Department of Energy

Bonneville Power Administration
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Portland, Oregon 97208-3621

EXECUTIVE OFFICE

March 5, 2002

In reply refer to: A-7

Mr. Larry Cassidy, Chairman
Northwest Power Planning Council
851 SW Sixth Avenue, Suite 1100
Portland, OR 97204

Dear Mr. Cassidy:

I understand the Northwest Power Planning Council (Council) and regional wildlife managers seek a response from the Bonneville Power Administration (Bonneville) regarding how we intend to credit wildlife mitigation actions attributable to the Federal Columbia River Power System (FCRPS) in light of the wildlife crediting provisions in the Council's 2000 Fish and Wildlife Program. I am pleased to reaffirm that Bonneville generally agrees with the Council findings on crediting with limited exceptions as noted below. Following the Council's recommendation, Bonneville will address assessments for operational losses through the subbasin planning process. Bonneville will continue to fulfill its obligations for fish and wildlife mitigation within the current $150 million expense and $36 million capital annual fish and wildlife Program target budget without further increasing direct wildlife expenditures at this time. It is particularly important that in apportioning investments of Bonneville funds, emphasis be placed on meeting Endangered Species Act requirements for the FCRPS while maintaining reasonable levels of investment in the broader Program goals.

Our primary point of divergence concerns the program language adopting a 2:1 ratio for crediting any land acquisitions made by Bonneville to satisfy the remaining mitigation for hydro-system construction impacts. In addition, Bonneville does not agree that annualized, secondary, and cumulative impacts are a ratepayer obligation. With these exceptions, I believe the Council's and Bonneville's approaches to crediting are consistent.

Bonneville has invested over $145 million for wildlife mitigation since 1983 and has acquired and enhanced habitat that offsets 43% of the habitat losses identified in the Program's loss assessments. When wildlife benefits prior to passage of the Act and the tens of thousands of acres of wildlife habitat resulting from fish mitigation projects are counted, Bonneville expects to be over half way toward its wildlife mitigation goal—exceeding the Council's initial goal of 35% mitigation by 2001.

Bonneville has maintained a 1:1 crediting policy for more than a decade, starting in 1989 with the Montana Wildlife Mitigation Agreement and continuing with the 2000 Oregon Wildlife Mitigation Agreements. Bonneville and the regional wildlife managers have documented through contract terms, support for Bonneville taking 1:1 credit for habitat acquisitions and enhancements. In October 2001, Bonneville informed the regional wildlife managers by letter that we planned to continue implementing projects that mitigate the wildlife losses for construction and inundation attributable to the FCRPS and document crediting for this work at the 1:1 level.

With the recent Findings on Recommendations, the Council acknowledges that "reasonable" arguments may be made for various crediting ratios—including a 1:1 ratio. There is also recognition that unannualized loss statements are within the range of "legitimate" ways to conceptualize the losses. Moreover, looking only at a 1:1 crediting ratio underestimates the value Bonneville brings to its wildlife mitigation efforts beyond merely acquiring and enhancing habitat. These other kinds of value include the following:

- Using its discretion to recoup the non-power share of mitigation costs with section 4(h)(10)(C) authorities; Bonneville mitigates wildlife on a system-wide basis—even where the power share of a project is nominal. This expedites mitigation for dams where wildlife needs have not been addressed through appropriations for decades.
- Bonneville typically funds ongoing operations and maintenance.
- Acquisitions are protected for wildlife habitat in perpetuity, not just for a term of years or the life of the hydro projects.
- Bonneville usually secures high quality and at-risk habitats, not degraded habitats.
- Bonneville allows state and tribal wildlife managers to recommend which habitats to acquire and then to own them.
- Bonneville mitigates at a higher rate than Congress or the Federal Energy Regulatory Commission specify for other hydroelectric projects in the Columbia Basin.

In addition, we note that fish projects with wildlife habitat benefits, most enhancement actions, and pre-Act mitigation have not yet been included in the tallies of completed mitigation.

Congress did not specify exactly how much mitigation it wanted Bonneville to complete under the Act. The Act's legislative history recognized most past impacts could not be corrected and that the power developments should not be undone. This general guidance leaves Bonneville broad discretion for interpreting and implementing sections 4(h)(10)(A) and 4(h)(11)(A)(i). The Council has accepted mitigation done to date at a 1:1 crediting ratio as have those wildlife managers who have contracted to do that mitigation. There is no guidance on the question of whether 2:1 crediting is an equally effective means of achieving the same sound biological objective at a cost less than that of 1:1 crediting, or any indication of how much lowering the crediting ratio to 2:1 would raise BPA's costs.

For these reasons, and those discussed in greater detail in the legal opinion (enclosure), I strongly believe that Bonneville's funding of wildlife mitigation at existing budget levels, and taking 1:1 credit for acquisition and enhancement actions, is reasonable and consistent with the wildlife mitigation goals of the Program.

