capital obligations. Subtracting capital obligations, the expenditures total \$137.9 million in 2004 and \$135.8 million in 2005.

In 2004, Bonneville's spending for anadromous fish totaled \$96.2 million and for 2005, \$101.2 million. For resident fish, the amount was \$18.9 million in 2004 and \$20.2 million in 2005. For wildlife, the amount was \$10.6 million in 2004 and \$13.3 million in 2005. Expenditures for anadromous fish projects amounted to 65.7 percent of direct-program spending in 2004 and 68.3 percent in 2005. Resident fish projects accounted for 12.9 percent of direct-program spending in 2004 and 13.6 percent in 2005. Wildlife expenditures accounted for 7.2 percent of direct-program spending in 2004 and 8.9 percent in 2005.⁴

Bonneville reported external fish and wildlife program support expenditures of \$10.01 million in 2004 and \$2.3 million in 2005. These include costs such as data management, coordination and information to support all programs. Internal program support (\$10.6 million in 2004 and \$10.9 million in 2005) includes contracts for program review and independent analysis of the program, and for Bonneville's Fish and Wildlife Division overhead and personnel costs.

Power purchases

Measures in the Council's program and in the 2000 and 2004 Biological Opinions on Hydropower Operations issued by NOAA Fisheries and the U.S. Fish and Wildlife Service can affect hydropower generation. These measures include river and dam operations to protect spawning and rearing areas for resident fish such as bull trout and white sturgeon and improve passage conditions at dams for juvenile salmon and steelhead. To make up lost hydropower generation when these operations occur, Bonneville often buys electricity from other suppliers. These purchases are part of Bonneville's larger wholesale power purchases. To determine how much of these purchases to attribute to lost hydropower from the fish operations, Bonneville performs two annual calculations of its total power purchases — one that includes the fish operations and one that does not. Bonneville attributes the difference in power purchases to the fish requirements and, therefore, identifies them as a cost in its fish and wildlife budget. Bonneville assigned \$191 million in power purchases to the fish and wildlife budget in 2004 and \$110.8 million in 2005.

Forgone revenue

River and dam operations can result in lost income, and in some circumstances increased income, for Bonneville. The budget term for the lost income is forgone revenue. To determine forgone revenue, Bonneville calculates the net value of the hydropower revenues gained and lost as a result of fish operations on an annual basis. Bonneville charges forgone revenue against its fish and wildlife budget as an expense. For Fiscal Year 2004, Bonneville assigned forgone revenue of \$21.7 million to the fish and wildlife budget. For 2005, the amount was \$182.1 million.

⁴ Wildlife expenditures are treated differently than expenditures for anadromous fish and resident fish. Wildlife projects address habitat losses that have been calculated, by species, for each federal dam (or groups of dams within tributary subbasins). The identified losses only address the impacts of dam construction; losses attributable to dam operations have not been quantified. The Council and Bonneville worked with the region's wildlife managers to develop a system of crediting habitat acquisitions against the losses.

Credits

In the Northwest Power Act Congress directs Bonneville's administrator to use the Bonneville Fund — electricity ratepayer dollars — to pay for the projects and activities in the Council's program. The Power Act also states that 1) ratepayers are only responsible for mitigating the impacts of hydro-power, and not impacts caused by non-power uses of the dams such as irrigation, navigation, flood control, and recreation; and 2) the Bonneville administrator can allocate mitigation costs between power and non-power purposes.

Bonneville pays the entire — power and non-power — cost of mitigating the impacts of federal dams on fish and wildlife and then receives a credit against its annual debt payment to the U.S. Treasury for the non-power portion. This arrangement results from a 1994 agreement between Bonneville, the Treasury, and the federal Office of Management and Budget. At that time the non-hydropower share of mitigation costs was determined to be 27 percent (subsequently revised to 22.3 percent due to changes in operations at Grand Coulee Dam). Accordingly, Bonneville pays the entire cost of mitigation and then receives a credit (this is called the 4(h)(10)(C) credit, after the relevant section of the Power Act) for the 22.3 percent attributable to non-power purposes of the dams. Bonneville takes the credit in two categories of expenditures: as a credit against direct fish and wildlife program expenditures and as a credit against power purchases.

Additionally, the agreement created a fund of \$325.2 million comprised of 4(h)(10)(C) credits earned but not taken by Bonneville between 1980 and 1994. This Fish Cost Contingency Fund could be tapped by Bonneville if water conditions were sufficiently adverse for hydropower generation. Bonneville has used the Fish Cost Contingency Fund twice: first during the drought of 2001 and again in 2003 when all remaining funds were exhausted.

Bonneville has calculated and claimed a 4(h)(10)(C) credit every year since 1994. For Fiscal Year 2004, the credit was \$77 million (after true-up). For Fiscal Year 2005 it was \$57.7 million (after true-up). This brought to \$832 million through 2005 the amount of credit Bonneville has taken for fish-related expenses since 1995, when the credits first were taken.

Fish Runs and Fisheries

This report also includes the most recent numbers the Council could gather about salmon and steelhead runs and fisheries in the Columbia River Basin. The Council collected the information from reports prepared by the Washington and Oregon departments of fish and wildlife, NOAA Fisheries, the U.S. Army Corps of Engineers, the Fish Passage Center and the Data Access in Real Time project of the University of Washington.

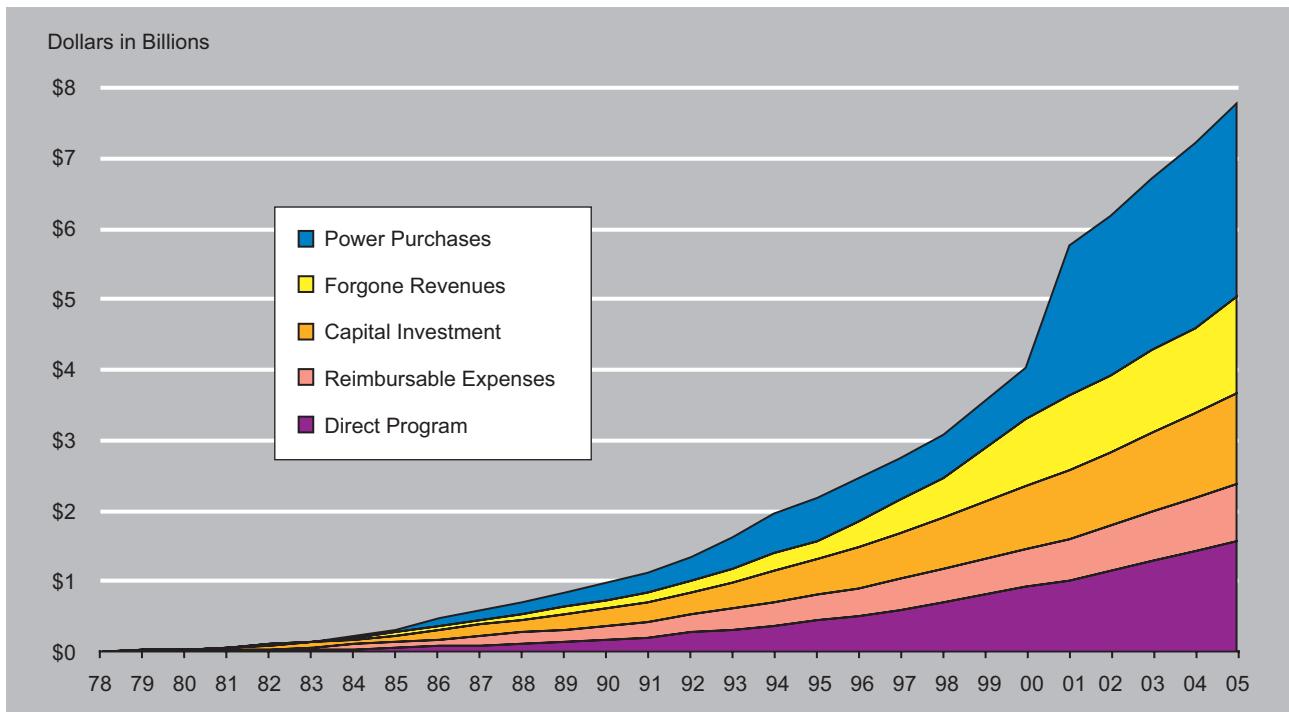
Some of the figures and tables are presented differently in this version of the report than in past versions, reflecting changes in how the state and federal agencies compile and report the information. Estimates of wild adult fish returning to spawn (Figure 12 and Table 12) are particularly difficult because only a portion of hatchery-produced fish are marked — typically with a clipped adipose fin (the small fin on the lower back immediately in front of the tail). With the adipose fin in place, unmarked hatchery fish look like wild fish to the people who count fish at Snake and Columbia river dams. Additionally, some information that was reported in past versions of this report no longer is available.

The Council is indebted to Tim Fisher of Fisher Fisheries, Inc., and to Jim Geiselman of the Bonneville Power Administration for providing data compiled from state and federal sources on the status of the ESA-listed stocks. Fisher's March 2005 report for Bonneville, Preliminary Abundance-based Trend Results for Columbia Basin Salmon and Steelhead ESUs, is posted on federal agencies' salmon recovery website at this location:

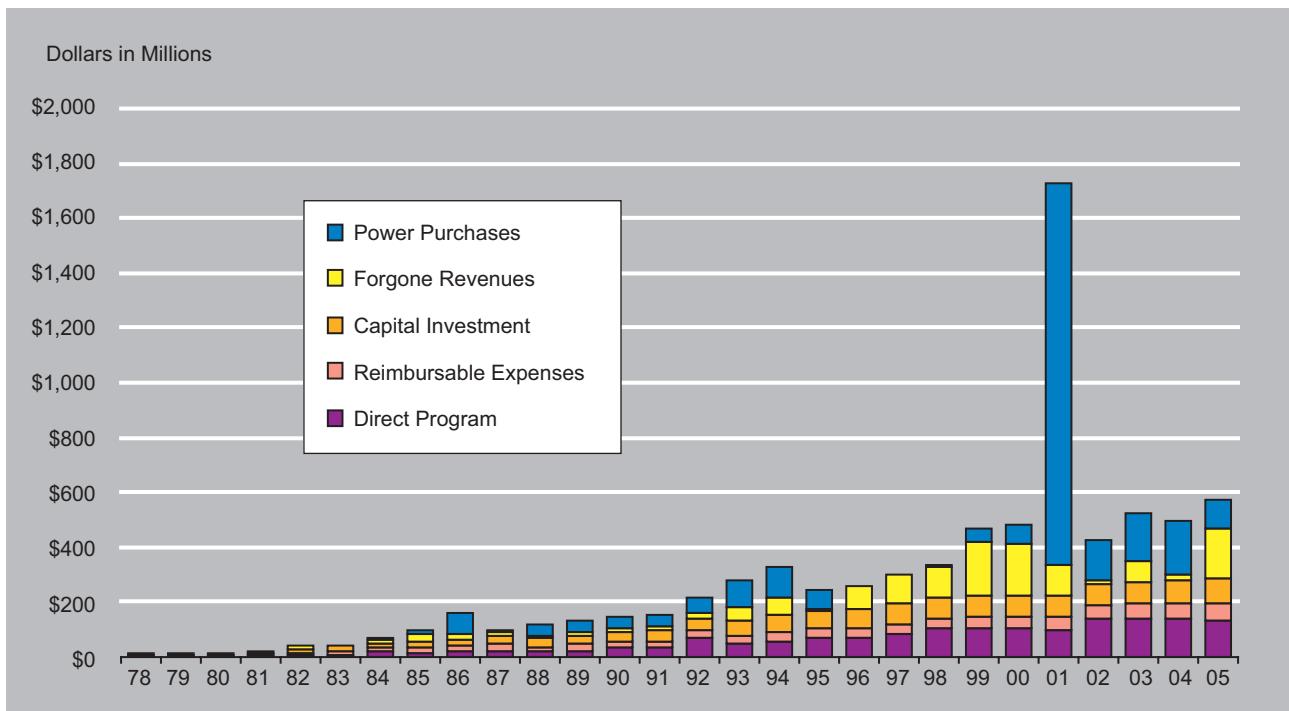
www.salmonrecovery.gov/reports_and_papers/research

Figures from the Fisher report on the status of threatened and endangered species of salmon and steelhead in the Columbia Basin are included in this report as Appendix C.

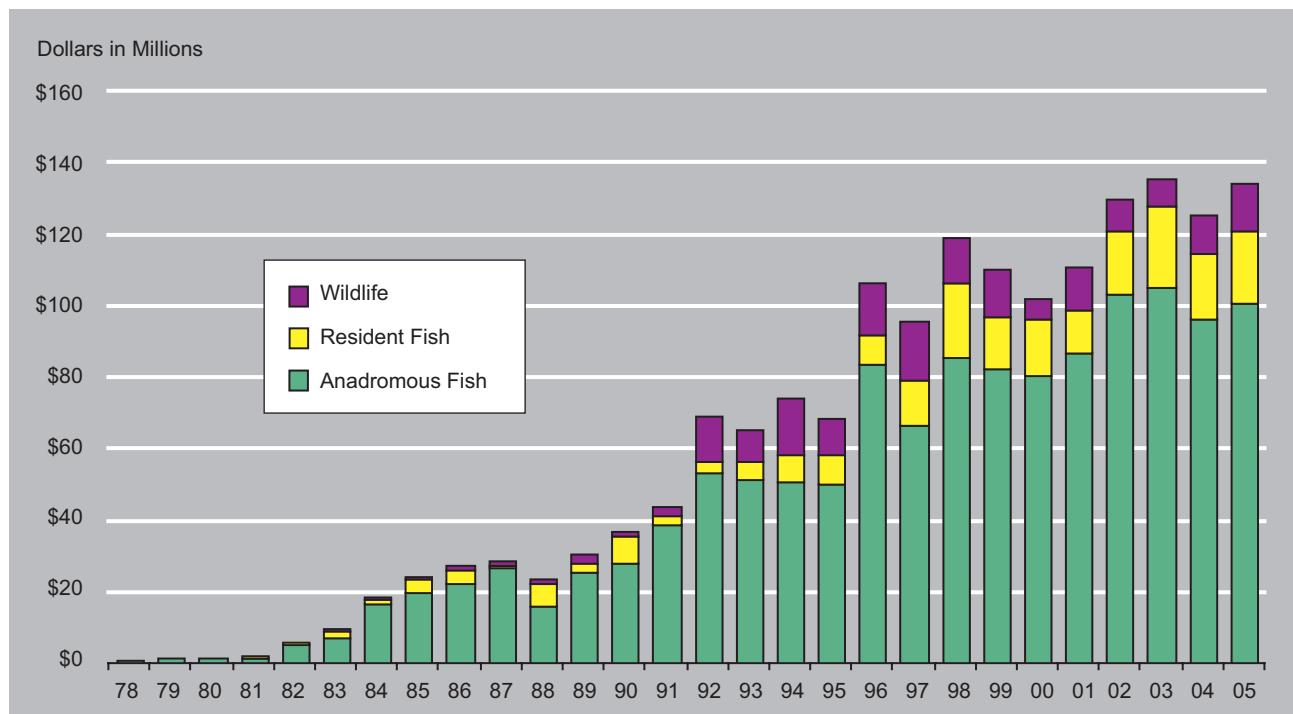
**Figure 1: BPA Fish and Wildlife Cumulative Expenditures
1978-2005**



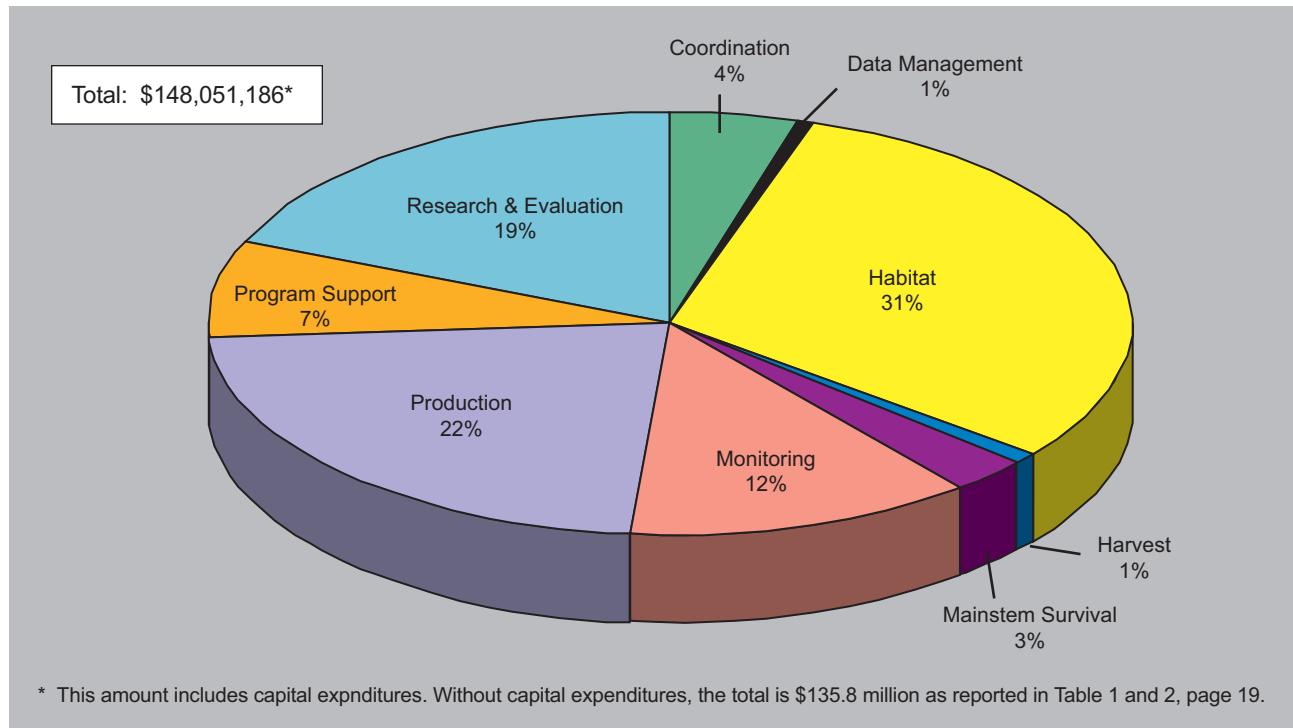
**Figure 2: BPA Fish and Wildlife Total Annual Expenditures
1978-2005**



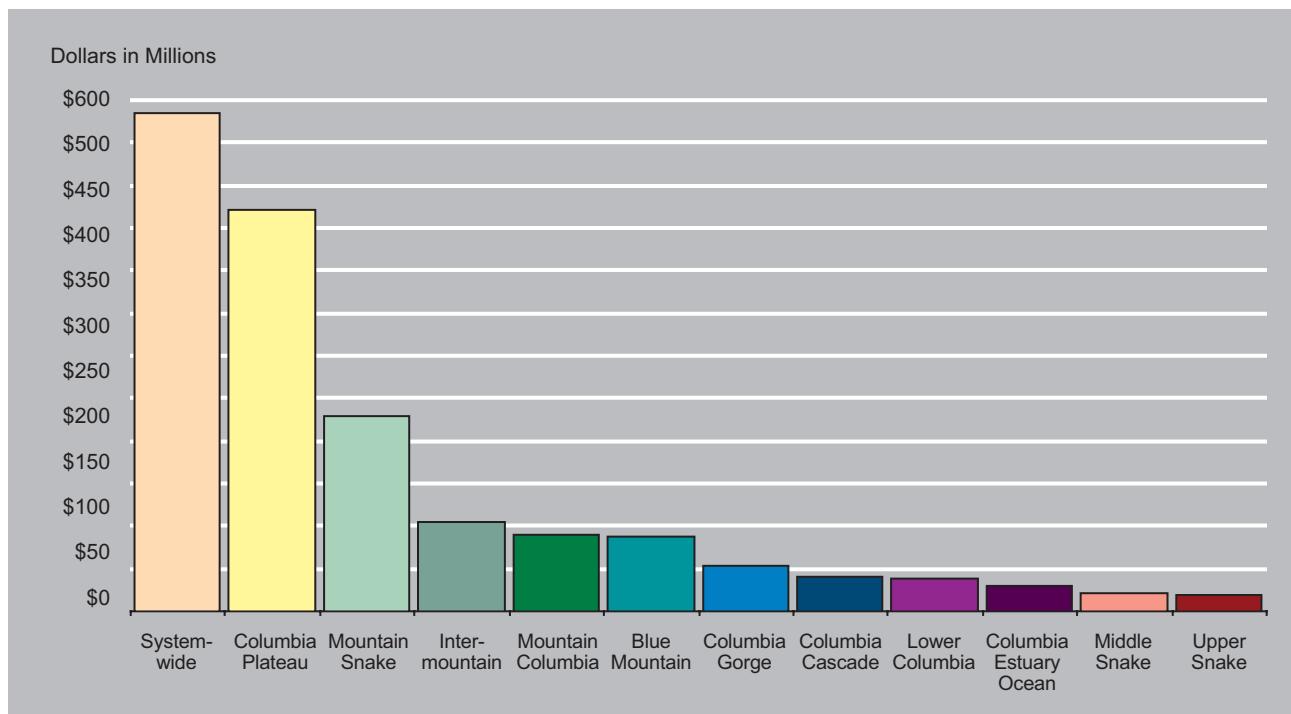
**Figure 3: BPA Fish and Wildlife Obligations by Species
1978-2005**



**Figure 4: BPA Fish and Wildlife Obligations by General Purpose
2005**



**Figure 5: BPA Direct Program Budget, Obligations by Province
1978-2005**



**Figure 6: BPA Direct Program Budget, Obligations by Prime Contractor¹
1978-2005**

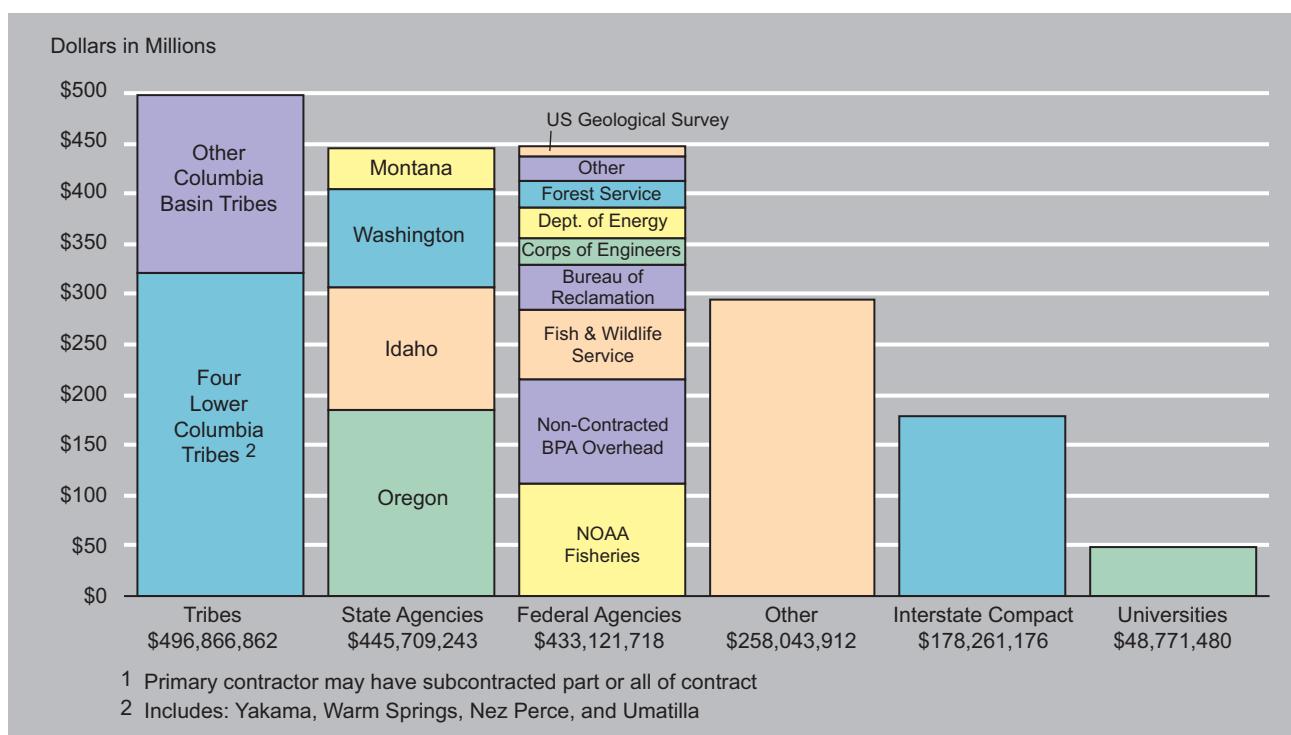


Figure 7: Total Estimated Salmon and Steelhead Entering the Columbia River and Passing Bonneville Dam 1938-2005*

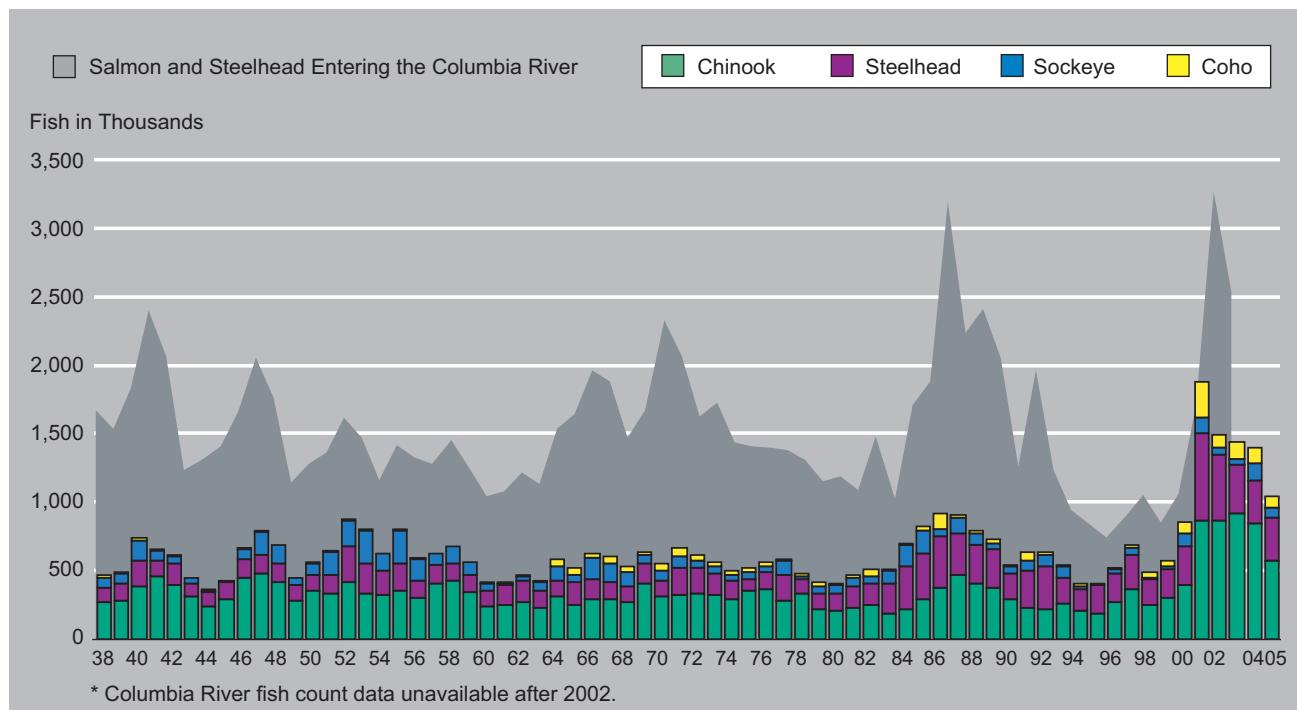
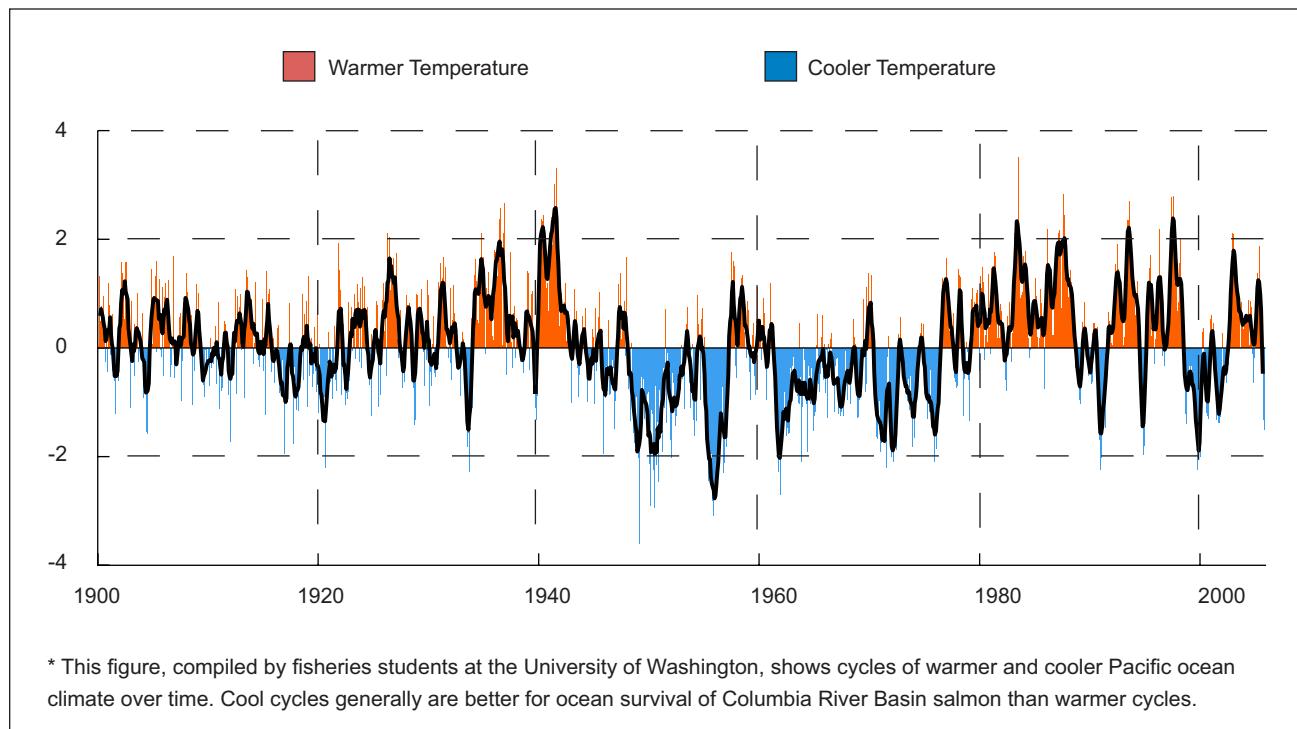
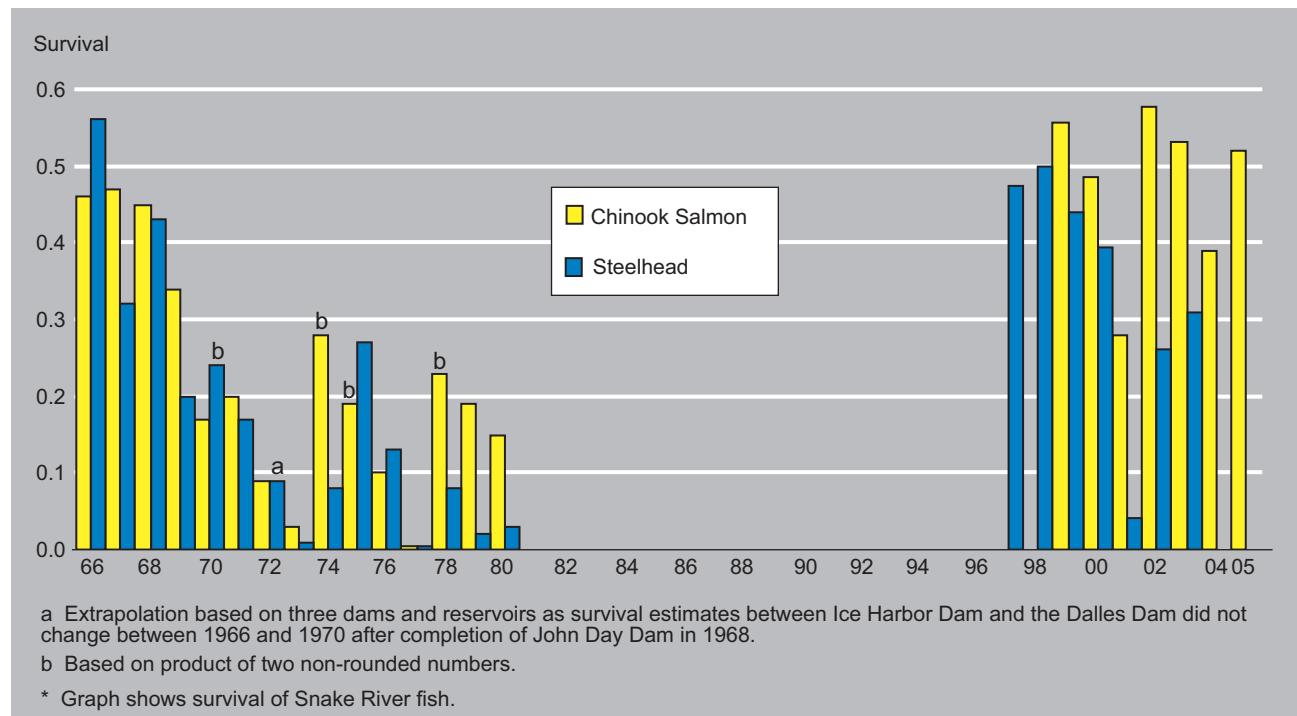


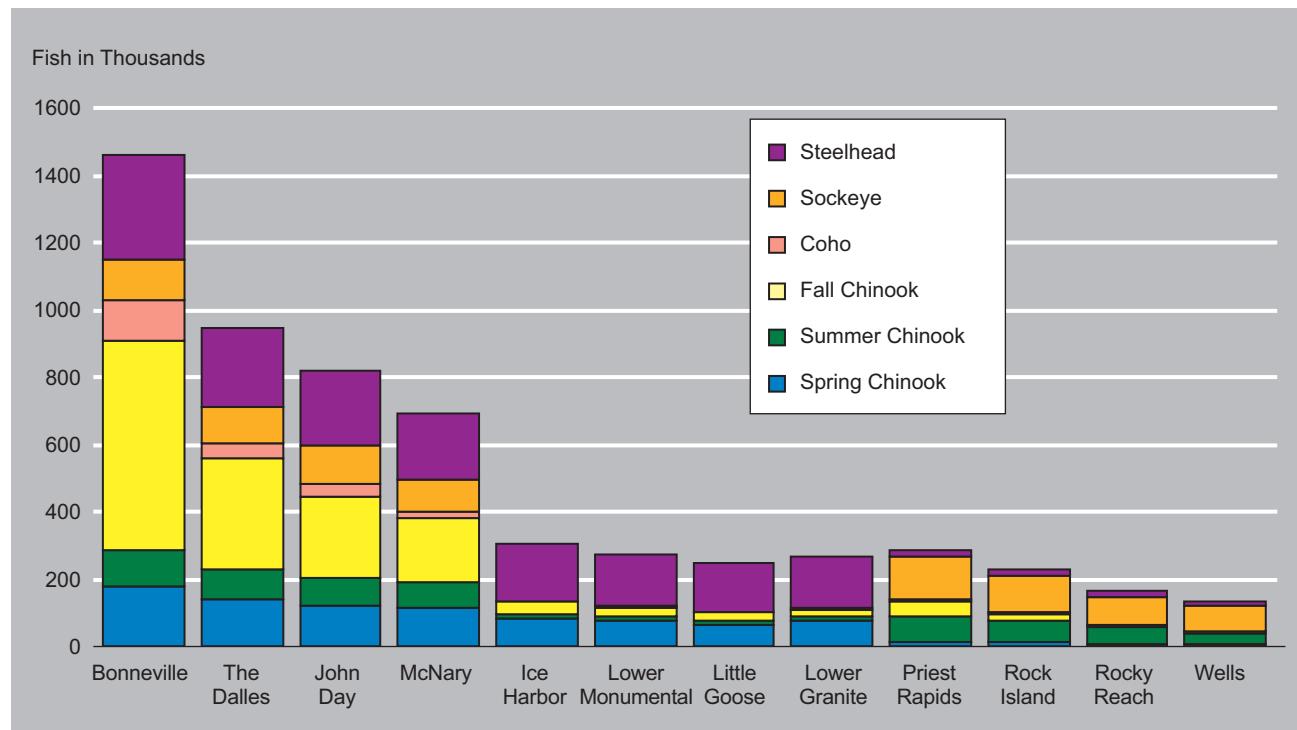
Figure 8: Ocean Temperature Cycles*
January 1900 - November 2005