Sincerely,

Stephen J. Wright
Administrator and
Chief Executive Officer

Enclosure

cc:
Mr. Doug Marker, Fish and Wildlife Director, Northwest Power Planning Council
Ms. Jann Eckman, Acting Director, Columbia Basin Fish and Wildlife Authority

Enclosure

Crediting Wildlife Habitat Projects
Introduction

For over a decade the Northwest Power Planning Council has tried to facilitate Regional agreement for how to quantify the impacts of the Federal Columbia River Power System (FCRPS) to wildlife and the means of crediting the BPA's efforts to mitigate those impacts. In the early years of the Columbia River Basin Fish and Wildlife Program, all parties agreed to quantify the construction impacts through project-by-project loss assessments based on habitat units. The Council amended those assessments into the Program in its 1989 Wildlife Rule, and BPA accepted them with few reservations.[1] Regional agreement on how to credit BPA's mitigation efforts, however, was not reached.

Mitigation proceeded with no universal acceptance of the extent of BPA's obligation or how to credit its mitigation. Through its mitigation contracts and comments to the Council, BPA attempted to clarify that it had adopted a 1:1 crediting policy: for every unit of habitat protected or improved, BPA took one unit of mitigation credit. Despite these efforts, through the year 2000 amendment process the Council adopted a position on crediting largely in response to regional wildlife managers' opposition to BPA's policy.

The Council's new mitigation rule has several elements. BPA generally agrees with the rule except for the adoption of 2:1 crediting methodology for future acquisitions and the inclusion of annualized and secondary impacts as part of BPA's obligation.[2] That the Council accepts completed acquisitions at a 1:1 ratio shows how close we are to sharing a single view of crediting. In addition, we both agree that enhancement measures should receive 1:1 credit and that operational impacts will be covered by the subbasin planning process now underway. While BPA believes it has always implemented its mitigation duties consistently with the biological objectives of the Program, strong legal and policy reasons prevent BPA from accepting the Council's recommendation for a 2:1 crediting ratio for the remaining construction impacts.

This enclosure elaborates on the origins of BPA's crediting policy and why it cannot follow all of the Council's new crediting recommendations. Interwoven throughout this enclosure are also the facts that show it would be futile for BPA to engage in another administrative process to re-establish its crediting policy. BPA has announced its position openly and consistently for years through public statements, comments to the Council, and contracts with wildlife managers. Consequently, while at times BPA has discussed the possibility of undertaking its own rulemaking or other administrative process to address crediting issues, there seems to be little value in that exercise now.

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[1] BPA disagreed with attempts to include a mitigation responsibility for Chandler, Rosa, Cascade, and Deadwood projects. BPA does not mitigate for these projects.

[2] While not part of the Program, the Council's findings also mention that an exception for l:l crediting of existing agreements "would be for agreements that clearly provide that the crediting ratio in the agreement was to be revisited upon final determination of the appropriate crediting ratio for the program as a whole." NPPC, Fish and Wildlife Program, Appendix E, Findings on Recommendations, 205 (2000). There are no such agreements. Many of the agreements allow for the crediting to be adjusted if the ratio changes as a result of a court order, subsequent agreement, or BPA rulemaking. The wildlife managers typically wanted this provision to ensure BPA would cooperate if a court set another crediting ratio. BPA always stressed in each negotiation that this provision simply restated existing law, including the fact that BPA could unilaterally change the crediting ratio.

I. BPA's Obligation to Mitigate Wildlife

BPA's primary duty to fish and wildlife under the Northwest Power Act is "to protect, mitigate, and enhance fish and wildlife" of the Columbia River Basin that have been affected by the FCRPS, and to do so "in a manner consistent with the … [P]rogram adopted by the Council . . . and the purposes of this [Act]."[3] The Council guides BPA but lacks the authority to legally "bind the United States in any way, manner or form."[4] BPA has the final authority to determine how to act consistently with the Program.[5] The Administrator has considerable discretion to determine when these criteria have been met,[6] and courts should "accord substantial deference to interpretations of an agency charged with administering the statute in issue."[7] BPA's construction of section 4(h)(10)(A) need not be the same as the Council's so long as it is reasonable.[8]

Where BPA's responsibilities under the Act are concerned, BPA respects the views of the Council and others, but only Congress, BPA, and the courts have the authority to establish BPA's legal obligations. Consequently, while BPA has participated in regional exercises to discuss and elaborate upon its mitigation duties, well-known principles of administrative law dictate that only Congress could delegate or share BPA's authority under the Act to actually interpret the law it helped draft and now implements.[9] It falls, then, to BPA to determine its mitigation obligations under the Act and how to credit the efforts taken to fulfill those obligations.