**Figure 9: Estimated Inriver Juvenile Survival through the Hydrosystem
1966-1980, 1997-2005***



**Figure 10: Where Do the Fish Go? Fish Counted at Each Mainstem Dam
2003-2004**



**Figure 11: Commercial Landings of Salmon and Steelhead from the Columbia River
1866-2002**

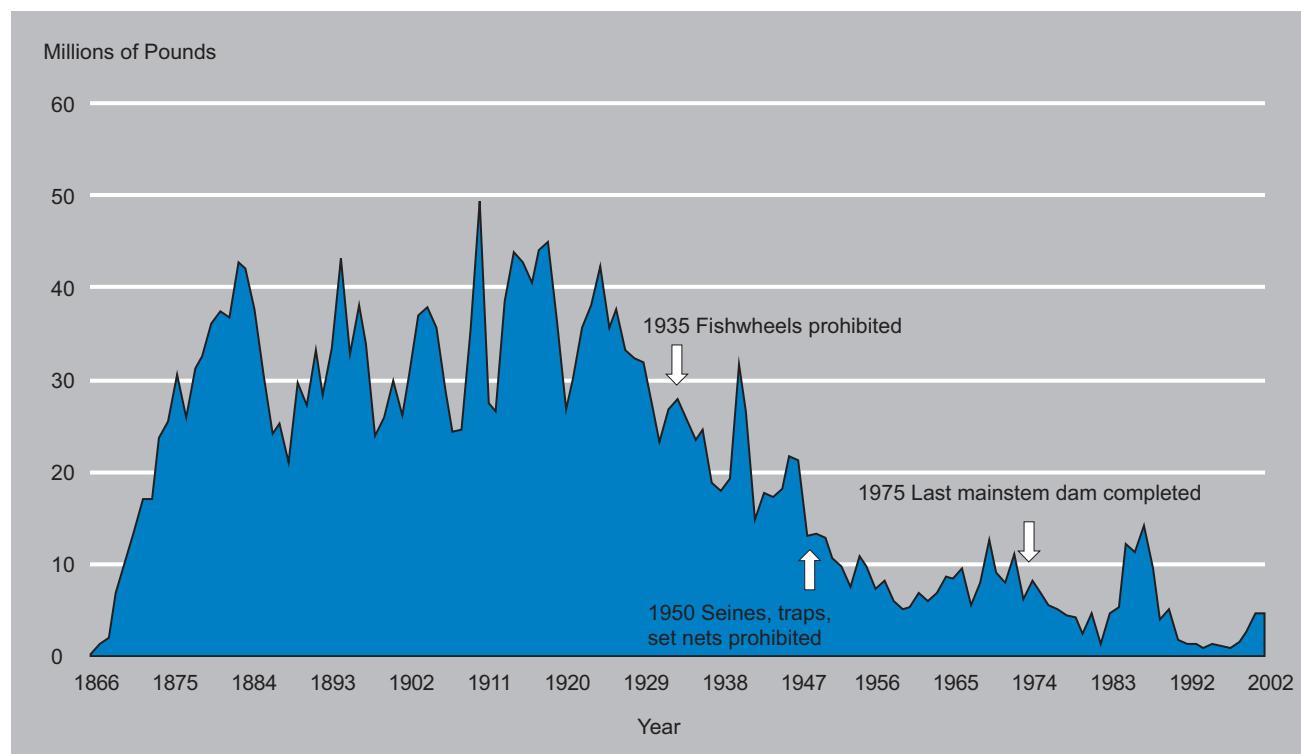


Figure 12: Wildlife Habitat Units: Lost & Acquired

Figure 13: Wildlife Habitat Units Lost and Acquired, Species Most Affected

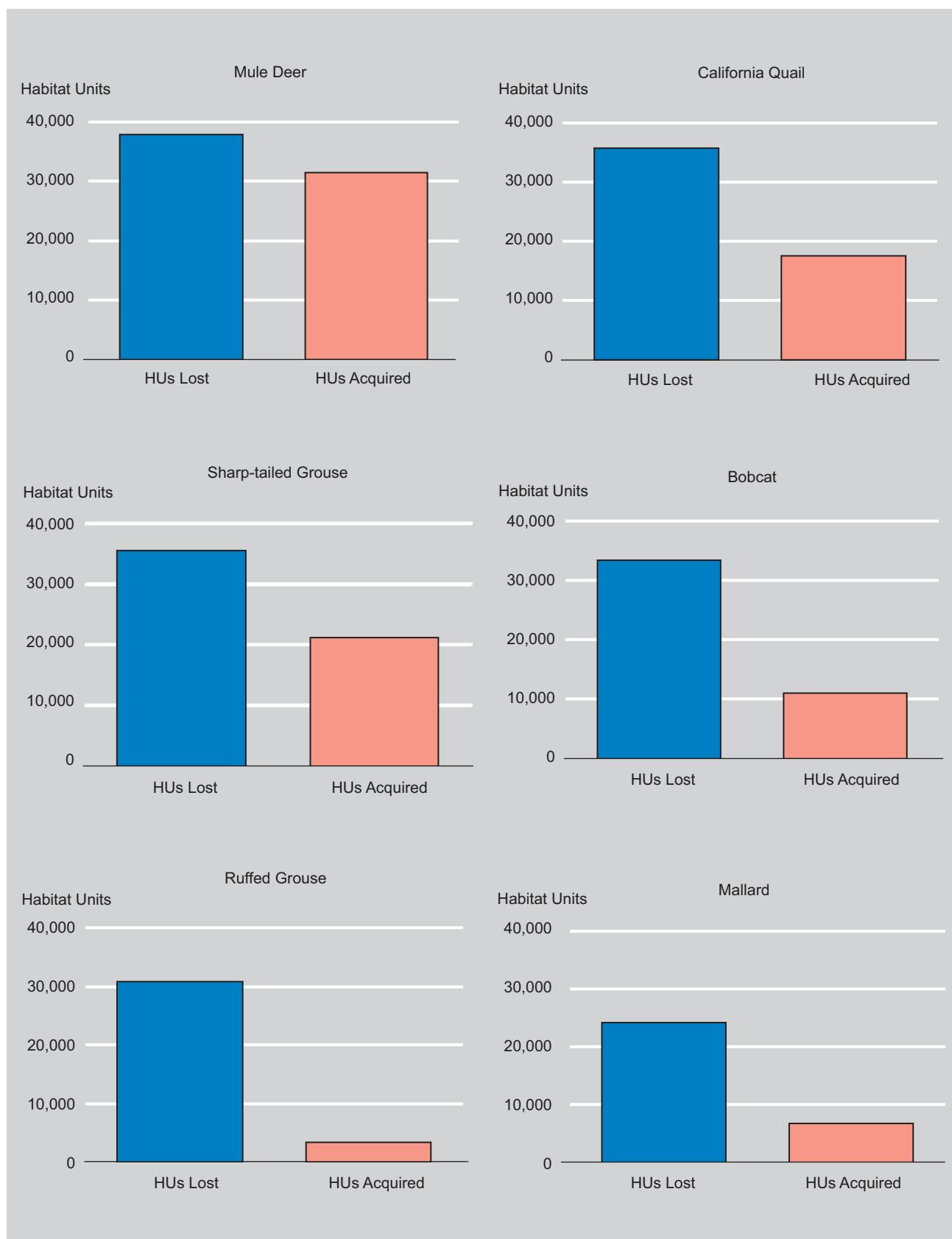


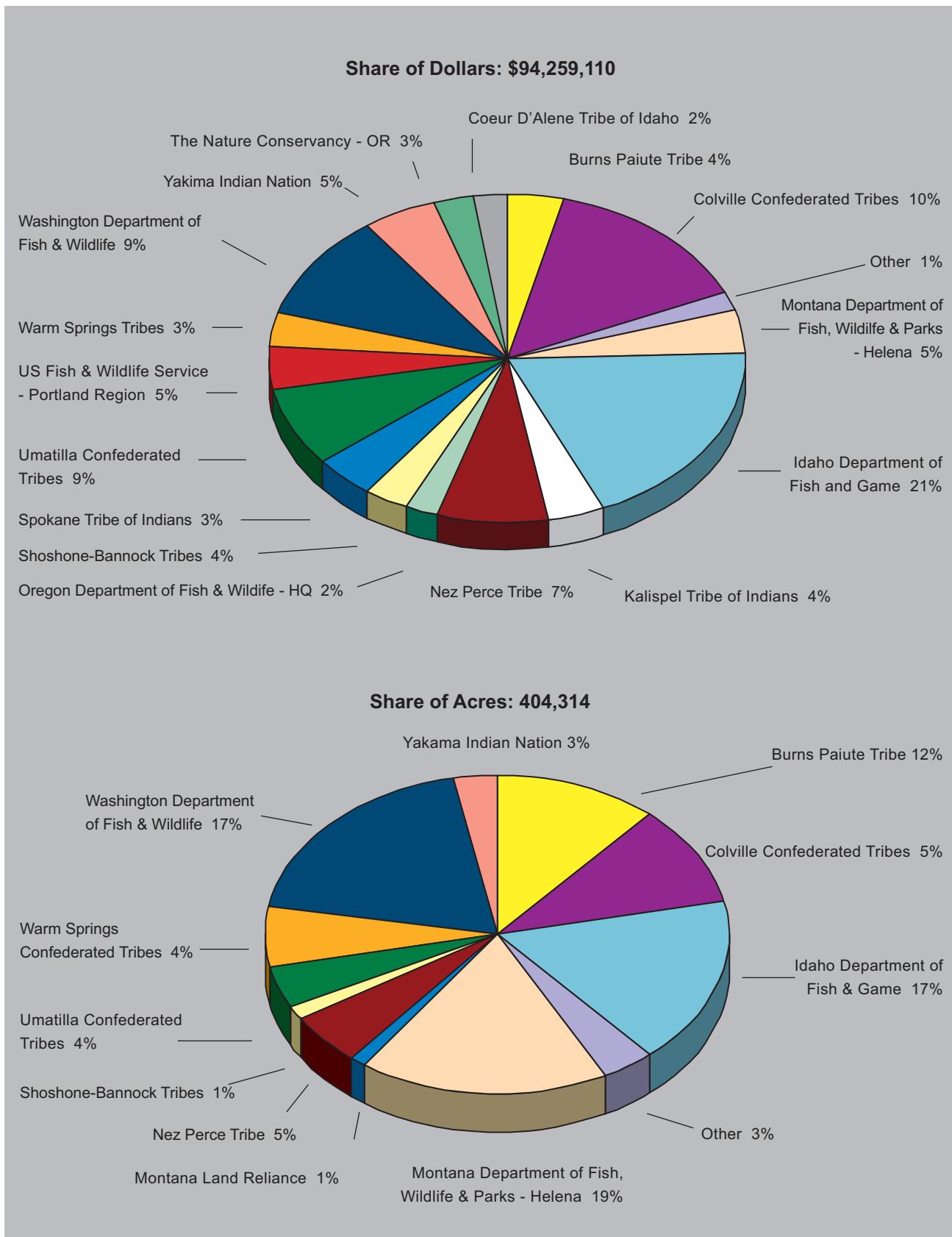
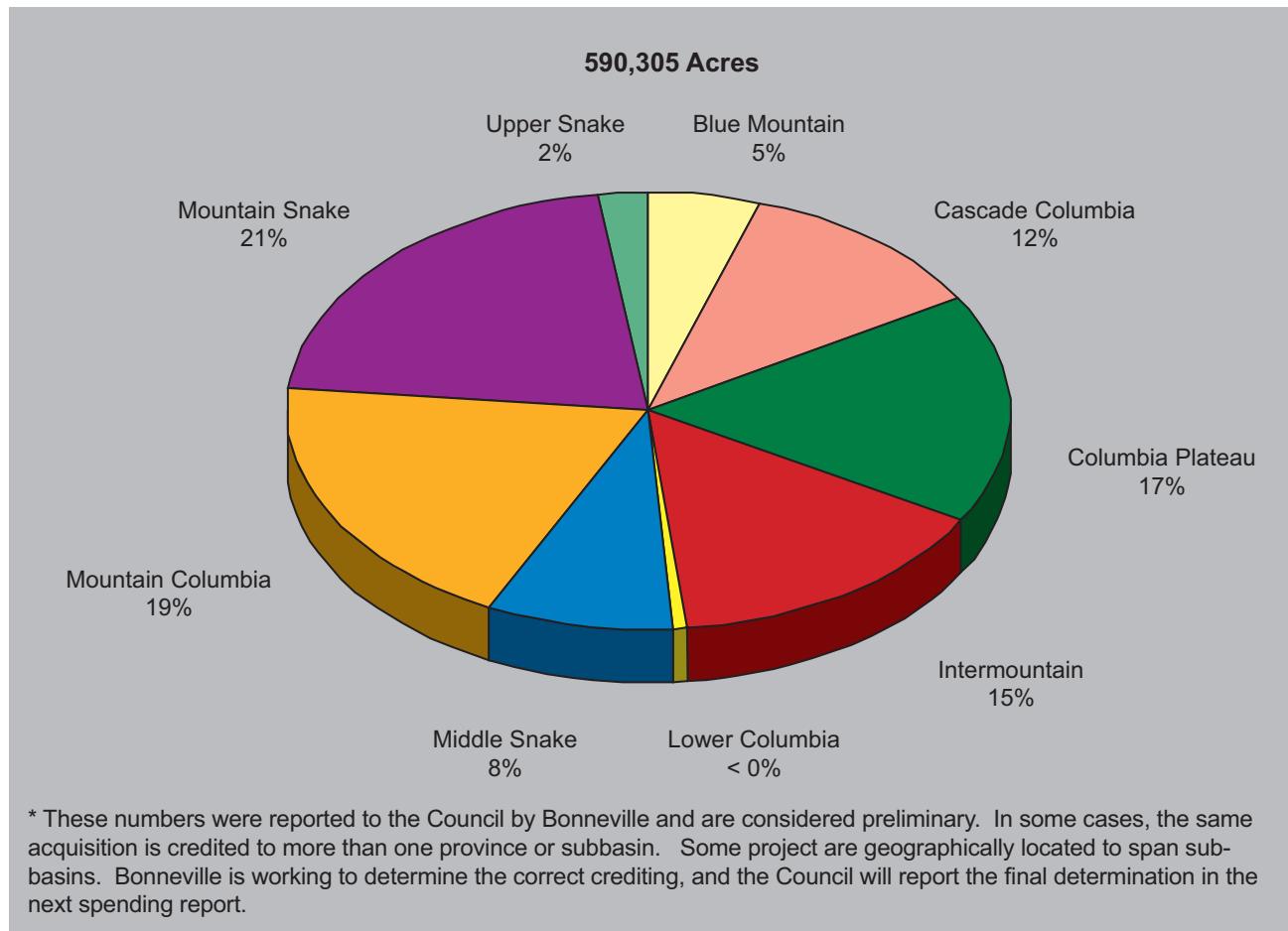
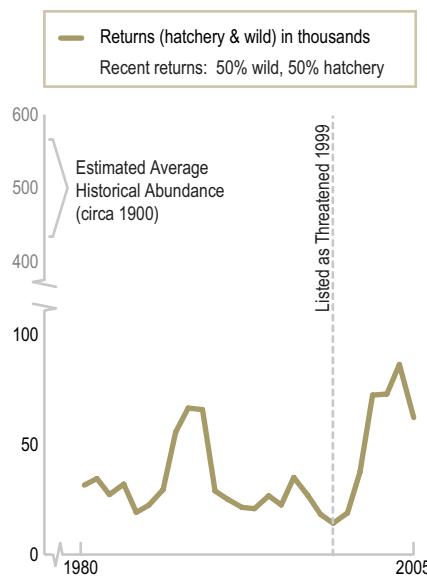
Figure 14: Wildlife Acres Protected and Share of Acquisition Costs by Entity

Figure 15: Properties Purchased by BPA for Wildlife Purposes by Province*
1978-2005

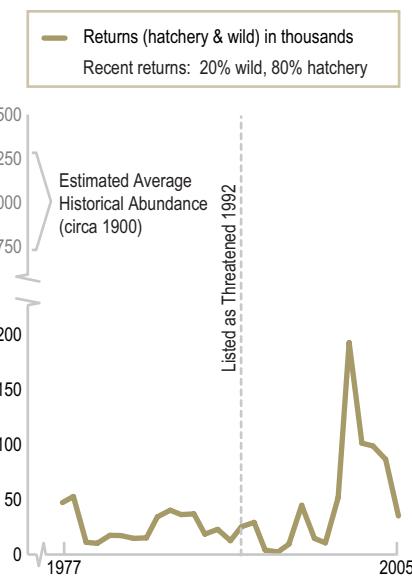


Appendix A: Status of Endangered Species Act-listed Salmon and Steelhead Populations in the Columbia River Basin*

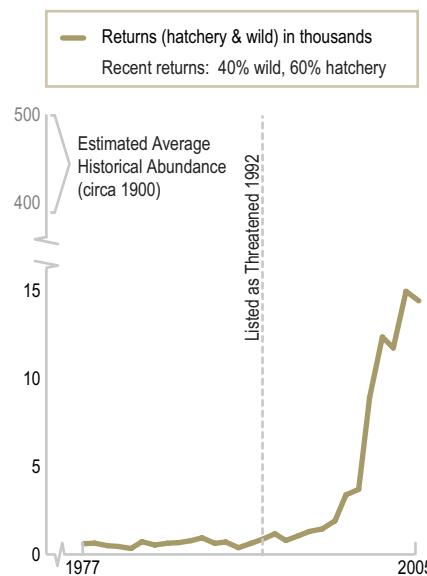
**Lower Columbia River
Chinook ESU**



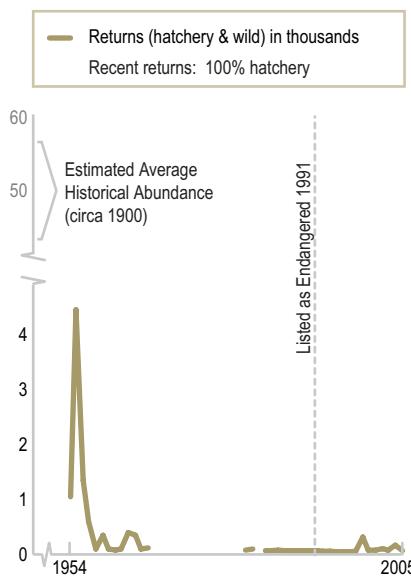
**Snake River Spring/Summer
Chinook ESU**



**Snake River Fall
Chinook ESU**

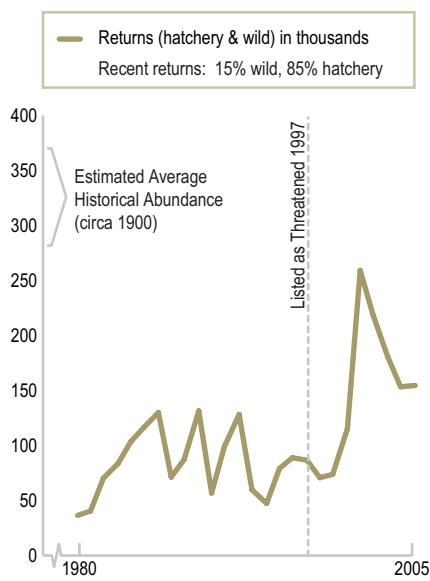


**Snake River
Sockeye ESU**

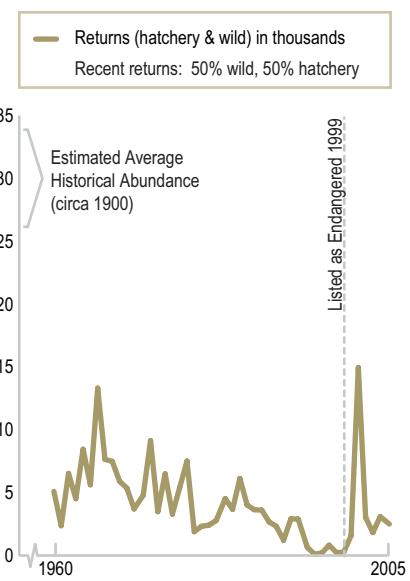


* These figures, reproduced with permission of NOAA Fisheries, are taken from the 2006 Annual Report to Congress of the Pacific Coastal Salmon Recovery Fund.