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[3] 16 U.S.C. § 839b(h)(10)(A). BPA must perform this duty to protect, mitigate, and enhance fish and wildlife "in a manner that provides equitable treatment for such fish and wildlife with the other purposes for which [the FCRPS is] managed and operated." *id.* § 839b(h)(11)(A)(i). BPA has taken many actions to ensure wildlife receive such equitable treatment. Those actions are not the subject of this memorandum but are discussed in greater detail in the forthcoming BPA Fish & Wildlife Implementation Plan Final Environmental Impact Statement and also in briefs in ongoing litigation. Nevertheless, a non-exhaustive list of actions that provide equitable treatment includes:

- examining mitigation needs in ratemaking processes and budgets,
- integrating wildlife mitigation in the overall unified plan which combines ESA and NW Power Act mandates,
- addressing wildlife mitigation on a system-wide basis through the section 4(h)(10)(C) financial crediting processes, and
- preparing NEPA analysis programmatically for wildlife projects.

[4] 126 CONG. REC. H10681 (daily ed. Nov. 17, 1980).

[5] *See* NW Resource Info. Ctr. v. NW Power Planning Council, 35 F.3d. 1371, 1379 (9th Cir. 1994), *quoting* Public Utility Dist. 1 v. BPA, 947 F.2d 386, 392 (9th Cir. 1991) (the Administrator is not "limited to the program in exercising [his] responsibilities under the Act").

[6] *See generally* Aluminum Co. of Am. v. Central Lincoln People's Utility Dist., 467 U.S. 380 389-390 (1984); Comp. Gen. Opinion B-105397 (Sept. 21, 1951).

[7] Utility Reform Project v. BPA, 869 F.2d 437, 442 (9th Cir. 1989).

[8] Central Montana Elec. Coop. v. BPA, 840 F.2d 1472, 1476-77 (9th Cir. 1988).

[9] For years the Region seemed to acknowledge this bright line. In the 1995 Program Amendments, for example, the Council directed BPA and wildlife managers to "develop a consistent, systemwide method for crediting new wildlife mitigation action. . . ." NPPC, Fish and Wildlife Program, Section 11.3C.1 (1995). In addition to the reasons stated above, this distribution of responsibility makes sense because as the entity charged with allocating mitigation costs under section 4(h)(10)(C), it would contravene the intent of the Act if a state entity set BPA's federal mitigation responsibility as that could affect the Administrator's allocation of mitigation costs.

II. The History of BPA's Wildlife Habitat Crediting Policy

As early as 1995, BPA believed it had made clear its policy on wildlife habitat crediting. In its comments to the Council on the 1995 proposed Program amendments, BPA stated:

> If the Program is to address credit, it should draw upon the 1989 Wildlife Rule where a 1:1 crediting ratio was used implicitly in an amendment asking Bonneville to achieve 35% of the FCRPS wildlife mitigation by the year 2000. If crediting ratios are to be addressed further in the program, *they must follow the policy Bonneville accepted. . . .*[10]

Acting Director of Fish and Wildlife, Robert Austin, restated BPA's position in a letter to members of the Oregon Wildlife Coalition and the Council in July 1999. He stated:

> Please let me take a moment to remind you of BPA's position on crediting.
>
> . . .
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> Beginning with the Council's 1989 amendments to the program, full credit has been implicitly understood through the Region to mean 1:1 crediting for habitat acquisitions. The mitigation contracts with the individual Coalition members expressly acknowledge full credit as one credit for each habitat unit acquired.[11]

A year later, the new Director discussed crediting with the Council's Wildlife Committee. The notes of the meeting prepared by Carl Scheeler, Crediting Subcommittee Chair, say: "Sarah McNary stated that BPA was *not inclined to move away from the current 1:1 ratio*."[12] This statement definitively shows 1:1 was indeed BPA's crediting policy, it had been for some time, and BPA was unlikely to change it.

In October 2001 BPA again wrote wildlife managers and explained that "[w]e plan to continue implementing projects that mitigate the wildlife losses for construction and inundation attributable to the FCRPS and document crediting for this work at the 1:1 level."[13]

For at least the past six years BPA has documented to regional interests its crediting policy. BPA has continued to work with the wildlife managers to try to convince them to accept 1:1 crediting as a policy—they had already done so as a matter of law in their mitigation contracts.

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[10] Letter from D. Robert Lohn, Director, Division of Fish and Wildlife, to Steve Crow, Director of Public Affairs, (June 15, 1995) (attachment page 8) (emphasis added). Similarly, in the same letter BPA stated it was adhering to the wildlife goals set in the 1989 Wildlife Rule. *Id.* at 9.

[11] Letter from Robert A. Austin, Acting Fish and Wildlife Division Director, to representatives of the Oregon Wildlife Coalition (Oregon Department of Fish and Wildlife, Confederated Tribes of the Umatilla Indian Reservation, Burns Paiute Tribe, Confederated Tribes of the Warm Springs Reservation of Oregon, and the U.S. Fish and Wildlife Service), (July 15, 1999).

[12] Action Notes from August 25, 2000 Meeting with BPA (emphasis added).

[13] Letter from Robert A. Austin, Deputy Fish and Wildlife Division Director, to Rodney W. Sando, Chairman, Columbia Basin Fish and Wildlife Authority, October 11, 2001.

But nothing in the record suggests that through this ongoing effort to reach consensus BPA changed or reopened its policy.

III. Crediting in the Program

BPA believes the Council adopted 1:1 crediting implicitly in the 1989 wildlife rule when it directed BPA to "protect, mitigate, and enhance approximately 35% of the lost habitat units identified in Table 5 over the coming ten-year period."[14] In the1989 rule, and all subsequent rules, the Council selected "habitat units as the preferred unit of measurement for mitigation accounting."[15] The habitat units amended into the Program are derived from habitat evaluation procedures (HEP) patterned after those established by the USFWS. The HEP compensation model that most closely approximates the mandates of the Act and the conditions of the Program is the equal replacement goal. "This compensation goal is to precisely offset the HU losses through a gain of an equal number of HUs. With this goal, a gain of one HU for any target species can be used to offset the loss of one HU for any evaluation species."[16] There is no crediting ratio contemplated by HEP or its equal replacement goal because HUs are determined by multiplying habitat quality by habitat quantity. Ratios like 2:1 or 3:1 are unnecessary because they are meant to address the lack of a habitat quality measurement when mitigation is measured in acres. HEP contemplates that "the HU losses due to the proposed action must be fully offset by the specified acquisition and/or management measures."[17] In other words, HEP does not use ratios, but if it did the ratio would be 1:1. BPA believes the Council must have embraced this view with its adoption of HUs as the measurement of mitigation accounting because that is the primary advantage of an HU approach over an acre-for-acre approach. The Program thus supports BPA's policy of offsetting one HU lost for every one acquired as full, reasonable mitigation.

Questions of fairness also arise when contemplating a crediting at other than 1:1. Virtually all tribal, state, and federal wildlife managers in the Region have 1:1 contracts with BPA now. We have established a course of dealing. Changing to another ratio or methodology would penalize those managers who already agreed that the mitigation under contract with them is full mitigation for the duration of their long-term contracts. Such entities include the State of Montana, and the State of Idaho and the Nez Perce Tribe with regard to Dworshak mitigation.

There is also a question of fairness to ratepayers. Beginning with the first detailed wildlife rule amended to the Program in 1989, the Council has directed BPA to:

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[14] NPPC, Wildlife Mitigation Rule and Response to Comments, Section 1003(b)(1)(C) (Nov. 21, 1989). Looking at the equation *35%=.35 x loss assessment* suggests 1:1 crediting for acquisitions.
[15] NPPC, Fish and Wildlife Program,11.3E.1 (1994).
[16] USFWS, Division of Ecological Services, Habitat Evaluation Procedure, 102 ESM 7 (Sept. 1980).
[17] *Id.*

> Use publicly-owned land for mitigation, or management agreements on private land, in preference to acquisition of private land, while providing permanent protection or enhancement of wildlife habitat in the most cost-effective manner.[18]

Despite this guidance—that remains in the current Program—wildlife managers have consistently preferred to bring the Council proposals for acquisition of private land. Few if any of these project proposals had any evidence that acquisition was the most cost-effective means of achieving wildlife biological objectives. None of them had any detailed economic analysis supporting acquisition as a least-cost mitigation method. Nevertheless, the Council consistently recommended these projects for BPA funding. And BPA funded them. BPA acquiesced to the will of the wildlife managers and the Council, but on a condition: 1:1 credit. This condition is evidenced by the full credit provisions in the acquisition agreements. BPA needed this credit because it saw what it suspected were lower-cost opportunities being bypassed in favor of higher-cost acquisition projects. BPA believes wildlife managers should be stopped from seeking a change in crediting because they chose what may have been the highest cost/least credit means of proceeding with mitigation.[19] BPA based its acquiescence in their choosing acquisition as the primary method of mitigation on the assurance of full 1:1 credit.

IV. Council Recognition of the Reasonableness of 1:1 Credit

In the face of the Council's adoption of a 2:1 crediting ratio for remaining wildlife habitat losses from FCRPS construction, there is strong evidence that the Council recognizes the reasonableness of BPA's 1:1 crediting policy.[20] First, the new Program accepts all crediting done through 2000 at a 1:1 ratio.[21] This indicates the Council can legally, economically, and biologically justify the past use of 1:1 crediting by BPA. Second, in the current Program's Findings on Recommendations, the Council acknowledges that "*reasonable* arguments may be made for various crediting ratios."[22] Presumably this includes 1:1 at least through 2000. There is also an appreciation that unannualized loss statements "are in the low end of the range of

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[18] *Id*. at Section 1003(b)(4)(C)(8).

[19] Program measures must reflect the minimum cost alternative when two or more alternatives are equally effective in achieving the same sound biological objective. 16 U.S.C. § 839b(h)(6)(C). The Program has no findings regarding whether acquisitions and habitat enhancements are indeed equally effective and, if so, which is the minimum cost alternative.