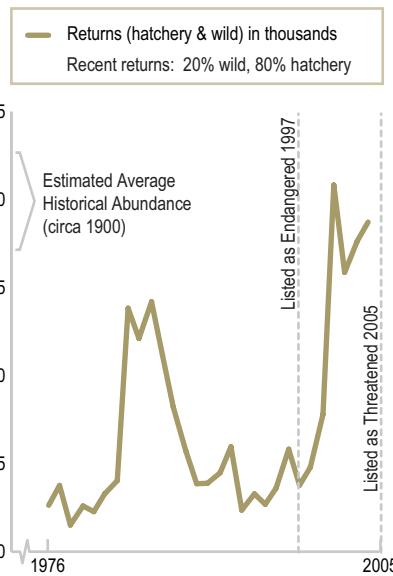
Snake River Steelhead DPS



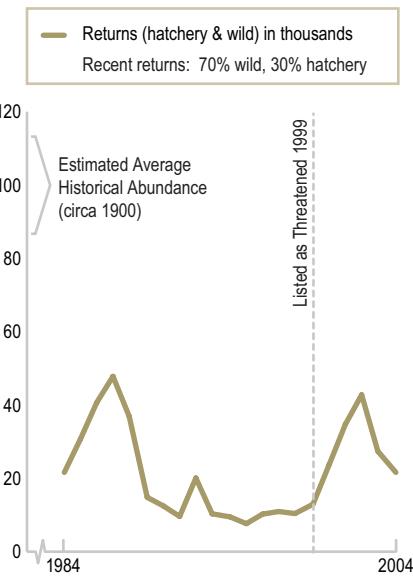
Upper Columbia River Spring Chinook DPS



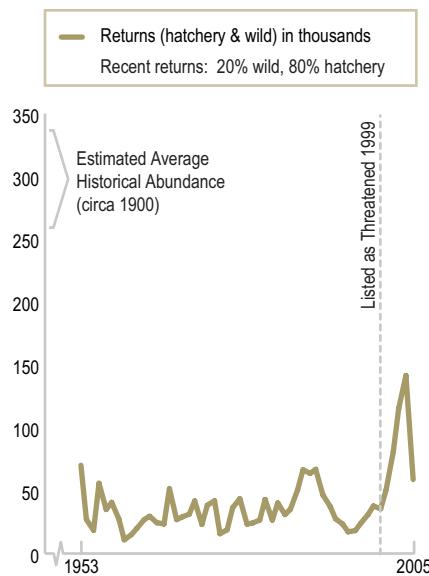
Upper Columbia River Steelhead DPS



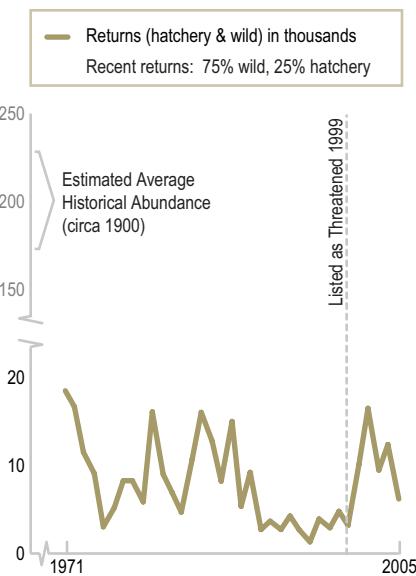
Middle Columbia River Steelhead DPS



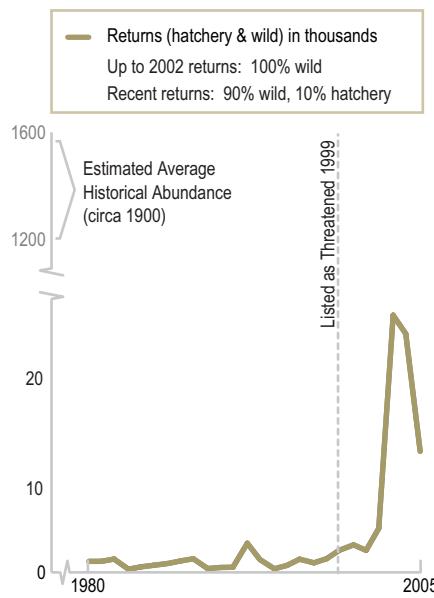
Upper Willamette River
Chinook ESU



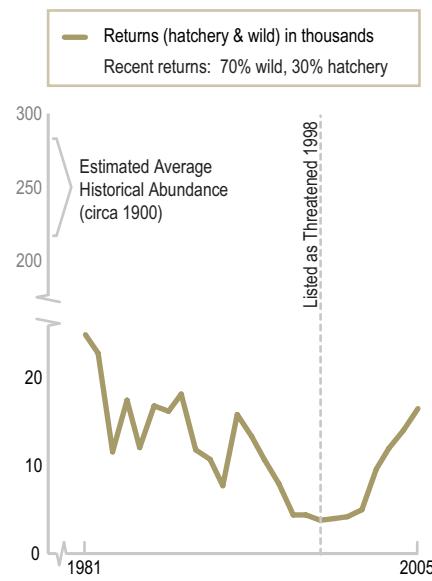
Upper Willamette River
Steelhead DPS



Columbia River
Chum ESU

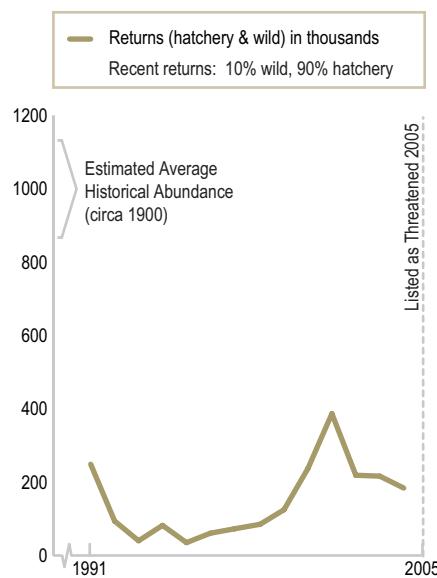


Lower Columbia River
Steelhead DPS



Lower Columbia River

Coho ESU



Appendix B: Tables

Table 1 & 2 Cumulative and Total Annual Expenditures

	1978-1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004*	2005	Total	
Direct Program	\$2.3	\$2.3	\$4.6	\$9.1	\$19.6	\$15.9	\$19.6	\$222	\$18.8	\$23.0	\$32.8	\$33.0	\$67.0	\$49.6	\$55.9	\$71.4	\$68.5	\$82.2	\$104.9	\$108.2	\$101.1	\$137.1	\$140.7	\$137.9	\$135.8	\$1,571.7		
Action Plan/High Priority*																												\$16.0
Reimbursable	\$15.0	\$6.1	\$11.5	\$14.2	\$16.0	\$19.9	\$23.7	\$29.7	\$19.0	\$23.6	\$23.4	\$24.3	\$28.4	\$30.5	\$34.9	\$36.1	\$35.4	\$35.9	\$36.4	\$38.9	\$37.6	\$42.5	\$50.9	\$52.6	\$57.2	\$57.9	\$801.6	
Fixed Expenses 1/	\$24.0	\$8.8	\$12.4	\$15.9	\$16.6	\$19.7	\$22.1	\$28.5	\$31.0	\$31.9	\$34.3	\$38.2	\$41.9	\$53.6	\$61.3	\$63.6	\$73.1	\$76.3	\$74.1	\$76.1	\$76.3	\$78.2	\$78.2	\$80.5	\$85.4	\$89.7	\$1,291.7	
Subtotal	\$41.3	\$77.2	\$28.5	\$39.2	\$52.2	\$55.5	\$65.4	\$80.4	\$80.4	\$68.8	\$78.5	\$90.5	\$95.5	\$137.3	\$133.7	\$152.1	\$171.1	\$177.0	\$194.4	\$215.4	\$223.2	\$222.1	\$224.7	\$272.6	\$280.1	\$283.4	\$3,681.0	
1/ Associated with Capital Investments																												
"River Ops"																												
Power Purchases	\$0.0	\$0.0	\$0.0	\$12.0	\$17.0	\$74.0	\$11.0	\$40.0	\$40.0	\$40.0	\$40.0	\$59.0	\$104.0	\$111.7	\$63.5	\$0.0	\$0.0	\$5.4	\$47.6	\$64.8	\$1,389.6	\$147.8	\$171.1	\$191.0	\$110.8	\$2,740.3		
Foreign Revenues	\$0.0	\$3.0	\$14.0	\$1.0	\$8.0	\$27.0	\$19.0	\$9.0	\$10.0	\$15.0	\$15.0	\$23.0	\$45.0	\$62.0	\$7.1	\$81.7	\$107.8	\$116.5	\$197.8	\$193.1	\$115.9	\$126	\$79.2	\$21.7	\$182.1	\$1,381.5		
Subtotal	\$0.0	\$3.0	\$14.0	\$1.0	\$20.0	\$44.0	\$33.0	\$20.0	\$50.0	\$55.0	\$55.0	\$82.0	\$149.0	\$173.7	\$70.6	\$81.7	\$107.8	\$121.9	\$245.4	\$257.9	\$1,505.5	\$160.4	\$250.3	\$212.7	\$292.9	\$4,121.8		
"River Ops" MOA Period Sub Total																												
Grand Total	\$41.3	\$20.2	\$42.5	\$40.2	\$72.2	\$99.5	\$158.4	\$100.4	\$118.8	\$133.5	\$145.5	\$150.5	\$219.3	\$282.7	\$325.8	\$241.7	\$258.7	\$302.2	\$337.3	\$468.6	\$480.0	\$1,730.2	\$433.0	\$530.4	\$493.6	\$576.3	\$7,802.8	
MOA Period Total \$3,577.0																												
Dollars are in Millions																												

* Action plan and high-priority projects were designed to benefit ESA-listed species 1) in advance of subbasin planning, and 2) in response to changed dam operations during the drought and energy crisis of 2001. The total for these expenditures was \$16 million.

Source: Bonneville Power Administration

Table 3 Obligations by Species, 1978-2005

Fiscal Year	Anadromous Fish	Resident Fish	Wildlife	Total
1978	\$400,000	\$0	\$0	\$400,000
1979	\$979,628	\$0	\$0	\$979,628
1980	\$1,232,775	\$0	\$0	\$1,232,775
1981	\$1,512,801	\$251,000	\$0	\$1,763,801
1982	\$5,349,333	\$335,930	\$0	\$5,685,263
1983	\$7,222,161	\$1,441,440	\$789,026	\$9,452,627
1984	\$6,675,925	\$1,263,895	\$589,066	\$18,528,886
1985	\$19,945,958	\$3,571,308	\$553,022	\$24,070,288
1986	\$22,208,357	\$3,779,463	\$1,009,667	\$26,997,487
1987	\$26,560,517	\$591,182	\$1,149,655	\$28,301,354
1988	\$15,848,972	\$6,389,391	\$1,040,601	\$23,278,964
1989	\$25,225,428	\$3,016,827	\$2,053,497	\$30,295,752
1990	\$27,737,779	\$7,795,641	\$1,058,418	\$36,591,838
1991	\$38,973,827	\$2,028,859	\$2,553,970	\$43,553,666
1992	\$53,119,662	\$3,550,209	\$12,847,109	\$69,516,980
1993	\$51,129,495	\$5,457,600	\$8,936,699	\$65,523,794
1994	\$51,044,466	\$7,072,137	\$16,050,951	\$74,207,554
1995	\$49,894,315	\$8,692,253	\$10,206,415	\$68,792,983
1996	\$83,789,352	\$7,962,544	\$14,857,773	\$106,567,669
1997	\$66,524,626	\$12,944,597	\$16,615,431	\$96,084,654
1998	\$85,533,382	\$20,991,620	\$12,675,870	\$119,200,872
1999	\$82,415,426	\$14,860,466	\$13,443,429	\$10,709,321
2000	\$80,591,738	\$15,808,570	\$6,022,069	\$102,422,377
2001	\$86,707,688	\$12,348,834	\$12,117,092	\$111,173,614
2002	\$103,474,620	\$17,568,123	\$9,443,746	\$130,456,489
2003	\$105,384,293	\$22,764,723	\$7,670,918	\$135,819,935
2004	\$96,206,585	\$18,899,368	\$10,659,908	\$125,765,860
2005	\$101,172,351	\$20,236,591	\$13,278,339	\$134,687,281
Total	\$1,306,861,461	\$219,612,570	\$175,597,671	\$1,702,041,702

* Totals for 2001-03 include program support and other costs, as indicated below. These costs were not separately reported by Bonneville prior to 2001.

FY **External Program Support 1**

BPA Program Support 2

Other 3

2000	\$2,737,207	\$16,356,411	\$566,751	\$89,090,066
2001	\$5,215,601	\$5,207,617	\$21,425	\$88,012,973
2002	\$1,699,566	\$11,096,041	\$12,041,388	\$54,123,708
2003	\$4,460,374	\$10,648,717	\$10,990,758	\$41,420,769
2004	\$10,019,553	\$2,254,004	\$66,340,931	\$39,575,193
2005	\$2,248,636	\$22,486,306	\$607,319	\$40,527,952
Total	\$1,306,861,461	\$219,612,570	\$175,597,671	\$1,702,041,702

1 External Program Support includes tasks such as data management that support all programs

2 BPA Program Support includes contracted tasks such as program review and independent analysis, as well as BPA internal overhead such as personnel costs

3 Expenses not otherwise categorized

Source: Bonneville Power Administration

Table 4 Breakdown of Expenditures for Mainstem, Production, Habitat and Harvest - Excluding Action Plan and High Priority

	General Purpose	FY 2003	FY 2004	FY 2005
Coordination	\$6,403,568	\$5,760,114	\$6,594,675	\$906,578
Data Management	\$236,896	\$39,500,655	\$40,306,108	\$44,898,740
Habitat	\$1,763,801	\$1,195,396	\$2,666,015	\$1,611,232
Harvest	\$1,685,263	\$24,070,288	\$3,639,242	\$4,112,685
Mainstem Survival	\$1,441,440	\$26,997,487	\$28,301,354	\$17,189,343
Monitoring	\$1,263,895	\$1,149,655	\$23,278,964	\$32,185,286
Production	\$35,930	\$1,040,601	\$34,939,205	\$33,085,526
Research and Evaluation	\$589,066	\$2,053,497	\$32,672,718	\$27,683,912
BPA Program Support	\$553,022	\$36,591,838	\$12,041,388	\$10,990,758
Other	\$1,009,667	\$1,058,418	\$10,648,717	158,184
Total	\$1,702,041,702	\$152,321,697	\$146,434,130	\$148,051,186

Source: Bonneville Power Administration

Table 5 Obligations by Province, 1978-2005

Province	1978-2005	2003	2004	2005
Systemwide	\$555,098,727	\$41,021,491	\$42,375,167	\$39,508,689
Columbia Plateau	\$470,870,841	\$28,530,634	\$25,395,810	\$27,057,099
Mountain Snake	\$229,071,527	\$20,023,083	\$17,908,414	\$17,157,162
Intermountain Columbia	\$104,513,786	\$12,884,976	\$13,116,278	\$18,225,072
Mountain Columbia	\$89,090,066	\$8,040,476	\$6,897,321	\$7,004,651
Blue Mountain	\$88,012,973	\$9,399,380	\$6,895,057	\$8,236,701
Columbia Gorge	\$54,123,708	\$6,487,780	\$4,947,368	\$5,103,954
Columbia Cascade	\$41,420,769	\$3,454,315	\$5,155,736	\$4,548,526
Lower Columbia	\$39,575,193	\$4,205,860	\$6,006,986	\$3,374,505
Columbia Estuary	\$29,527,952	\$3,289,408	\$5,008,417	\$4,295,766
Upper Snake	\$19,591,601	\$1,064,801	\$345,252	\$65,9,919
Middle Snake	\$21,108,519	\$1,877,824	\$1,735,608	\$1,565,370
Total	\$1,772,005,662	\$140,280,309	\$135,785,413	\$136,737,413
Program Support	\$63,808,965	\$12,041,388	\$10,648,717	\$10,990,758

Source: Bonneville Power Administration

Table 6A Obligations by Prime Contractor - 1978-2005

Contractor Type	Prime Contractor	1979-2005	1979-2005	Contractor Type	Prime Contractor	1979-2005
FEDERAL	NATIONAL MARINE FISHERIES SVC NON-CONTRACTED BPA OVERHEAD FISH & WILDLIFE SERVICE BUREAU OF RECLAMATION CORP OF ENGINEERS DEPARTMENT OF ENERGY FOREST SERVICE OTHER US GEOLOGICAL SURVEY	\$112,757,626 \$102,466,486 \$70,252,285 \$44,655,717 \$25,878,289 \$29,534,347 \$25,881,772 \$25,315,289 \$9,161,792	\$112,757,626 \$102,466,486 \$70,252,285 \$44,655,717 \$25,878,289 \$29,534,347 \$25,881,772 \$25,315,289 \$9,161,792	TRIBE	NEZ PERCE TRIBE YAKAMA INDIAN NATION UMATILLA CONFEDERATED TRIBES COLVILLE CONFEDERATED TRIBES WARM SPRINGS TRIBES KOOTENAI TRIBE OF IDAHO SPOKANE TRIBE OF INDIANS SHOSHONE-BANNOCK TRIBES KALISPEL TRIBE OF INDIANS COEUR D'ALENE TRIBE OF IDAHO	\$115,578,387 \$53,203,928 \$40,896,401 \$32,336,247 \$23,465,457 \$22,607,606 \$21,211,832 \$16,538,235
STATE	OREGON DEPARTMENT OF FISH & WILDLIFE OREGON STATE POLICE - FISH & WILDLIFE OREGON WATER TRUST OREGON DEPARTMENT OF ENERGY OREGON DEPARTMENT OF TRANSPORTATION OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY OREGON DEPARTMENT OF PARKS & RECREATION	\$180,222,001 \$3,480,952 \$1,004,400 \$193,707 \$106,422 \$186,618 \$5,367	\$180,222,001 \$3,480,952 \$1,004,400 \$193,707 \$106,422 \$186,618 \$5,367	COLUMBIA RIVER INTERTRIBAL FISH COMMISSION SHOSHONE-PAUITE TRIBES BURNS PAUITE TRIBE SALISH-KOOTENAI TRIBES POINT NO POINT TRIBE TULALIP TRIBE KLAMATH TRIBE CHEHALIS INDIAN TRIBE CHEHALIS INDIAN TRIBE SQUAXIN ISLAND TRIBE	\$13,586,142 \$9,378,008 \$8,618,562 \$4,491,425 \$11,960 \$4,988 \$4,512 \$2,082 \$1,304	
	Subtotal	\$185,199,466		TOTAL		\$496,966,756
	IDAHO DEPARTMENT OF FISH & WILDLIFE IDAHO SOIL & WATER CONSERVATION COMMISSION IDAHO STATE OFFICE OF SPECIES CONSERVATION IDAHO STATE HISTORICAL SOCIETY	\$113,755,528 \$7,083,530 \$54,140 \$31	\$113,755,528 \$7,083,530 \$54,140 \$31	INTERSTATE COMPACT Pacific States Marine Fisheries Commission UNIVERSITY University	\$178,261,176 \$48,857,807	
	Subtotal	\$120,993,229				
	WASHINGTON DEPARTMENT OF FISH & WILDLIFE WASHINGTON DEPARTMENT OF ECOLOGY WASHINGTON WILDLIFE COALITION MEMBERS WASHINGTON STATE CONSERVATION COMMISSION WASHINGTON DEPARTMENT OF ECOLOGY WASHINGTON STATE ENERGY OFFICE WASHINGTON DEPARTMENT OF TRANSPORTATION WASHINGTON DEPARTMENT OF NATURAL RESOURCES	\$86,713,503 \$6,077,932 \$3,445,738 \$694,411 \$542,633 \$242,857 \$101,700 \$5,000	\$86,713,503 \$6,077,932 \$3,445,738 \$694,411 \$542,633 \$242,857 \$101,700 \$5,000	OTHER Private/Other Local/Semi governmental Utility COLUMBIA BASIN FISH & WILDLIFE FDN Not Specified (Land) NATIONAL FISH & WILDLIFE FOUNDATION	\$144,624,542 \$54,185,351 \$24,804,622 \$22,444,005 \$13,163,259 \$6,658,199	
	Subtotal	\$97,823,775		TOTAL		\$295,711,855
	MONTANA DEPARTMENT OF FISH & WILDLIFE MONTANA FISH, WILDLIFE & PARK	\$33,692,166 \$8,000,606	\$33,692,166 \$8,000,606	GRAND TOTAL		\$1,881,978,553
	Subtotal	\$41,692,772				
	TOTAL	\$445,709,243				

Source: Bonneville Power Administration

Table 6B Expenditures of Direct BPA funds by contractor,* 1996-2005

Contractor	Total	Contractor	Total
PACIFIC STATES MARINE FISH COMMISSION	\$125,139,170	COLUMBIA RIVER INTRIBRAL FISH COMMISSION	\$4,932,208
NEZ PERCE TRIBE	\$106,871,800	CONFEDERATED TRIBES OF THE UMATILLA/INDI	\$4,660,809
OREGON DEPARTMENT OF FISH & WILDLIFE- HQ	\$95,214,332	OREGON STATE UNIVERSITY	\$4,569,772
YAKAMA NATION	\$84,808,722	US DOE RICHLAND OPERATIONS OFC	\$4,368,203
IDAHo DEPARTMENT OF FISH & GAME	\$72,093,146	MWHAERICAS INC	\$4,268,094
WASHINGTON DEPARTMENT OF FISH & WILDLIFE	\$60,107,370	IDAHo SOIL & WATER CONSERVATION COMMISSION	\$4,200,607
NATIONAL MARINE FISHERIES SERVICE - SEATTLE OFFICE	\$43,471,177	US DOI GEOLOGICAL SURVEY	\$4,073,408
UMATILLA CONFEDERATED TRIBES	\$37,672,049	DEPT OF FISHERIES & OCEANS (CANADIAN)	\$3,622,330
WARM SPRINGS TRIBES	\$30,071,485	WESTLAND IRRIGATION DISTRICT	\$3,548,255
COLVILLE CONFEDERATED TRIBES	\$24,547,813	CONCORD CONSTRUCTION, INC	\$3,540,383
COLUMBIA BASIN FISH & WILDLIFE FOUNDATION	\$21,982,314	CONFEDERATED TRIBES OF THE	\$3,238,699
KOOTENAI TRIBE of IDAHO	\$18,241,907	COLUMBIA RIVER INTER-TRIBAL	\$3,083,377
SPOKANE TRIBE of INDIANS	\$16,902,020	CONFEDERATED TRIBES AND BANDS OF THE	\$3,073,595
BONNEVILLE POWER ADMINISTRATION - FISH AND WILDLIFE PROGRAM SUPPORT	\$16,848,350	IDAHo DEPARTMENT OF FISH & GAME / KALISPEL	\$2,861,571
PACIFIC NORTHWEST ELECTRIC POWER &	\$16,196,356	UNIVERSITY of IDAHO	\$2,623,622
NATTMCDOUGALL COMPANY	\$15,876,408	SLAYDEN CONSTRUCTION INC	\$2,582,316
US FISH AND WILDLIFE SERVICE - PORTLAND REGION	\$15,120,271	US FISH AND WILDLIFE SERVICE - FISHERIES PROGRAM OFFICE	\$2,561,689
NATIONAL MARINE FISHERIES SERVICE - PORTLAND OFFICE	\$14,860,289	ASOTIN COUNTY CONSERVATION DISTRICT	\$2,390,714
UNIVERSITY OF WASHINGTON	\$13,398,991	LOWER COLUMBIA RIVER ESTUARY PARTNERSHIP	\$2,344,881
KALISPEL TRIBE of INDIANS	\$12,148,701	UNDERWOOD CONSERVATION DISTRICT	\$2,333,575
BONNEVILLE POWER ADMINISTRATION - TRANSMISSION BUSINESS LINE	\$11,880,217	US GEOLOGICAL SURVEY	\$2,314,513
COEUR D'ALENE TRIBE of IDAHO	\$11,133,279	DESTRON - FEARING	\$2,254,524
SHOSHONE-BANNOCK TRIBES	\$10,754,217	ESSA TECHNOLOGIES LTD.	\$2,227,191
IMPERIO CONSTRUCTION COMPANY	\$10,716,321	CONTRACTOR UNKNOWN TO EMIS	\$2,167,074
FISHPRO, INC.	\$10,459,556	CLATSOP ECONOMIC DEVELOPMENT COMMITTEE	\$2,152,615
US DEPT. OF ENERGY - BATTELLE PACIFIC NORTHWEST LABORATORY - (RICHLAND)	\$10,289,413	NATURE CONSERVANCY - MONTANA	\$2,101,220
NATIONAL BIOLOGICAL SERVICE / USFWS - NATIONAL FISH RESEARCH CENTER - SEATTLE	\$9,844,736	CITY OF YAKIMA	\$2,049,515
US BUREAU OF RECLAMATION - PACIFIC NW REGION (BOISE)	\$9,686,763	PACIFIC POWER & LIGHT/UECA	\$1,994,000
MONTGOMERY WATSON	\$9,549,413	COEUR D'ALENE TRIBE OF INDIANS	\$1,992,180
US DOI FISH & WILDLIFE SERVICE	\$9,152,253	NEZ PERCE SOIL & WATER CONSERVATION DISTRICT	\$1,832,377
NORTHWEST POWER PLANNING COUNCIL	\$9,067,769	LEMHI SOIL & WATER CONSERVATION DISTRICT	\$1,787,083
NATIONAL MARINE FISHERIES SVC	\$8,460,439	WASHINGTON STATE UNIVERSITY	\$1,750,237
BURNS PAULTE TRIBE	\$8,203,148	BIOANALYSTS INC (D. CHAPMAN)	\$1,675,879
CONFEDERATED TRIBES AND BANDS OF THE VAK	\$7,813,863	KITTITAS-YAKIMA RES CONS & DEV	\$1,666,998
SHOSHONE-PAUITE TRIBES	\$7,663,955	CONFEDERATED SALISH-KOOTENAI TRIBES	\$1,651,272
CUSTER SOIL & WATER CONSERVATION DISTRICT	\$7,411,930	U.S. FOREST SERVICE	\$1,639,797
US ARMY CORE OF ENGINEERS - PORTLAND DISTRICT	\$7,367,824	MONTANA FISH WILDLIFE & PARKS / CONFEDERATED SALISH-KOOTENIA TRIBES	\$1,606,434
NATIONAL FISH & WILDLIFE FOUNDATION	\$6,408,371	USFS - PACIFIC NW RESEARCH STATION	\$1,577,145
WASHINGTON DEPT OF ECOLOGY	\$6,089,022	PAULSEN ENVIRONMENTAL RESEARCH	\$1,518,287
MONTANA FISH, WILDLIFE & PARKS	\$5,889,021	IDAHO STATE CONSERVATION COMMISSION	\$1,495,304
MONTANA DEPARTMENT OF FISH & WILDLIFE - HELENA	\$5,697,907	YAKIMA CO-OP	\$1,479,863
UMATILLA ELECTRIC COOP ASSOCIATION	\$5,621,125	PORTLAND GENERAL ELECTRIC	\$1,396,282
DIGITAL ANGEL CORPORATION	\$5,109,234	WASCO COUNTY SOIL & WATER CONSERVATION DISTRICT	\$1,360,528
CH2M HILL - NORTHWEST INC.	\$5,043,703	OREGON STATE UNIVERSITY / CUMULATIVE RISK INITIATIVE	\$1,360,009

Table 6B Expenditures of Direct BPA funds by contractor 1996-2005 (continued)

Contractor	Total	Contractor	Total
COLUMBIA COUNTY SOIL & WATER CONSERVATION DISTRICT	\$1,331,566	US DOI NW BIOLOGICAL SCIENCE CENTER	\$556,552
WALLOWA COUNTY SOIL & WATER CONSERVATION DISTRICT	\$1,283,803	USFS - IMATILLA NATIONAL FOREST	\$534,198
US DOI BUREAU OF RECLAMATION	\$1,271,869	EASTERN OREGON STATE COLLEGE	\$521,423
USDA FOREST SERVICE	\$1,258,457	YAKAMA NATION FISHERIES PROJECT	\$515,366
S CENTRAL WASHINGTON RESOURCE CONSERVATI	\$1,215,855	SYNERGY CONSULTING INC	\$511,623
US BUREAU OF RECLAMATION (WA)	\$1,205,799	MILLER ECOLOGICAL CONSULTANTS	\$507,552
US GEO. SURVEY - BIOLOGICAL RESOURCES DIV. - COLUMBIA RIVER RESEACH LAB	\$1,204,305	LATAH SOIL & WATER CONSERVATION DIST	\$506,862
USDA - NATURAL RESOURCES CONSERVATION SERVICE	\$1,169,780	TRANSNATION TITLE INSURANCE CO	\$500,000
INTERMOUNTAIN COMMUNICATIONS	\$1,116,616	UNION COUNTY	\$480,024
MONTANA DEPT FISH WILDLIFE & PARKS	\$1,111,885	WALLA WALLA COUNTY CONSERVATION DISTRICT	\$474,928
PACIFIC POWER & LIGHT COMPANY	\$1,107,973	US GEOLOGICAL SURVEY - BIOLOGICAL RESOURCES DIVISION	\$468,198
NORTHWEST FISHERIES SCIENCE CENTER	\$1,037,476	UNISYS CORPORATION	\$445,509
JEFFERSON COUNTY SOIL & WATER CONSERVATION DISTRICT	\$1,026,185	USFS - GIFFORD PINCHOT NAT. FOREST - MT ADAMS RANGER DISTRICT, WIND RIVER DIV.	\$444,891
CASCADE PACIFIC RESOURCE HARZAN NORTHWEST INC	\$1,016,797	FISHER FISHERIES LTD.	\$432,167
POMEROY SOIL & WATER WATER CONSERVATION DISTRICT	\$1,010,802	MOBRAND BIOMETRIC, INC.	\$430,780
US FISH AND WILDLIFE SERVICE - DENVER REGION	\$983,310	TICOR TITLE INSURANCE COMPANY	\$430,000
UNION COUNTY SOIL & WATER CONSERVATION DISTRICT	\$978,033	EDUCATIONAL SERVICES DISTRICT #105 (YAKIMA)	\$427,427
US FISH AND WILDLIFE SERVICE - AHSAHKA LAKE ROOSEVELT DEVELOPMENT ASSOCIATION	\$941,543	WASHINGTON TROUT	\$415,446
KINTAMA RESEARCH CORPORATION	\$937,531	RESEARCH INTO ACTION	\$414,555
US DEPARTMENT OF ENERGY - OAK RIDGE NATIONAL LABORATORY LEWIS SOIL & WATER CONSERVATION DISTRICT	\$916,393	HES	\$412,682
OREGON WATER TRUST	\$893,888	M-F WATER CONTROL DISTRICT	\$400,000
SANDPOINT TITLE INSURANCE INC	\$881,687	USFS - MT. HOOD NATIONAL FOREST	\$391,000
USFS - WALLA-WHITMAN NATIONAL FOREST - LAGRANDE DISTRICT, USFS - FLATHEAD NATIONAL FOREST	\$878,996	BIMARK INC.	\$384,762
WYEAST RESOURCE CONSERVATION & DEVELOPMENT COUNCIL	\$878,078	CLATSOP CTY ECONOMIC DEV CNCL	\$384,653
MOSS-ADAMS ADVISORY SERVICES	\$850,356	PER LTD.	\$376,374
S. P. CRAMER & ASSOCIATES IRZ CONSULTING LLC	\$838,422	STEPHEN H. SMITH FISHERIES CONSULTING, INC.	\$369,498
US FISH AND WILDLIFE SERVICE - FISH ASST: VANCOUVER CUSTER COUNTY TITLE INC	\$837,468	WASHINGTON WATER TRUST	\$365,912
KITTITAS COUNTY WATER PURVEYORS WALLA WALLA BASIN WATERSHED COUNCIL	\$836,333	JEFF KUECHEL	\$360,691
CANADA DEPARTMENT OF FISHERIES & OCEANS SHOSHONE-PAULUTE TRIBES OF DUCK VALLEY RE	\$819,207	SHERMAN SOIL & WATER CONSERVATION DISTRICT	\$360,578
CLEARWATER FOCUS WATERSHED PROGRAM	\$806,021	RICHARD HINRICHSEN	\$344,480
COLUMBIA CONSERVATION DISTRICT	\$784,663	USFS - INTERMOUNTAIN REGION (4) - OGDEN	\$340,057
WALLA WALLA COUNTY SOIL AND WATER CONSERVATION DISTRICT	\$775,613	ALLIANCE TITLE & ESCROW CORP	\$336,000
IDaho DEPARTMENT OF FISH & GAME / KOOTENAI US SMALL BUSINESS ADMINISTRATION	\$764,616	CITY OF SCAPPoose	\$329,060
US BUREAU OF RECLAMATION - YAKIMA	\$730,000	DONNA SILVERBERG	\$328,212
KITTITAS COUNTY CONSERVATION DISTRICT	\$728,047	ENVIRONMENTAL SCIENCE ASSOCIATES	\$303,102
THE NATURE CONSERVANCY - OR	\$684,700	USFS - MT HOOD NATIONAL FOREST - HOOD RIVER RANGER DISTRICT	\$296,082
ROCKY MOUNTAIN RESEARCH STATION	\$651,766	THE NATURE CONSERVANCY - OR	\$295,917
CIBER INC	\$641,749	ROBERT HALF TECHNOLOGY	\$291,370
ROBERT HALF TECHNOLOGY	\$637,188	WASHINGTON STATE CONSERVATION COMMISSION	\$288,324
WALLA WALLA COUNTY SOIL AND WATER CONSERVATION DISTRICT	\$624,166	FIRST AMERICAN TITLE CO	\$285,200
US SMALL BUSINESS ADMINISTRATION	\$610,923	KITTITAS COUNTY CONSERVATION DISTRICT	\$284,479
KITTITAS COUNTY CONSERVATION DISTRICT	\$580,303	P.A.C.E.	\$283,800
	\$573,849		\$283,359
			\$276,905

Table 6B Expenditures of Direct BPA funds by contractor 1996-2005 (continued)

Contractor	Total	Contractor	Total
ECO-NORTHWEST	\$276,345	TEASDALE ENVIRONMENTAL	\$174,144
NEZ TRIBAL FISHERIES/WATERSHED PROGRAM	\$270,293	NATURAL RESOURCES CONSERVATION SERVICE	\$173,044
WALLOWA RESOURCES INC	\$267,687	LAKE ROOSEVELT FARM	\$172,292
GILLIAN SOIL AND WATER CONSERVATION DISTRICT	\$264,857	GARDENA FARMS IRRIGATION DISTRICT #13	\$171,435
MORROW COUNTY SOIL AND WATER CONSERVATION DISTRICT	\$263,061	EASTERN OREGON UNIVERSITY	\$171,219
KOOTENAI RIVER NETWORK INC	\$261,402	NEZ PERCE SOIL & WATER	\$169,035
HINRICHSEN ENVIRONMENTAL SERVICES	\$259,481	US ARMY CORE OF ENGINEERS - WALLA WALLA DIST	\$165,938
US ARMY CORE OF ENGINEERS - NORTHWEST DIVISION	\$250,760	NORTHWEST HABITAT INSTITUTE	\$164,281
JONES & STOKES ASSOCIATES	\$248,968	GOLDEN PACIFIC HOMES	\$160,000
BIOANALYSTS INC	\$244,591	IDAHO STATE OFFICE OF SPECIES CONSERVATION	\$154,140
EASTERN WASHINGTON UNIVERSITY - ARCHAEOLOGY & HISTORY DEPARTMENT	\$241,176	CHELAN COUNTY CONSERVATION DISTRICT	\$152,788
WHEELER SOIL AND WATER CONSERVATION DISTRICT	\$238,941	KRUGEL & ASSOCIATES	\$152,000
DSCONSULTING	\$238,197	RHI MANAGEMENT RESOURCES	\$147,432
ESD105	\$232,500	CASCADE PACIFIC RESC CONSV & DEV'L INC	\$143,487
GRANDE RONDE MODEL WATERSHED FOUNDATION	\$223,463	OXARC	\$143,340
COLUMBIA RIVER ESTUARY STUDY TASKFORCE	\$218,250	USFS - NEZ PERCE NATIONAL FOREST	\$142,878
MARKS & MARKS	\$218,020	NATIONAL SYS & RESEARCH	\$141,574
RESOURCE CONSERVATION & DEVELOPMENT	\$217,584	TERRAQUA INC	\$140,520
US FISH AND WILDLIFE SERVICE - (LONGVIEW WA)	\$214,203	D J WARREN & ASSOCIATES INC	\$137,864
HUDSON BAY DISTRICT IMPROVEMENT CO INC	\$213,423	RICK APPLEGATE	\$136,100
USFS - PACIFIC NW REGION (6) - PORTLAND	\$213,180	JEAN EDWARDS	\$135,711
NSRI	\$208,915	ARCHAEOLOGICAL & HISTORICAL SERVIVE	\$127,894
WALLOWA PUBLIC WORKS DEPARTMENT	\$206,426	DS CONSULTING	\$124,650
SEA RESOURCES INC	\$203,659	UNIVERSITY OF ALASKA FAIRBANKS	\$122,421
UNION COUNTY PUBLIC WORKS DEPARTMENT	\$203,650	ADVANCED TELEMETRY SYSTEMS INC	\$122,027
CRATE'S POINT	\$200,000	SUNDAY & ASSOCIATES INC	\$121,137
KENNETH STINSON, LATAH SOIL AND WATER CONSERVATION DISTRICT	\$196,214	SHAPIRO & ASSOCIATES INC	\$120,983
NORTON-ARNOLD & COMPANY	\$196,036	BC/MINISTRY ENVIRONMENT LAND AND PARKS	\$117,449
COLUMBIA SOIL & WATER CONSERVATION DISTRICT	\$189,922	GORGE EARTHWORKS INC	\$116,082
WALLOWA COUNTY	\$188,422	ENERGY NEWSDATA INC	\$114,600
KATHLEENA A CONCANNON	\$188,237	SUN WEST PRODUCTIONS	\$113,998
COLE & WEBER	\$186,618	PACIFIC WATERSHED INSTITUTE	\$112,620
OREGON DEPT OF ENVIRONMENTAL QUALITY - BUSINESS OFFICE	\$184,796	FOSTER WHEELER ENVIRONMENTAL CO	\$101,955
OREGON HEALTH SCIENCES UNIV	\$184,384	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION	\$101,700
MINISTRY OF WATER LAND AND AIR PROTECTIO	\$182,938	JAMES JANDERSON MD	\$100,000
LEMHI IRRIGATION DISTRICT	\$181,088	US DEPT OF JUSTICE	\$100,000
USFWS - CRESTON NATIONAL FISH HATCHERY	\$180,539		
UNIVERSITY of MONTANA	\$174,704		
MONUMENT SOIL & WATER CONSERVATION DISTRICT			

* Contracts under \$100,000 are not listed.