[20] BPA believes the Council based its conclusion rejecting 1:1 credit after 2000 on an incomplete record. For instance, it justifies the 2:1 ratio "as consistent with other mitigation programs in the basin" without identifying what those programs are, whether the habitat is protected permanently, whether the developer pays O&M, or whether the wildlife managers own the habitat. *Id.* (The only example cited, the Lower Snake River Compensation Plan, actually includes both 1:1 and 2:1 credit established through a negotiated agreement between the Corps and WDFW as discussed in the "Benchmarking" section below.) Absent such crucial information, BPA cannot accept the conclusion. In other ways, the Council's findings on crediting are inconsistent with the Program. With respect to inundated habitat, for example, the findings claim that "it is a given that an inundated acre has zero wildlife value." *Id*. Table 11-4 of the Program, however, lists tens of thousands of habitat units created for wintering Mallards, Lesser Scaup, Bald Eagles, and Osprey as a result of the construction of the FCRPS. This is inundated habitat, water habitat, with its value already recognized by the Region's wildlife managers and the Council.

[21] NPPC, Fish and Wildlife Program, Appendix E, Findings on Recommendations, 205 (2000).

[22] *Id*. (emphasis added).

legitimate ways to conceptualize the losses."[23] The Findings on Recommendations can thus support both 1:1 crediting and unannualized loss assessments as used by BPA and the Program.

V. Existing Funding Agreements Support BPA's 1:1 Crediting Policy

All of BPA's wildlife mitigation agreements either express or imply acknowledgement that crediting is 1:1. In BPA's earliest agreement, known as the Montana Trust, BPA paid Montana a fixed sum sufficient to mitigate for all the habitat lost from the development of Libby and Hungry Horse dams. Montana promised that it would indemnify BPA for claims related to the "area, amounts, and types of habitats identified" in the loss assessments, both during and after the agreement. Letters from Montana indicate it has instituted its own crediting methodology to track its progress. Montana gives itself 100% credit, that is 1:1 credit, for fee purchases "based on the assumption that lands purchased in fee title can be managed exclusively for wildlife values. . . ."[24] Montana further agreed to hold BPA harmless for additional wildlife mitigation for the duration of the agreement.

The Dworshak Trust with the state of Idaho and the Nez Perce Tribe says BPA will receive credit for the mitigation funded to "fully satisfy BPA's responsibilities" to mitigate for the development of Dworshak Dam.[25] The amount of the funding and other consideration BPA provided was calculated to offset the habitat losses shown in the loss assessments for Dworshak Dam. No ratio was set, but a straight offset against the assessed losses amounts to 1:1 crediting. The state and tribe agreed to hold BPA harmless for 60 years for "any and all of BPA's responsibilities" to wildlife and wildlife habitat affected by development of Dworshak.[26]

In the 1993 Interim Agreement, Washington Wildlife Coalition members agreed that "BPA shall receive full credit for existing habitat value for all lands that are acquired, permanently dedicated to wildlife and wildlife mitigation purposes, and provided with reasonable funding for operation and maintenance over the life of the Project."[27] BPA takes credit for every habitat unit acquired and directly offsets the amounts shown in the loss assessments by this amount. In other words, the credit is 1:1. While the parties expressly agreed this crediting provision was not to set a precedent for crediting in the future, in fact subsequent agreements with Coalition members provide for full credit based on the Interim Agreement model.[28]

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[23] *Id*. (emphasis added). This assumes that annualized losses would show higher losses. This is not necessarily true. Annualization may result in higher or lower loss assessments when compared to assessments based on a single point in time.

[24] Undated letter from Alan Wood, Wildlife Mitigation Coordinator, Montana Fish, Wildlife, & Parks to Peter Paquet, Northwest Power Planning Council. Under the terms of the agreement such crediting is unnecessary to BPA because the state already agreed the funding was adequate for all identified losses.

[25] Wildlife Mitigation Agreement for Dworshak Dam between BPA, Idaho, Nez Perce Tribe at Section 9(b) (1992).

[26] *Id.* § 11.

[27] Washington Wildlife Mitigation Agreement Among the Members of the Washington Wildlife Coalition of Resource Agencies And Tribes and the BPA, Section 5c(ix) (April 1993).

[28] *See, e.g.,* Memorandum of Agreement Between the Confederated Tribes of the Umatilla Indian Reservation and the Bonneville Power Administration for the Disbursal of Wildlife Mitigation Funds and Wildlife Mitigation

Most of BPA remaining wildlife agreements followed the Interim Agreement terms of crediting. BPA's year 2000 agreements with the State of Oregon, for instance, provide that BPA shall receive "full credit for all HUs achieved through protection or improvement activities. Full credit for protection Projects such as acquisition of an interest in real property means one credit for each habitat unit acquired. Full credit for improvement activities means one credit for each habitat unit achieved over the baseline actual HEP."[29] From the initial Montana Trust to the most recent agreements, BPA has consistently established and secured the legal right to claim 1:1 credit.