Source: Bonneville Power Administration

Table 7A Salmon and Steelhead Passing Bonneville Dam, 1938 - 2005

These dam counts can not be utilized for year to year comparison of abundance or population size without evaluating and quantifying the effects of facility modifications, dam operations, dam modifications, upstream development, fisheries, hatchery production, counting schedules, counting techniques, between-dam counting discrepancies, counting station modification, fishway modifications, fallback and dam passage efficiencies.

Yearly totals of all fish passing Bonneville Dam 1938 - 1976

Year	Chinook	Steelhead	Sockeye	Coho	Chinook	Steelhead	Sockeye	Coho
1938	271,799	107,003	75,040	15,185	1979	220,335	114,010	52,637
1938	271,900	107,003	75,040	15,200	1980	207,770	129,254	58,882
1939	286,200	122,032	73,382	14,400	1981	232,299	159,270	56,037
1940	391,600	185,174	148,807	11,900	1982	247,911	157,640	50,219
1941	461,400	118,089	65,741	17,900	1983	186,214	218,419	100,542
1942	401,900	151,800	55,464	12,400	1984	216,469	315,795	152,540
1943	313,100	92,133	39,845	2,500	1985	293,803	330,170	165,933
1944	240,800	100,518	15,072	4,200	1986	371,075	376,752	58,099
1945	297,500	120,133	9,501	790	1987	468,574	300,351	116,956
1946	446,000	142,807	74,376	3,900	1988	411,897	79,721	17,921
1947	480,500	135,444	171,139	11,200	1989	373,222	287,802	41,884
1948	419,500	139,062	131,541	4,100	1990	296,389	183,011	49,581
1949	277,700	119,285	51,444	1,000	1991	226,433	274,535	60,417
1950*	357,400	114,087	77,993	10,200	1992	219,688	314,974	84,992
1951*	331,800	140,689	169,428	5,200	1993	259,337	188,386	80,178
1952	420,900	184,645	7,800	1994	208,197	161,978	12,678	20,291
1953	332,500	223,914	235,215	13,000	1995	189,419	202,448	8,774
1954 ¹	321,000	176,260	130,107	4,100	1996	272,885	205,213	30,252
1955 ²	359,800	198,411	237,748	3,700	1997	360,673	258,385	47,008
1956 ³	300,900	131,116	156,418	6,100	1998	248,860	185,094	46,290
1957 ⁴	403,200	139,183	82,915	4,700	1999	306,981	206,488	17,875
1958 ⁵	426,400	131,437	122,389	3,700	2000	401,733	275,273	85,384
1959 ⁶	345,000	129,026	86,560	2,700	2001	867,933	633,464	114,934
1960 ⁷	237,600	113,676	59,713	3,288	2002	870,303	481,203	49,610
1961 ⁸	254,300	139,719	17,111	3,456	2003	917,154	361,412	88,459
1962 ⁹	268,100	164,025	28,179	14,788	2004	845,717	311,122	125,743
1963 ¹⁰	230,500	129,418	60,319	12,638	2005	570,413	315,650	115,041
1964 ¹¹	315,600	117,252	99,856	53,602				83,305
1965 ¹²	253,400	165,453	49,400	36,972				72,971
1966	294,700	143,661	156,661	48,505				
1967	292,700	121,872	144,158	108,207				
1968	276,400	106,974	43,030	24,182				
1969	411,300	140,782	59,636	54,888				
1970	314,032	113,510	70,762	53,817				
1971	328,740	193,966	87,447	56,323				
1972	336,037	185,886	157,823	58,979				
1973	318,836	137,054	43,837	31,605				
1974	288,410	85,540	58,212	32,772				
1975	350,320	364,907	124,177	43,611				
1976	281,659	193,337	99,829	36,666				
1977	332,323	104,431	18,436	9,325				
1978				30,278				

* Fish counting discontinued for annual winter maintenance on November 29, 1950.
 1 Fish counting initiated Feb. 28, 1954 and discontinued Nov. 27, 1954
 2 Fish counting initiated Feb. 28, 1955 and discontinued Nov. 27, 1955
 3 Fish counting initiated March 1, 1956 and discontinued Dec. 1, 1956
 4 Fish counting initiated March 1, 1957 and discontinued Nov. 30, 1957
 5 Fish counting initiated March 2, 1958 and discontinued Nov. 30, 1958
 6 Fish counting initiated March 1, 1959 and discontinued Nov. 28, 1959
 7 Fish counting initiated March 1, 1960 and discontinued Nov. 30, 1960
 8 Fish counting initiated March 1, 1961 and discontinued Nov. 30, 1961
 9 Fish counting initiated March 1, 1962 and discontinued Nov. 30, 1962
 10 Fish counting initiated March 1, 1963 and discontinued Nov. 30, 1963
 11 Fish counting initiated March 1, 1964 and discontinued Nov. 28, 1964
 12 Fish counting initiated March 28, 1965 and discontinued Nov. 30 1965

Source: 1938 - 1976: Annual Fish Passage Reports - Corps of Engineers
 1977 - 2005: Corps of Engineers, Fish Passage Center

Table 7B Minimum Numbers (in Thousands) of Salmon and Steelhead, Including Jacks, Entering the Columbia River Basin, 1938-2002*

Year	Chinook			Coho 2/			Steelhead			Total
	Spr.1/ Sum.	Fall	Sockeye	Chum 3/	Winter 4/Summer	Total	Chum 3/	Winter 4/Summer	Steelhead	
1938	118.4	122.7	582.2	168.0	271.9	157.0	—	249.6	1,669.8	1,403.8
1939	155.5	191.8	550.3	124.8	184.2	96.3	—	232.0	1,534.9	1,380.5
1940	97.6	112.7	742.9	196.0	164.4	102.8	—	422.8	1,839.2	1,315.6
1941	129.0	106.5	1,175.7	173.6	131.5	340.1	—	336.8	2,393.2	1,160.9
1942	87.9	94.8	979.0	94.5	83.8	425.5	—	297.2	2,062.7	1,191.6
1943	133.8	57.0	600.9	73.4	80.9	78.7	—	216.0	1,240.7	1,091.0
1944	78.4	67.1	709.8	24.6	174.2	22.6	—	232.3	1,309.0	1,486.5
1945	118.8	52.6	711.7	10.9	204.6	48.3	—	268.4	1,415.3	1,034.8
1946	199.3	72.0	831.9	101.1	121.5	72.7	—	268.0	1,666.5	1,706.7
1947	251.8	86.3	903.6	335.3	176.2	40.7	—	261.8	2,055.7	1,876.7
1948	173.3	86.9	899.2	143.2	134.5	85.6	—	240.1	1,762.8	1,318.9
1949	178.3	57.8	550.5	52.6	100.7	44.7	—	162.5	1,147.1	2,229.4
1950	146.1	69.3	588.6	112.6	125.9	58.9	—	179.0	1,280.4	2,409.3
1951	259.0	116.4	385.6	203.7	112.4	46.1	—	244.5	1,367.7	2,055.1
1952	319.8	114.5	323.0	318.9	126.3	28.9	—	383.1	1,614.5	1,262.1
1953	342.4	95.0	257.3	260.0	61.3	22.9	76.8	361.3	1,477.0	1,965.4
1954	237.4	114.8	231.9	180.0	37.4	28.5	49.8	289.5	1,169.3	1,236.5
1955	317.1	147.6	281.5	245.0	64.3	10.7	56.0	298.8	1,421.0	951.6
1956	297.9	195.2	312.7	202.0	64.4	4.7	51.2	200.7	1,328.8	854.3
1957	307.8	207.0	276.6	147.8	55.1	4.2	54.8	229.6	1,454.6	748.5
1958	268.5	187.5	393.2	313.3	24.2	8.3	48.4	211.2	1,254.0	905.4
1959	198.2	169.8	296.0	270.7	21.2	5.5	61.0	231.6	1,054.5	1,054.5
1960	175.2	142.6	246.1	179.1	47.7	3.0	56.5	199.8	1,050.0	861.8
1961	203.8	129.2	252.3	60.2	112.4	3.1	94.4	227.9	1,083.3	1,064.5
1962	255.4	108.0	290.6	42.9	184.7	5.7	78.7	251.7	1,217.7	1,711.0
1963	219.0	100.0	265.1	79.9	161.9	3.0	79.4	228.8	1,137.1	3,252.1
1964	247.2	97.0	372.2	104.9	453.9	3.2	79.9	178.6	1,536.9	2,529.3
1965	241.9	82.1	399.2	55.2	519.0	1.5	120.3	227.3	1,646.5	NA (553.1)
1966	236.1	74.8	347.8	174.8	785.9	3.1	133.1	208.6	1,964.2	* Data is unavailable after 2002.
1967	240.5	100.7	385.0	180.2	694.2	2.1	111.5	167.3	1,881.5	Source: Fish Passage Center
1968	199.5	89.4	346.3	134.8	423.9	0.6	122.5	161.2	1,478.2	
1969	295.0	106.2	471.0	75.8	463.4	1.1	66.8	191.2	1,670.5	
1970	252.7	72.9	532.2	95.4	1,079.0	1.2	134.5	157.0	2,324.9	
1971	266.9	89.5	488.6	150.5	648.7	1.1	169.2	248.5	2,063.0	
1972	353.3	77.5	338.3	123.3	362.6	2.4	133.0	257.8	1,628.2	
1973	326.1	48.9	562.1	61.3	422.8	1.8	90.9	217.0	1,730.9	
1974	224.1	34.0	357.1	43.8	534.0	1.2	77.7	168.9	1,440.8	
1975	176.1	44.4	525.9	58.2	437.7	0.8	62.0	105.4	1,410.5	

1/ Counting began at Bonneville Dam on May 7, 1938. Estimates for tributary runs below Bonneville Dam are not included for 1938-45.

2/ Commercial catch and dam counts only, 1938-59.

3/ Commercial catch numbers only, 1938-49.

4/ Abundance index.

() indicates estimate.

Table 9 Estimated Inriver Juvenile Survival through the Hydrosystem, 1966-1980, 1997-2005

Year	Chinook Salmon	Steelhead	Year	Chinook Salmon	Steelhead
1966	0.46	0.56	1979	0.19	0.02
1967	0.47	0.32	1980	0.15	0.03
1968	0.45	0.43	1997		0.47
1969	0.34	0.20	1998		0.50
1970	0.17	0.24	1999	0.56	0.44
1971	0.20	0.17	2000	0.49	0.39
1972	0.09 ^a	0.09 ^a			
1973	0.03	0.01			
1974	0.28 ^b	0.08	2001	NA	0.28
1975	0.19 ^b	0.27	2002	0.75	0.58
1976	0.10	0.13	2003	0.77	0.53
1977	0.01	0.01	2004	0.62	0.39
	0.23 ^b	0.08	2005	0	0.52
					0.53
					NA

There is a gap in this information between 1981 and 1997. Prior to 1993, survival studies based on observations of freeze brands on juvenile fish were considered unreliable, and further studies were put off until PIT tag data became available that year. Between 1993 and 1997, PIT tag detectors were installed only at Snake River dams, and so statewide survivals for those years were mathematical expansions of the Snake River observations. Beginning in 1997, with additional PIT tag detection equipment available, statewide survival observations were possible and the mathematical expansions no longer were used.

a Extrapolation based on three dam and reservoirs as survival estimates between Ice Harbor Dam and The Dalles. Dam did not change between 1966 and 1970 after completion of John Day Dam in 1968.

b Based on product of two non-rounded numbers

Source: NOAA Fisheries

Table 10 Where do the Fish Go? Fish Counted at Each Mainstem Dam, 2003 - 2004

Dam	Spring Chinook		Summer Chinook		Fall Chinook		Coho		Sockeye		Steelhead
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	
Bonneville	206,268	179,037	128,166	105,032	658,064	621,895	133,870	119,849	39,291	122,291	2003
The Dalles	142,729	137,957	111,931	87,925	353,405	334,538	45,374	40,564	34,176	107,466	2004
John Day	111,642	118,520	105,615	83,060	249,810	244,723	38,577	34,755	35,417	113,497	273,172
Mchary	106,673	115,179	104,948	74,217	208,982	193,550	19,830	20,132	32,037	89,707	238,242
Ice Harbor	86,190	81,752	25,343	16,185	31,664	32,276	1,431	3,519	37	91	227,199
Lower Monumental	77,947	75,363	22,307	12,789	22,851	25,878	1,104	3,663	14	80	230,418
Little Goose	76,096	65,862	17,877	11,567	20,918	23,568	864	3,042	23	81	180,672
Lower Granite	78,904	75,224	20,559	11,277	20,213	22,560	1,265	3,904	11	113	154,389
Priest Rapids	18,792	14,451	86,837	72,673	54,804	47,406	5,216	5,624	36,551	124,943	17,652
Rock Island	17,634	11,786	88,401	67,145	26,132	18,744	5,869	5,982	34,779	106,866	18,727
Rocky Reach	4,666	5,099	69,362	49,625	13,980	10,814	993	786	30,355	81,338	13,641
Wells	4,702	4,793	46,391	32,847	8,253	5,777	168	291	28,977	78,053	14,580
											9,317

Source: Fish Passage Center

Table 11 Commercial Landings of Salmon and Steelhead from the Columbia River, Non-Indian and Treaty Indian combined, 1866-2002*

Zone 1 - 6

* Data is unavailable after 2002

Source: Oregon Department of Fish and Wildlife and Washington Department of Fish and Wildlife

Table 12A Wildlife Accounting by Species and Dam

Dam	Wildlife Species	HUs Lost	HUs Acquired	HUs Remaining	Percent Completed	Dam	Wildlife Species	HUs Lost	HUs Acquired	HUs Remaining	Percent Completed
Albeni Falls	Bald Eagle (breeding)	4,508	301	4,207	6.68%	Bonneville WA	Black-capped Chickadee	511	429	82	83.95%
Albeni Falls	Bald Eagle (wintering)	4,365	314	4,051	7.19%	Bonneville WA	Canada Goose	1,222	1,112	110	91.00%
Albeni Falls	Black-capped Chickadee	2,286	117	2,169	5.12%	Bonneville WA	Great Blue Heron	2,150	607	1,543	28.23%
Albeni Falls	Canada Goose	4,699	1,161	3,538	24.71%	Bonneville WA	Lesser Scaup	0	0	0	0.00%
Albeni Falls	Mallard	5,985	227	5,758	3.79%	Bonneville WA	Mink	811	1,687	-876	208.01%
Albeni Falls	Muskrat	1,756	82	1,674	4.67%	Bonneville WA	Spotted Sandpiper	1,383	0	1,383	0.00%
Albeni Falls	Redhead Duck	3,379	0	3,379	0.00%	Bonneville WA	Yellow Warbler	82	40	42	48.78%
Albeni Falls	White-tailed Deer	1,680	30	1,650	1.79%	Bonneville WA	All Species	6,159	3,875	2,284	62.92%
Albeni Falls	Yellow Warbler	0	59	-59	0.00%						
Albeni Falls	All Species	28,658	2,291	26,367	7.99%						
Anderson Ranch	Black-capped Chickadee	890	0	890	0.00%	Chief Joseph	Bobcat	401	132	269	32.92%
Anderson Ranch	Blue Grouse	1,980	0	1,980	0.00%	Chief Joseph	Canada Goose	213	10	203	4.69%
Anderson Ranch	Common Snipe	0	889	-889	0.00%	Chief Joseph	Lesser Scaup	0	0	0	0.00%
Anderson Ranch	Mallard	1,048	81	967	7.73%	Chief Joseph	Lewis Woodpecker	286	141	145	49.30%
Anderson Ranch	Mink	1,732	0	1,732	0.00%	Chief Joseph	Mink	920	137	783	14.89%
Anderson Ranch	Mule Deer	2,689	0	2,689	0.00%	Chief Joseph	Mule Deer	1,992	409	1,583	20.53%
Anderson Ranch	Peregrine Falcon	0	0	0	0.00%	Chief Joseph	Ring-necked Pheasant	239	0	239	0.00%
Anderson Ranch	Ruffed Grouse	919	0	919	0.00%	Chief Joseph	Sage Grouse	1,179	554	625	46.98%
Anderson Ranch	Western Meadowlark	0	74	-74	0.00%	Chief Joseph	Sharp-tailed Grouse	2,290	14	2,276	0.61%
Anderson Ranch	Yellow Warbler	361	3	358	0.83%	Chief Joseph	Spotted Sandpiper	1,255	10	1,245	0.80%
Anderson Ranch	All Species	9,619	1,047	8,572	10.88%	Chief Joseph	Yellow Warbler	8,833	1,433	7,400	16.22%
Big Cliff	Bald Eagle	0	0	0	0.00%	American Dipper	American Dipper	285	0	285	0.00%
Big Cliff	Beaver	50	0	50	0.00%	Bald Eagle	Bald Eagle	0	0	0	0.00%
Big Cliff	Black-tailed Deer	81	0	81	0.00%	Beaver	Beaver	189	182	7	96.30%
Big Cliff	Common Merganser	11	0	11	0.00%	Cougar	Black Bear	1,856	0	1,856	0.00%
Big Cliff	Osprey	0	0	0	0.00%	Cougar	Black-tailed Deer	1,192	0	1,192	0.00%
Big Cliff	Pileated Woodpecker	71	0	71	0.00%	Cougar	Cougar	1,472	0	1,472	0.00%
Big Cliff	River Otter	38	0	38	0.00%	Cougar	Harlequin duck	282	0	282	0.00%
Big Cliff	Roosevelt Elk	81	0	81	0.00%	Cougar	Osprey	0	0	0	0.00%
Big Cliff	Ruffed Grouse	81	0	81	0.00%	Cougar	Pileated Woodpecker	1,938	0	1,938	0.00%
Big Cliff	All Species	413	0	413	0.00%	Cougar	River Otter	189	0	189	0.00%
						Cougar	Roosevelt Elk	1,484	0	1,484	0.00%
						Cougar	Ruffed Grouse	293	0	293	0.00%
						Cougar	Spotted Owl	1,774	0	1,774	0.00%
						Cougar	Waterfowl	0	0	0	0.00%
						Cougar	Yellow Warbler	170	25	145	14.71%
						All Species		11,124	207	10,917	1.86%
Black Canyon	Black-capped Chickadee	0	0	0	0.00%						
Black Canyon	Canada Goose	214	0	214	0.00%						
Black Canyon	Mallard	270	0	270	0.00%						
Black Canyon	Mink	652	1	651	0.15%						
Black Canyon	Mule Deer	242	53	189	21.90%						
Black Canyon	Ring-necked Pheasant	260	0	260	0.00%						
Black Canyon	Sharp-tailed Grouse	532	0	532	0.00%						
Black Canyon	Yellow Warbler	0	3	-3	0.00%						
Black Canyon	All Species	2,170	57	2,113	2.63%						
Black Canyon	Black-capped Chickadee	511	189	322	36.99%						
Black Canyon	Canada Goose	1,222	0	1,222	0.00%						
Black Canyon	Great Blue Heron	2,150	388	1,762	18.05%						
Black Canyon	Lesser Scaup	0	0	0	0.00%						
Black Canyon	Mink	811	0	811	0.14%						
Black Canyon	Spotted Sandpiper	1,383	2	1,381	13.41%						
Black Canyon	Yellow Warbler	82	11	71	9.58%						
Black Canyon	All Species	6,159	590	5,569							
Bonneville OR	Black-capped Chickadee										
Bonneville OR	Canada Goose										
Bonneville OR	Great Blue Heron										
Bonneville OR	Lesser Scaup										
Bonneville OR	Mink										
Bonneville OR	Spotted Sandpiper										
Bonneville OR	Yellow Warbler										
Bonneville OR	All Species										
Bonneville OR	Black-capped Chickadee										
Bonneville OR	Canada Goose										
Bonneville OR	Great Blue Heron										
Bonneville OR	Lesser Scaup										
Bonneville OR	Mink										
Bonneville OR	Spotted Sandpiper										
Bonneville OR	Yellow Warbler										
Bonneville OR	All Species										