VI. Benchmarking

To assess the equitable nature of BPA's wildlife policy generally, and the crediting methodology it has implemented, comparisons may be insightful. Before 1980 and passage of the Northwest Power Act, the primary law governing mitigation of fish and wildlife resources affected by federal projects in the Basin was the Fish and Wildlife Coordination Act. The Coordination Act directed agencies that constructed water projects, like the Corps and Reclamation, to provide fish and wildlife "equal consideration" in planning and development with other project purposes.[30] To achieve this goal, project managers consulted with state and federal fish and wildlife agencies to assess potential mitigation plans.[31] After providing "full consideration" of the agencies' views, the project managers could accept or reject the mitigation plans in light of "overall project benefits."[32] Mitigation plans like the Lower Snake River Compensation Plan (LSRCP) resulted from Corps planning and consultation based on the Coordination Act.[33] Because this act was the law governing mitigation prior to the Northwest Power Act, BPA looks to it as an indication of how Congress intended mitigation to be done.

Of course some observers will criticize the problems of the Coordination Act and argue that because it failed Congress enacted section 4 of the Northwest Power Act. It is true the Coordination Act had notable failings.[34] It is also true, however, that Congress emphasized that "[t]he goal of the program is not to increase the obligations of water project owners and operators, but rather to go beyond a project-by-project approach on a river system whose multiplicity of projects and interdependent biological species makes a project-by-project approach unsatisfactory for all involved parties."[35] BPA interprets this language to mean that

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Crediting, Section 15 (1997); Memorandum of Agreement Between the U.S. Fish and Wildlife Service and BPA for Tualitan National Wildlife Refuge Real Property Acquisition, Section 4 (Dec. 1999).

[29]Oregon Dep't of Fish and Wildlife and BPA Oregon Columbia Basin (excluding the Willamette Basin) Wildlife Mitigation Memorandum of Agreement, Section 4(b) (Nov. 9, 2000).

[30] 16 U.S.C. § 661.

[31] 16 U.S.C. § 662(a).

[32] *Id.* § 662 § (b)(2).

[33] District Engineer, Walla Walla District, Special Report: Lower Snake River Fish and Wildlife Compensation Plan at iii, 55-60 (June 1975).

[34] Michael C. Blumm, *Fulfilling the Parity Promise: A Perspective on Scientific Proof, Economic Cost, and Indian Treaty Rights in the Approval of the Columbia Basin Fish and Wildlife Program*, 13 Envtl. L. 103, 109-111 (1982).

[35]H.R. REP. NO. 96-976, pt. 2, at 38 (1980).

Congress wanted system-wide, coordinated mitigation directed by the Region with a greater emphasis on increased efficiencies over increased obligations. This legislative history argues against increasing the crediting ratio from well below 1:1 to over 2:1.

The Program notes that one Coordination Act plan, the LSRCP, adopted a 2:1 crediting ratio. A close look at the agreements written to implement this plan actually include both 1:1 and 2:1 crediting. Generally, crediting for acquisitions was 2:1 because the parties agreed "to focus acquisition on lands having minimal existing habitat units, but good potential for habitat development."[36] The parties made an exception for high quality habitat and allowed for those acquisitions to receive 1:1 crediting because "habitat protection of existing high quality riparian/wetland habitat will be justified when such habitat is potentially threatened by land use changes or practices." [37] The Corps assumed the acquisition costs, but the holder of the mitigation sites, Washington Department of Fish and Wildlife (WDFW), was responsible for O&M and replacement costs.[38] Therefore, whether looking at the Coordination Act generally, or at the LSRCP as a specific instance of its application, the predecessors to the Northwest Power Act did not impose a blanket, unqualified obligation greater than 1:1 on the FCRPS project owners and operators. BPA's routine acquisition of pristine and at risk properties, as well as its history of regular payment of O&M costs, shows that under the LSRCP agreements such actions should receive 1:1 crediting.

Some managers suggest BPA disregard the Coordination Act and focus instead on FERC hydro licensing and relicensing law. They argue that a 3:1 ratio has precedent set by FERC. There are several problems with this argument. First, 3:1 is not FERC's mitigation policy. FERC does not have one. Instead, FERC considers policies and recommendations of state and federal agencies that comment on the relicensing application.[39] Second, FERC guidelines do not apply to FCRPS. This may be obvious, but it is significant because FERC regulates non-federal entities, many of which are making a private profit using a public resource. Considerations of fairness suggest those who profit using public resources should be held to a higher mitigation standard than those using a public resource at the direction of a public body for public benefit.

Third, BPA has not seen evidence of FERC requiring as much or more mitigation from any one of its Columbia Basin licensees as BPA currently provides for the FCRPS under the Program. The Idaho Power Company, for example, has performed limited wildlife mitigation for Brownlee, Oxbow, and Hells Canyon—the Hells Canyon Complex, mostly by purchasing

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[36]Letter of Agreement: Wildlife Compensation Goals and Evaluation Measures for the LSRCP between the Corps of Engineers, Washington Department of [Fish and] Wildlife, U.S. Fish and Wildlife Service, 3 (Mar. 24, 1989).

[37] *Id*. In other words, the sheer fact of purchase does indeed create or change habitat value according to WDFW and the USFWS. This is contrary to statements in NPPC, Fish and Wildlife Program, Appendix E, Comments on Recommendations at 205 (2000).

[38] Letter from Mathew M. Laws, Chief, Planning Division, Corps of Engineers Walla Walla District to Angus Duncan, Council Chairman (Dec. 20, 1994) (Enclosure 3).

[39] Policy guidance that other federal agencies might use when making recommendations to FERC in relicensing proceedings in fact allows for project developers to receive full credit for preservation under circumstances similar to BPA's. *See* Corps, EPA, Natural Resources Conservation Service, USFWS, and NMFS, Federal Guidance for the Establishment, Use and Operation of Mitigation Banks, 60 Fed. Reg. 58605, 58608 (Nov. 28, 1995).

replacement habitat. It has been difficult to determine exactly what lands were purchased and for how much money. According to the Program, the Hells Canyon Complex mitigation plans for wildlife only addressed the loss of habitat for upland birds and waterfowl.[40] There has apparently been no mitigation for terrestrial mammal habitat.

It is also difficult to determine how much wildlife mitigation has been done by the public utility districts that own and operate dams on the mainstem. For instance, even as they prepared a competing bid to obtain the rights to operate Priest Rapids Dam, the Yakama Nation and PacifiCorp were unable to determine the nature and full extent of Grant County PUD's wildlife mitigation efforts.[41] It thus appears FERC has not required even 1:1 mitigation of is Columbia Basin licensees.

Any comparison of BPA's efforts to other mitigation processes must also examine the substantial biological value BPA adds over what other entities may provide. BPA adds value to its efforts by allowing state, federal, and tribal wildlife managers to own virtually all of the fee acquisitions. Many other utilities retain title to their mitigation acquisitions. Because the Council supports the managers holding the properties in fee, BPA believes this provides additional mitigation value that was not counted in the 2000 Program recommendations.

BPA's mitigation under the Program is by and large protected permanently. Most habitat acquisition agreements, conservation easements, and habitat improvement projects have enforceable provisions to help ensure the habitat is managed for wildlife in perpetuity, not just for the life of the federal hydro projects.

BPA has provided, and continues to provide, extensive funding for the operation and maintenance of the mitigation habitat. It is not unusual for a site's annual O&M funding to be about 10% of the initial acquisition cost.[42] While BPA cannot guarantee O&M funding in perpetuity, BPA does anticipate shouldering a substantial O&M burden for years to come. Moreover, where BPA ceases to provide O&M sufficient to maintain habitat values, many of the mitigation agreements call for BPA to reduce its credit by the number of habitat units lost in the absence of BPA funding.

The partnerships that can be leveraged with BPA funding are another source of increased intangible value to wildlife projects. BPA takes only the share of credit in partnerships that is proportional to its contribution. There is precedent in the Region, though, for crediting BPA with the full value of leveraged mitigation projects.[43]

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[40] NPPC, Fish and Wildlife Program,135 (1987).
[41] Personal communications from Yakama staff to BPA staff in December 2001.
[42] Whether to provide O&M is not the only pertinent question here. Equally important is the question of how much is appropriate to consider a ratepayer responsibility. Past reviews by BPA have shown some state wildlife managers seek ten times more O&M funding from BPA than they dedicate to similarly situated projects where the state has the O&M obligation.
[43] Letter from Alan Wood, Wildlife Mitigation Coordinator, Montana Department of Fish, Wildlife & Parks, to Gail Kuntz, BPA 2 (Feb. 5, 1997) ("Failure to give full credit to partnership projects ignores the value of using [BPA]

Finally, prior to passage of the Northwest Power Act, BPA spent almost $200 million on fish and wildlife mitigation. Most of that was spent indirectly by reimbursing the Treasury for appropriations to the Corps and Reclamation. Those reimbursements covered the power share of mitigation actions like the acquisition and development of the Umatilla (or Mid-Columbia) National Wildlife Refuge. Federal agencies acquired over 40,000 acres of habitat to mitigate for the FCRPS prior to the passage of the Northwest Power Act,[44] and they dedicated tens of thousands of acres of project lands to wildlife mitigation. These kinds of measures are not currently part of the crediting ledger even though they represent ratepayer dollars mitigating wildlife affected by the FCRPS.

These examples show BPA's 1:1 crediting provides much greater value to wildlife than would accrue from habitat acquisitions alone. Benchmarking BPA's wildlife mitigation against other standards in the Basin shows BPA provides more mitigation using its enhanced 1:1 crediting policy than other similarly situated entities.