Table 12A Wildlife Accounting by Species and Dam (continued)

Dam	Wildlife Species	HUs Lost	HUs Acquired	HUs Remaining	Percent Completed	Dam	Wildlife Species	HUs Lost	HUs Acquired	HUs Remaining	Percent Completed
Dexter	American Dipper	119	0	119	0.00%	Green Peter	Osprey	0	0	0	0.00%
Dexter	Bald Eagle	0	0	0	0.00%	Green Peter	Pileated Woodpecker	710	0	710	0.00%
Dexter	Beaver	832	0	832	0.00%	Green Peter	River Otter	575	0	575	0.00%
Dexter	Black-tailed Deer	1,078	0	1,078	0.00%	Green Peter	Roosevelt Elk	3,997	0	3,997	0.00%
Dexter	California quail	664	0	664	0.00%	Green Peter	Ruffed Grouse	3,264	0	3,264	0.00%
Dexter	Greater Sculpin	0	0	0	0.00%	Green Peter	All Species	16,432	0	16,432	0.00%
Dexter	Mink	832	0	832	0.00%						
Dexter	Osprey	0	0	0	0.00%	Hills Creek	American Dipper	200	0	200	0.00%
Dexter	Red Fox	508	0	508	0.00%	Hills Creek	Bald Eagle	0	0	0	0.00%
Dexter	Ring-necked Pheasant	332	0	332	0.00%	Hills Creek	Beaver	326	955	629	292.94%
Dexter	Ruffed Grouse	701	0	701	0.00%	Hills Creek	Black Bear	2,958	66	2,892	2.23%
Dexter	Western Gray Squirrel	284	0	284	0.00%	Hills Creek	Black-tailed Deer	2,912	259	2,653	8.89%
Dexter	Wood Duck	644	0	644	0.00%	Hills Creek	Cougar	2,381	110	2,271	4.62%
Dexter	Yellow Warbler	654	0	654	0.00%	Hills Creek	Harequin duck	269	0	269	0.00%
Dexter	All Species	6,648	0	6,648	0.00%	Hills Creek	Osprey	0	0	0	0.00%
Foster	Bald Eagle	0	0	0	0.00%	Hills Creek	Pileated Woodpecker	3,201	0	3,201	0.00%
Foster	Beaver	245	0	245	0.00%	Hills Creek	River Otter	384	0	384	0.00%
Foster	Black-tailed Deer	890	0	890	0.00%	Hills Creek	Roosevelt Elk	3,203	106	3,097	3.31%
Foster	Osprey	0	0	0	0.00%	Hills Creek	Ruffed Grouse	468	0	468	0.00%
Foster	Ring-necked Pheasant	385	0	385	0.00%	Hills Creek	Spotted Owl	2,977	0	2,977	0.00%
Foster	River Otter	340	0	340	0.00%	Hills Creek	Waterfowl	0	0	0	0.00%
Foster	Roosevelt Elk	652	0	652	0.00%	Hills Creek	Yellow Warbler	210	0	210	0.00%
Foster	Ruffed Grouse	853	0	853	0.00%	Hills Creek	All Species	19,489	1,496	17,993	7.68%
Foster	Wood Duck	179	0	179	0.00%						
Foster	All Species	3,544	0	3,544	0.00%	Black-capped Chickadee	435	0	435	0.00%	
						California quail	3,162	0	3,162	0.00%	
						Canada Goose	4,005	0	4,005	0.00%	
						Great Blue Heron	1,593	0	1,593	0.00%	
						Lesser Scaup	0	0	0	0.00%	
						Mallard	3,700	0	3,700	0.00%	
						Mink	719	7	712	0.97%	
						Mule Deer	0	5,966	-5,966	0.00%	
						Spotted Sandpiper	1,593	0	1,593	0.00%	
						Western Meadowlark	2,530	8,070	-5,540	318.97%	
						Yellow Warbler	543	14	529	2.58%	
						All Species	18,280	14,057	4,223	76.90%	
Grand Coulee	Black-capped Chickadee	0	2	-2	0.00%	John Day OR	John Day OR	0	0	0	0.00%
Grand Coulee	Blue Grouse	0	954	-954	0.00%	John Day OR	John Day OR	0	0	0	0.00%
Grand Coulee	Bobcat	0	8	-8	0.00%	John Day OR	John Day OR	0	0	0	0.00%
Grand Coulee	Canada Goose (nesting)	74	0	74	0.00%	John Day OR	John Day OR	0	0	0	0.00%
Grand Coulee	Downy Woodpecker	0	1,495	-1,495	0.00%	John Day OR	John Day OR	0	0	0	0.00%
Grand Coulee	Great Blue Heron	0	4,500	-4,500	0.00%	John Day OR	John Day OR	0	0	0	0.00%
Grand Coulee	Mallard	0	2	-2	0.00%	John Day OR	John Day OR	0	0	0	0.00%
Grand Coulee	Mink	0	24	-24	0.00%	John Day OR	John Day OR	0	0	0	0.00%
Grand Coulee	Mourning Dove	9,316	1,001	8,315	10.74%	John Day OR	John Day OR	0	0	0	0.00%
Grand Coulee	Mule Deer	27,133	17,172	9,961	63.29%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	Pigmy Rabbit	0	1,246	-1,246	0.00%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	Riparian Forest	1,632	200	1,432	12.25%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	Riparian Shrub	27	0	27	0.00%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	Ruffed Grouse	16,502	2,908	13,594	17.62%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	Sage Grouse	2,746	7,432	4,686	270.65%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	Sharp-tailed Grouse	32,723	14,789	17,934	45.19%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	Western Meadowlark	0	286	-286	0.00%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	White-tailed Deer	21,632	9,064	12,568	41.90%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	Yellow Warbler	0	129	-129	0.00%	John Day WA	John Day WA	0	0	0	0.00%
Grand Coulee	All Species	111,785	61,212	50,573	54.76%	John Day WA	John Day WA	18,280	16,798	1,482	91.88%
Green Peter	Bald Eagle	0	0	0	0.00%	Lookout Point	American Dipper	350	0	350	0.00%
Green Peter	Band-tailed Pigeon	3,487	0	3,487	0.00%	Lookout Point	Bald Eagle	0	0	0	0.00%
Green Peter	Beaver	3,997	0	3,997	0.00%	Lookout Point	Beaver	1,739	0	1,739	0.00%
Green Peter	Black-tailed Deer	21	0	21	0.00%	Lookout Point	Black-tailed Deer	4,043	0	4,043	0.00%

Table 12A Wildlife Accounting by Species and Dam (continued)

Dam	Wildlife Species	HUs Lost	HUs Acquired	HUs Remaining	Percent Completed	Dam	Wildlife Species	HUs Lost	HUs Acquired	HUs Remaining	Percent Completed
Lookout Point	California quail	1,937	0	1,937	0.00%	McNary WA	McNary WA	0	0	0	0.00%
Lookout Point	Common Merganser	95	0	95	0.00%	McNary WA	Mallard (wintering)	1,000	925	75	92.50%
Lookout Point	Mink	1,586	0	1,586	0.00%	McNary WA	Mink	1,090	0	1,090	0.00%
Lookout Point	Osprey	0	0	0	0.00%	McNary WA	Spotted Sandpiper	2,775	1,130	1,645	40.72%
Lookout Point	Pileated Woodpecker	1,614	0	1,614	0.00%	McNary WA	Western Meadowlark	263	396	-133	150.57%
Lookout Point	Red Fox	2,082	0	2,082	0.00%	McNary WA	Yellow Warbler	18,834	22,041	-3,207	117.03%
Lookout Point	Ring-necked Pheasant	1,654	0	1,654	0.00%	All Species		All Species		All Species	
Lookout Point	Roosevelt Elk	3,668	0	3,668	0.00%	Minidoka	Bald Eagle (wintering)	0	89	-89	0.00%
Lookout Point	Ruffed Grouse	2,457	0	2,457	0.00%	Minidoka	Mallard	0	0	0	0.00%
Lookout Point	Spotted Owl	714	0	714	0.00%	Minidoka	Marsh Wren	0	0	0	0.00%
Lookout Point	Western Gray Squirrel	1,070	0	1,070	0.00%	Minidoka	Mule Deer	3,413	1,632	1,781	47.82%
Lookout Point	Wood Duck	1,124	0	1,124	0.00%	Minidoka	Redhead Duck	0	0	0	0.00%
Lookout Point	Yellow Warbler	1,321	0	1,321	0.00%	Minidoka	River Otter	2,993	0	2,993	0.00%
Lookout Point	All Species	25,454	0	25,454	0.00%	Minidoka	Sage Grouse	3,755	0	3,755	0.00%
Lower Snake	Black-capped Chickadee	0	1,091	-1,091	0.00%	Minidoka	Western Grebe	0	0	0	0.00%
Lower Snake	California quail	20,508	1,208	19,300	5.89%	Minidoka	Yellow Warbler	342	0	342	0.00%
Lower Snake	Canada Goose	2,040	7	2,033	0.34%	Minidoka	All Species	10,503	1,721	8,782	16.38%
Lower Snake	Downy Woodpecker	365	399	-34	109.32%	Palisades	Bald Eagle (breeding)	5,941	3,329	2,612	56.03%
Lower Snake	Mallard (nesting)	0	365	-365	0.00%	Palisades	Bald Eagle (wintering)	18,565	6,974	11,591	37.57%
Lower Snake	Mink	0	48	-48	0.00%	Palisades	Black-capped Chickadee	1,358	480	878	35.35%
Lower Snake	Mule Deer	0	3,652	-3,652	0.00%	Palisades	Canada Goose	805	388	417	48.20%
Lower Snake	Ring-necked Pheasant	2,647	49	2,598	1.85%	Palisades	Mallard	2,622	998	1,624	38.06%
Lower Snake	Sage Grouse	0	45	-45	0.00%	Palisades	Mink	2,276	653	1,623	28.69%
Lower Snake	Sharp-tailed Grouse	0	6,390	-6,390	0.00%	Palisades	Peregrine Falcon	2,454	2,607	-153	106.23%
Lower Snake	Song Sparrow	288	789	-511	277.43%	Palisades	Ruffed Grouse	2,331	0	0	0.00%
Lower Snake	Western Meadowlark	0	9,795	-9,795	0.00%	Palisades	Yellow Warbler	718	160	558	21.06%
Lower Snake	Yellow Warbler	927	457	470	49.30%	Palisades	All Species	37,070	16,080	20,990	43.38%
Lower Snake	All Species	26,775	24,305	2,470	90.77%	All Species		All Species		All Species	
McNary OR	Black-capped Chickadee	0	1,202	-1,202	0.00%	The Dalles OR	Black-capped Chickadee	91	0	91	0.00%
McNary OR	Blue Grouse	0	408	-408	0.00%	The Dalles OR	Canada Goose	220	0	220	0.00%
McNary OR	California quail	1,263	1,448	-185	114.65%	The Dalles OR	Great Blue Heron	213	0	213	0.00%
McNary OR	Canada Goose	697	0	697	0.00%	The Dalles OR	Lesser Scaup	0	0	0	0.00%
McNary OR	Downy Woodpecker	75	845	-770	1126.67%	The Dalles OR	Mink	165	0	165	0.00%
McNary OR	Great Blue Heron	0	39	-39	0.00%	The Dalles OR	Spotted Sandpiper	267	0	267	0.00%
McNary OR	Mallard (nesting)	1,392	93	1,299	6.68%	The Dalles OR	Western Meadowlark	124	0	124	0.00%
McNary OR	Mallard (wintering)	0	145	0	0.00%	The Dalles OR	Yellow Warbler	85	0	85	0.00%
McNary OR	Mink	250	145	105	58.00%	The Dalles OR	All Species	1,165	0	1,165	0.00%
McNary OR	Spotted Sandpiper	273	20	253	7.33%	The Dalles WA	Black-capped Chickadee	91	272	-181	298.90%
McNary OR	Western Meadowlark	694	1,981	-1,287	285.45%	The Dalles WA	Canada Goose	220	734	-514	333.64%
McNary OR	Yellow Warbler	66	284	-218	430.30%	The Dalles WA	Great Blue Heron	213	111	102	52.11%
McNary OR	All Species	4,710	6,465	-1,755	137.26%	The Dalles WA	Lesser Scaup	0	0	0	0.00%
McNary WA	Black-capped Chickadee	0	3,178	-3,178	0.00%	The Dalles WA	Mink	165	410	-245	248.48%
McNary WA	Blue Grouse	0	137	-137	0.00%	The Dalles WA	Spotted Sandpiper	158	109	59.18%	59.18%
McNary WA	California quail	5,051	10,275	-5,224	203.43%	The Dalles WA	Western Meadowlark	124	58	66	46.77%
McNary WA	Canada Goose	2,787	2,323	464	83.35%	The Dalles WA	Yellow Warbler	85	156	-71	183.53%
McNary WA	Downy Woodpecker	301	1,757	-1,456	583.72%	The Dalles WA	All Species	1,165	1,899	-734	163.00%
McNary WA	Great Blue Heron	0	117	-117	32.39%						

Source: Bonneville Power Administration

Table 12B Wildlife Habitat Units Lost, Acquired and Estimated, by Dam Group

Dam Group	Dam	HUs Lost	Total HUs Acquired & Estimated*	Percent Completed	Dam	HUs Lost	HUs Gained	HUs Acquired	HUs Estimated**	Total Acquired & Estimated** HUs
Lower Columbia	Bonneville	12,318	12,251	99.5%	Albeni Falls	28,658	171	2,306	2,717	5,023
Lower Columbia	John Day	36,560	30,855	84.4%	Anderson Ranch	9,619	0	1,047	0	1,047
Lower Columbia	McNary	23,544	29,234	124.2%	Big Cliff	413	40	0	32	32
Lower Columbia	The Dalles	2,330	1,899	81.5%	Black Canyon	2,170	76	57	0	57
	74,752	74,239		99.3%	Bonneville OR	6,159	1,335	590	0	590
Lower Snake	Four Lower Snake Dams	26,775	25,266	94.4%	Bonneville WA	6,159	1,335	3,875	7,786	11,661
Upper Columbia	Albeni Falls	28,658	5,023	17.5%	Chief Joseph	8,833	1,440	1,433	0	1,433
Upper Columbia	Chief Joseph	8,833	1,433	16.2%	Cougar	11,124	1,637	207	100	307
Upper Columbia	Grand Coulee	111,785	78,919	70.6%	Detroit	11,298	3,233	0	58	58
	149,276	85,375		57.2%	Dexter	6,648	1,214	0	150	150
Upper Snake	Anderson Ranch	9,619	1,047	10.9%	Foster	3,544	926	0	96	96
Upper Snake	Black Canyon	2,170	57	2.6%	Grand Coulee	111,785	0	61,212	17,707	78,919
Upper Snake	Minidoka	10,503	1,833	17.5%	Green Peter	16,432	4,742	0	0	0
Upper Snake	Palisades	37,070	16,080	43.4%	Hills Creek	19,489	853	1,496	0	1,496
	59,362	19,017		32.0%	John Day OR	18,280	7,199	14,057	0	14,057
Willamette	Big Cliff	413	32	7.7%	John Day WA	18,280	7,199	16,798	0	16,798
Willamette	Cougar	11,124	307	2.8%	Lookout Point	25,454	2,636	0	513	513
Willamette	Detroit	11,298	58	0.5%	Lower Snake	26,775	0	24,305	961	25,266
Willamette	Dexter	6,648	150	2.3%	McNary OR	4,710	2,749	6,465	0	6,465
Willamette	Foster	3,544	96	2.7%	McNary WA	18,834	10,995	22,041	728	22,769
Willamette	Green Peter	16,432	0	0.0%	Minidoka	10,503	5,129	1,721	112	1,833
Willamette	Hills Creek	19,489	1,496	7.7%	Palisades	37,070	0	16,080	0	16,080
Willamette	Lookout Point	25,454	513	2.0%	The Dalles OR	1,165	289	0	0	0
	94,402	2,652		2.8%	The Dalles WA	1,165	289	1,899	0	1,899
	Grand Total	404,567	206,549	51.1%	Total	404,567	53,487	175,589	30,960	206,549

* Estimated HUs are those not yet credited by Bonneville against losses.

Source: Bonneville Power Administration

Table 12C Wildlife Habitat Units Lost, Gained*, Acquired, and Total by Dam or Area

Dam	HUs Lost	HUs Gained	HUs Acquired	HUs Estimated**	Total Acquired & Estimated** HUs
Albeni Falls	28,658	171	2,306	2,717	5,023
Anderson Ranch	9,619	0	1,047	0	1,047
Big Cliff	413	40	0	32	32
Black Canyon	2,170	76	57	0	57
Bonneville OR	6,159	1,335	590	0	590
Bonneville WA	6,159	1,335	3,875	7,786	11,661
Chief Joseph	8,833	1,440	1,433	0	1,433
Cougar	11,124	1,637	207	100	307
Detroit	11,298	11,298	0	58	58
Dexter	6,648	1,214	0	150	150
Foster	3,544	926	0	96	96
Grand Coulee	111,785	0	61,212	17,707	78,919
Green Peter	16,432	4,742	0	0	0
Hills Creek	19,489	853	1,496	0	1,496
John Day OR	18,280	7,199	14,057	0	14,057
John Day WA	18,280	7,199	16,798	0	16,798
Lookout Point	25,454	2,636	0	513	513
Lower Snake	26,775	0	24,305	961	25,266
McNary OR	4,710	2,749	6,465	0	6,465
McNary WA	18,834	10,995	22,041	728	22,769
Minidoka	10,503	5,129	1,721	112	1,833
Palisades	37,070	0	16,080	0	16,080
The Dalles OR	1,165	289	0	0	0
The Dalles WA	1,165	289	1,899	0	1,899
Total	404,567	53,487	175,589	30,960	206,549

* Gained HUs are those that resulted from inundation and created habitat for some species.

** Estimated HUs are those not yet credited by Bonneville against losses.

Source: Bonneville Power Administration

Table 12D BPA Expenditures for Individual Wildlife Tracts

WL Site	Tract	Acres Protected	Purchase Cost	Purchase Type	WL Site	Tract	Acres Protected	Purchase Cost	Purchase Type
Albeni Falls Dam	Upper Hangman Schliee	1,387	\$2,200,000	Fee Title	McCoy Lake Watershed	Parson East and West People Living God Prop.	501	\$792,349	Fee Title
Asotin Creek	Abrahamson Property (A-322)	8,500	\$3,000,000	Fee Title	McCoy Lake Watershed	Sampson	440	\$498,000	Fee Title
Blue Creek Winter Range	Blue Creek Land Swap	78	\$42,237	Fee Title	Muddy Cr / Mays River	Carstens	566	\$577,629	Fee Title
Blue Creek Winter Range	Krieger	701	\$812,000	Exchange	Pend Oreille	Heller	222	\$387,500	Fee Title
Boise River WMA	Boundary Creek	166	\$332,500	Fee Title	Pend Oreille	Korenget	92	\$281,262	Fee Title
Boundary Creek MMA	Burlington Bottoms	1,405	\$672,885	Fee Title	Pend Oreille	Iestall	105	\$325,837	Fee Title
Camas Prairie	Frice Property	417	\$70,000	Fee Title	Pend Oreille	Twigg	40	\$176,265	Fee Title
Candy Landing	Candy Property	1,364	\$1075,228	Fee Title	Pend Oreille	ODL #1	241	\$277,767	Fee Title
Deer Parks WMU	Allien	23	\$250,000	Fee Title	Pend Oreille Wetlands (Kalsipel)	Pend Oreille Wetlands I	170	\$177,348	Fee Title
Deer Parks WMU	BeaverDick (Kinghorn 1)	81	\$283,800	Fee Title	Pend Oreille Wetlands (Kalsipel)	Pend Oreille Wetlands II	436	\$427,185	Fee Title
Deer Parks WMU	Eboye Ranch	310	\$465,000	Fee Title	Pine Creek	Deep Creek	164	\$199,500	Fee Title
Deer Parks WMU	Horkley	2,556	\$5,200,000	Fee Title	Pine Creek	Perkins Lake Tract	40	\$65,000	Fee Title
Deer Parks WMU	Menan (Kinghorn 2)	128	\$336,000	Fee Title	Pine Creek	Pine Creek	24,304	\$200,000	Fee Title
Deer Parks WMU	Denny Jones Ranch	140	\$220,350	Fee Title	Precious Lands WMA	ODL #2	760	\$228,486	Fee Title
Denny Jones	Kleffner Property	6,385	\$1,700,000	Fee Title	Precious Lands WMA	Precious Lands	201	\$50,378	Fee Title
Fox Creek	Fox Creek	40	\$64,000	Fee Title	Rainwater Ranch	Rainwater Ranch	15,325	\$4,250,524	Fee Title
Fox Creek	Smith Property	160	\$320,000	Fee Title	Rudeen	Deep Creek	8,678	\$4,085,550	Fee Title
Goose Haven Lake	Bader	648	\$800,324	Fee Title	Rudeen	Rudeen	40	\$1,700,000	Fee Title
Hells Gate	Beig	6,300	\$2,000,000	Fee Title	Sage Flat WA	Sage Flat	2,450	\$1,526,057	Mix
Hells Gate	Bill Kuenne	4,864	\$275,000	Fee Title	Scotch Creek WA	Chesaw	8,380	\$228,486	Fee Title
Hells Gate	Cokville Allotments	80	\$21,746	Fee Title	Scotch Creek WA	Scotch Creek	4,290	\$99,000	Fee Title
Hells Gate	Covington	129	\$68,000	Fee Title	Scotch Creek WA	Tunk	7,300	\$265,291	Fee Title
Hells Gate	Friedlander	60	\$47,116	Fee Title	Soda Hills WHMA	Soda Hills	320	\$158,665	Fee Title
Hells Gate	Graves	2,700	\$657,403	Fee Title	Sorenson	Sorenson	2,563	\$1,282,000	Fee Title
Hells Gate	Henry Kuehne	4,860	\$3,000,000	Fee Title	Steigerwald Lake NWR	Bliss	42	\$172,955	Fee Title
Hells Gate	Hilman	770	\$139,608	Fee Title	Steigerwald Lake NWR	Burlington Northern	9	\$172,955	Fee Title
Hells Gate	Nespelem Band	517	\$95,000	Fee Title	Steigerwald Lake NWR	James	27	\$130,000	Fee Title
Hells Gate	Redford Canyon	221	\$175,000	Fee Title	Steigerwald Lake NWR	Straub	90	\$594,000	Fee Title
Hells Gate	Sand Hills	1,394	\$575,000	Fee Title	Swanson Lakes	Nelson	191	\$872,852	Fee Title
Hells Gate	Tumwater	18,812	\$4,500,000	Fee Title	Swanson Lakes	Swanson Lakes	792	\$191,389	Exchange
Iskutla	Iskutla	5,937	\$2,260,625	Fee Title	Tacoma/Trimble WMA	Lower Trimble Creek	14,939	\$3,071,856	Fee Title
Kruze Pine Creek Easement	Pine Creek (Kruse)	800	\$310,000	Easement	Tacoma/Trimble WMA	Tacoma Creek	450	\$506,000	Fee Title
Ladd Marsh	Ladd Marsh	940	\$265,000	Mix	Tacoma/Trimble WMA	Upper Trimble Creek	437	\$535,000	Fee Title
Little Pend Oreille NWR	Kaniksu Addition	716	\$13,000	Mix	Tex Creek WMA	Quarter Circle	303	\$304,500	Fee Title
Little Pend Oreille NWR	Weir	200	\$275,707	Fee Title	The Pend Oreille WMA	Albeni Cove	2,135	\$260,000	Fee Title
Logan Valley	Logan Valley	1,700	\$2,000,000	Easement	The Pend Oreille WMA	Carter Island	70	\$126,208	Fee Title
Lower Yakima Wetlands	Old Goldendale S Barkes Rd.	92	\$102,200	Lease	The Pend Oreille WMA	Cocolalla Lake	96	\$288,000	Fee Title
Lower Yakima Wetlands	Knight Property	80	\$79,000	Easement	The Pend Oreille WMA	Denton Slough	98	\$290,500	Fee Title
Lower Yakima Wetlands	Lateral A	417	\$830,000	Easement	The Pend Oreille WMA	Derr Creek (Henderson Ranch)	17	\$44,000	Fee Title
Lower Yakima Wetlands	Lower Status	1,791	\$93,500	Mix	The Pend Oreille WMA	Pack River (McMahon)	240	\$511,000	Fee Title
Lower Yakima Wetlands	Nosebar	733	\$167,725	Mix	The Pend Oreille WMA	Rapid Lightning (Ginter)	30	\$42,500	Fee Title
Lower Yakima Wetlands	North Status	1,110	\$331,150	Mix	The Pend Oreille WMA	Trout Creek (Hunter Ranch)	110	\$219,900	Fee Title
Lower Yakima Wetlands	Wanity	193	\$89,250	Easement	The Pend Oreille WMA	Westmond Lake	216	\$875,500	Fee Title
Lower Yakima Wetlands	Watapo	81	\$91,000	Lease	The Pend Oreille WMA	Thurston	65	\$148,000	Easement
Lower Yakima Wetlands	West Status	4,474	\$975,750	Mix	Trout Creek Peninsula Tract	Wheeler Peninsula Tract	54	\$121,275	Fee Title
Lower Yakima Wetlands	Allotment 65 C	40	\$47,000	Lease	The Pend Oreille WMA	Aliotment 154	148	\$146,000	Fee Title
Lower Yakima Wetlands	Elite Property	74	\$148,720	Fee Title	The Pend Oreille WMA	Wynecoop (A-67B)	80	\$83,000	Fee Title
Lower Yakima Wetlands	Harris Property	180	\$194,940	Fee Title	The Pend Oreille WMA	Whitney	54	\$121,680	Easement
Lower Yakima Wetlands	Kenworthy Property	40	\$60,000	Fee Title	Vancouver Lowlands (Shillapoo)	Green Island	856	\$1,052,826	Fee Title
Lower Yakima Wetlands	Lantzy East	85	\$60,744	Fee Title	Vancouver Lowlands (Shillapoo)	Willow Creek	165	\$1,394,605	Easement
Lower Yakima Wetlands	Lantzy West	124	\$116,187	Fee Title	Vancouver Lowlands (Shillapoo)	Ramsey	329	\$1,058,000	Easement
Lower Yakima Wetlands	McCrea Property (A 401 A)	35	\$19,530	Fee Title	Vancouver Lowlands (Shillapoo)	Winterfeld	147	\$300,000	none/unknown
Lower Yakima Wetlands	McCoy Lake Watershed	35	\$225,000	Fee Title	Vancouver Lowlands (Shillapoo)	Winterfeld Easement	422	\$225,000	Easement

Source: Bonneville Power Administration

Table 13 Wildlife Habitat Units Lost and Acquired, Species Most Affected

Wildlife Species	HUs Lost	HUs Acquired	HUs Net	Percent Completed	Wildlife Species	HUs Lost	HUs Acquired	HUs Net	Percent Completed
Mule Deer	37,923	31,491	6,432	83.04%	Redhead Duck	3,379	0	3,379	-
California quail	35,747	17,512	18,235	48.99%	Red Fox	2,590	0	2,590	-
Sharp-tailed Grouse	35,545	21,193	14,352	59.62%	Blue Grouse	1,980	1,499	481	75.71%
Bald Eagle	33,379	11,007	22,372	32.98%	Wood Duck	1,947	0	1,947	-
Ruffed Grouse	30,897	3,399	27,498	11.00%	Muskrat	1,756	82	1,674	4.67%
Mallard	24,284	6,652	17,632	27.39%	Riparian Forest	1,632	200	1,432	12.25%
White-tailed Deer	23,312	9,094	14,218	39.01%	Western Gray Squirrel	1,354	0	1,354	-
Canada Goose	22,423	8,477	13,946	37.80%	American Dipper	954	0	954	-
Black-tailed Deer	17,254	259	16,995	1.50%	Downy Woodpecker	741	4,496	-3,755	606.75%
Roosevelt Elk	15,295	106	15,189	0.69%	Harlequin duck	551	0	551	-
Mink	12,638	5,467	7,171	43.26%	Bobcat	401	140	261	34.91%
Mourning Dove	9,316	1,001	8,315	10.74%	Song Sparrow	288	799	-511	277.43%
Spotted Sandpiper	9,104	190	8,914	2.09%	Lewis Woodpecker	286	141	145	49.30%
Western Meadowlark	8,777	23,321	-14,544	265.71%	Common Merganser	127	0	127	-
Pileated Woodpecker	8,690	0	8,690	-	Riparian Shrub	27	0	27	-
Great Blue Heron	7,912	7,453	459	94.20%	Common Snipe	0	889	-889	-
Sage Grouse	7,680	8,031	-351	104.57%	Greater Sculp	0	0	0	-
Black-capped Chickadee	6,608	7,637	-1,029	115.57%	Lesser Sculp	0	0	0	-
Yellow Warbler	6,510	2,430	4,080	37.33%	Marsh Wren	0	0	0	-
Spotted Owl	5,711	0	5,711	-	Osprey	0	0	0	-
Ring-necked Pheasant	5,517	49	5,468	0.89%	Peregrine Falcon	0	0	0	-
River Otter	5,401	0	5,401	-	Pigmy Rabbit	0	1,246	-1,246	-
Black Bear	4,814	66	4,748	1.37%	Waterfowl	0	0	0	-
Beaver	4,477	1,137	3,340	25.40%	Western Grebe	0	0	0	-
Cougar	3,853	110	3,743	2.85%	Total	404,567	175,574	228,993	43.40%
Band-tailed Pigeon	3,487	0	3,487	-					

* HUs acquisitions exceed losses for these species. Therefore, negative numbers represent excess habitat units.

Source: Bonneville Power Administration

Table 14A BPA wildlife acres protected by agency

Agency Name	Acres Protected
Washington Department of Fish & Wildlife	78,040
Montana Department of Fish & Wildlife - Helena	70,386
Idaho Department of Fish & Game	68,974
Burns Paiute Tribe	46,462
Colville Confederated Tribes	40,657
Confederated Tribes Warm Springs Indian Reservation	24,304
Nez Perce Tribe	21,159
Confederated Tribes of the Umatilla Indian Reservation	17,432
Yakama Indian Nation	12,142
Montana Land Reliance	5,041
Shoshone-Bannock Tribes	5,013
Spokane Tribe of Indians	3,292
Kalispel Tribe of Indians	2,618
USFS - Flathead National Forest	2,383
Oregon Department of Fish & Wildlife- Hq	1,752
US Fish and Wildlife Service - Portland Region	1,465
Coeur D'Alene Tribe of Idaho	1,387
McKenzie River Trust	856
The Nature Conservancy - OR	494
Kootenai Tribe of Idaho	210
The Nature Conservancy - MT	107
US Fish and Wildlife Service - Denver Region	80
Flathead Land Trust	60
Total	404,314

Source: Bonneville Power Administration

Table 14B BPA wildlife acquisition costs by agencies

Agency Name	Cost
Idaho Department of Fish & Game	17,909,110
Colville Confederated Tribes	13,553,873
Washington Department of Fish & Wildlife	9,993,415
Confederated Tribes of the Umatilla Indian Reservation	7,389,151
Nez Perce Tribe	7,000,803
Yakama Indian Nation	4,761,800
Spokane Tribe of Indians	3,982,336
US Fish and Wildlife Service - Portland Region	3,741,677
Montana Department of Fish & Wildlife - Helena	3,728,583
Kalispel Tribe of Indians	3,710,664
Burns Paiute Tribe	3,700,000
Confederated Tribes Warm Springs Indian Reservation	3,200,000
Shoshone-Bannock Tribes	2,982,000
The Nature Conservancy - OR	2,452,605
Coeur D'Alene Tribe of Idaho	2,200,000
Oregon Department of Fish & Wildlife- Hq	2,018,410
McKenzie River Trust	1,052,826
USFS - Flathead National Forest	416,000
Kootenai Tribe of Idaho	355,000
Montana Land Reliance	100,059
US Fish and Wildlife Service - Denver Region	5,000
Flathead Land Trust	3,598
The Nature Conservancy - MT	2,200
Total	94,259,110

Source: Bonneville Power Administration

Table 15 Properties Purchased by BPA for wildlife purposes, 1978-2005

Province	Subbasin	Site	Purchase Type	Acres Protected	Province	Subbasin	Site	Purchase Type	Acres Protected	Protected	Purchase Type
Blue Mountain	Grande Ronde	Ladd Marsh	Mix	940	Willamette	Tualatin River NWR	232	Mix	232		
	Grande Ronde	Precious Lands WMA	Fee Title	16,286		Whitney	54	Easement	54		
	Grande Ronde	Rainwater Ranch	Fee Title	8,678		Willamette River	1,021	Fee Title	1,021		
	Grande Ronde	Wanaket	Fee Title	2,817		Willow Creek	329	Easement	329		
Cascade Columbia	Columbia Upper Middle	Sage Flat WA	Mix	8,380	Malheur	Denny Jones	6,385	Fee Title	6,385		
	Okanogan	Asotin Creek	Fee Title	8,500		Denny Jones	38,377	Lease	38,377		
	Okanogan	Columbia Basin Wetlands	Fee Title	8,100		Logan Valley	1,700	Fee Title	1,700		
	Okanogan	Sage Flat WA	Mix	8,380		Soda Hills WHMA	2,563	Fee Title	2,563		
Columbia Plateau	Okanogan	Scotch Creek WA	Fee Title	11,910	Owyhee	The Pend Oreille WMA	942	Fee Title	942		
	Okanogan	Sunny-side	Fee Title	1,280		Hungry Horse Mitigation	37,595	Easement	37,595		
	Crab	Wenatchee WA	Lease	30,053		Hungry Horse Mitigation	1,289	Exchange	1,289		
	Crab	Columbia Basin Wetlands	Fee Title	100		Hungry Horse Mitigation	113	Fee Title	113		
Columbia Lower Middle	John Day	Swanson Lakes	Fee Title	2,817	Clark Fork	Hungry Horse Mitigation	1,094	Mix	1,094	No purchase/ enhancement	
	Umatilla	Swanson Lakes	Fee Title	14,999		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Walla Walla	Pine Creek	Fee Title	24,304		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Yakima	Iskuitipa	Fee Title	5,837		Hungry Horse Mitigation	4,514	Partnerships	4,514		
Intermountain	Yakima	Rainwater Ranch	Fee Title	8,678	Flathead	Hungry Horse Mitigation	33,217	Easement	33,217		
	Yakima	Lower Yakima Wetlands	Fee Title	1,460		Hungry Horse Mitigation	235	Exchange	235		
	Yakima	Lower Yakima Wetlands	Easement	613		Hungry Horse Mitigation	0	No purchase/ enhancement	0		
	Yakima	Lower Yakima Wetlands	Lease	10,069		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
Coeur D'Alene	Yakima	Lower Yakima Wetlands	Mix	30,053	Flathead	Hungry Horse Mitigation	1,405	Boundary Creek WMA	1,405		
	Columbia Upper	Wenatchee WA	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Columbia Upper	The Pend Oreille WMA	Fee Title	942		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Columbia Upper	Heisgate	Easement	25,112		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
Columbia Lower	Heisgate	Heisgate	Fee Title	15,545	Flathead	Hungry Horse Mitigation	0	No purchase/ enhancement	0	none/unknown	
	Heisgate	Heisgate	No purchase/ enhancement	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Lake Roosevelt Peregrine Falcon	0	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Carey Creek	117	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
Pend Oreille	Little Pend Oreille NWR	200	Fee Title	0	Flathead	Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Little Pend Oreille NWR	716	Mix	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Pend Oreille Wetlands (Kalsipell)	648	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Perkins Lake	600	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
Prest River	Prest River	98	Fee Title	0	Flathead	Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Tacoma/Timble WMA	63	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	The Pend Oreille WMA	1,390	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Trout Creek Peninsula	942	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
San Poil	Heisgate	112	Fee Title	0	Flathead	Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Heisgate	25,112	Easement	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Heisgate	15,545	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Heisgate	0	No purchase/ enhancement	0		Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
Spokane	Blue Creek Winter Range	701	Exchange	0	Systemwide	Hungry Horse Mitigation	37,395	Easement	37,395		
	Blue Creek Winter Range	78	Fee Title	0		Hungry Horse Mitigation	1,289	Exchange	1,289		
	Fox Creek	200	Fee Title	0		Hungry Horse Mitigation	113	Fee Title	113		
	McCoy Lake Watershed	769	Fee Title	0		Hungry Horse Mitigation	1,094	Mix	1,094	No purchase/ enhancement	
Columbia Lower	Wellpinit Mtn WA	228	Fee Title	0	Columbia Basin	Hungry Horse Mitigation	0	Fee Title	0	none/unknown	
	Vancouver Lowlands	317	Fee Title	0		Hungry Horse Mitigation	4,514	Partnerships	4,514		
	Sandy River Delta	612	Fee Title	0		Hungry Horse Mitigation	33,217	Easement	33,217		
	Burlington Bottoms	0	No purchase/ enhancement	0		Hungry Horse Mitigation	235	Exchange	235		
Sandy	Carby Landing	417	Fee Title	0	Columbia Basin	Hungry Horse Mitigation	0	No purchase/ enhancement	0	Fee Title	
	Muddy Cr / Marys River	23	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	Fee Title	
	Sorenson	222	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	Fee Title	
	South Pasture	42	Fee Title	0		Hungry Horse Mitigation	0	Fee Title	0	Fee Title	
Thurston	Thurston	54	Easement	0	Columbia Basin	Hungry Horse Mitigation	0	Fee Title	0	Fee Title	
						McCoy Lake Watershed	1,316	Fee Title	1,316	Fee Title	
						Columbia Basin	669,678	Fee Title	669,678	Fee Title	
						Columbia Basin					
Grand Total											

* These numbers were reported to the Council by Bonneville and are considered preliminary. In some cases, the same acquisition is credited to more than one province or subbasin. Some project are geographically located to span subbasins. Bonneville is working to determine the correct crediting, and the Council will report the final determination in the next spending report.

Source: Bonneville Power Administration



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