VII. Annualization: Hindcasting Estimates of Possible Futures

In addition to questioning BPA's 1:1 crediting policy, wildlife managers encouraged the Council to adopt more than the direct impacts of the construction and operation of the FCRPS in the loss assessments by using concepts like annualization, secondary losses, or cumulative effects. BPA has often indicated its unwillingness to use these concepts.

A concern repeated by wildlife managers is that HEP requires annualization,[45] a process in which "HU gains or losses are annualized by summing HUs across all years in the period of analysis and dividing the total (cumulative HU) by the number of years in the life of the project."[46] Annualization does not result in an estimation of cumulative or additive losses, or compound interest on borrowed habitat—it averages the losses annually over the duration of the project.[47] BPA declines to assume a responsibility for annualization for several reasons. First, this insistence on strict adherence to HEP is inconsistent with the willingness with which the wildlife managers mold the HEP process on projects they support. HEP is a tool.[48] Basing a loss

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trust fund dollars to stimulate financial involvement from other organizations, thereby leveraging the funds to accomplish mitigation in the most cost effective way possible").

[44]Chaney, E. & S. Sather-Blair. 1984. Status Review of Wildlife Mitigation at Columbia Basin Hydroelectric Projects: Idaho Facilities. BPA; Bedrossian, K.L. et al. 1984. Status Review of Wildlife Mitigation at Columbia Basin Hydroelectric Projects: Oregon Facilities. BPA; Howerton, J., et al. 1984. Status Review of Wildlife Mitigation at Columbia Basin Hydroelectric Projects: Columbia River Mainstem Facilities. BPA.

[45] Actually, annualization is not required for proper application of HEP. USFWS, Habitat Evaluation Procedure, 102 ESM A.5A.

[46] USFWS, Habitat Evaluation Procedure, 102 ESM 5.2D.

[47] This is contrary to analogies suggesting annualization is supposed to compound interest on unmitigated habitat losses over time. *See* Beak Consultants, Inc., Council Presentation to Address Annualization and Crediting 2 (April 28, 1994).

[48] It is just one among possible tools. "Several assessment methods are discussed and compared to selected criteria in reaching the conclusion that a habitat approach is most appropriate *within the current legal and institutional*

assessment on HEP is no guarantee of the assessment's validity or accuracy. A study of four loss assessments shows how the use of the tool in different hands produces different results—results that cannot in some instances be duplicated, even when competent wildlife professionals completed the initial assessments.[49]

In a review of the assessments done for Grand Coulee, Dworshak, McNary, and Lookout Point, an independent analysis found a number of inconsistencies. They include the following: (1) wildlife managers defined the area of study differently for each assessment; (2) some managers used standardized habitat models and others used models that cannot be replicated; (3) some managers included species that had substantial habitat created by the reservoirs, others omitted these species; (4) none used the same assumptions for mapping the structural diversity of vegetation; (5) one counted beneficial impacts of existing mitigation, the others did not; (6) one used a different group of species to assess impacts and another group to evaluate habitat suitability; (7) there was no criteria for selecting the type or number of species to be used in the evaluation; (8) one assessment had 17 species models which created a likelihood of overestimation of impacts; (9) there was no attempt to coordinate field procedures between projects; and (10) none of the assessments engaged annualization comprehensively.

Considering these examples, it is likely that all of the wildlife loss assessments for the FCRPS projects relied heavily upon the subjective judgment of project proponents, not just USFWS guidelines, when conducting assessments derived from HEP. While the loss assessments serve as useful general guideposts, they are not grounded completely in science or the scientific method. As the assessment method chosen by wildlife managers and adopted by the Council, BPA has agreed to work with HEP. However, loss assessments for projects as large as FCRPS dams are inherently inaccurate; they are only as good as their underlying assumptions.[50] Given the array of different assumptions going into each dam's loss assessment, and the conjecture upon which estimates of past and future conditions must be based, BPA does not believe an attempt to annualize losses would be fair or accurate enough to warrant the effort and expense it would require to complete the process.[51]

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constraints on the USFWS. Other criteria can be used, and other equally valid arguments can be made in support of other approaches for impact assessment." *Id.* 101 ESM 1 (emphasis added).

[49] The ability to duplicate an experiment and obtain the same result is the heart of the scientific method. The numerous subjective judgments that go into HEPs render them something considerably less than objective scientific experiments or studies. *See generally*, Samuel J. McNaughton, *What is Good Science?*, 13 Nat. Resources & Envt. 513-518 (1999).

[50] The margin for error in the Beak report was plus or minus 25%. "We assumed variation less than 25% would be acceptable for loss assessments dealing with numerous wildlife species that use thousands of acres." Beak Consultants Inc., Audit of Wildlife Loss Assessments for Federal Dams on the Columbia river and its Tributaries 1 (Feb. 1993).

[51] While Beak recommended annualization be part of the HEP process, the report noted that there were other ways to provide for adequate mitigation. *Id*. at 63. Negotiated agreements like the Montana Trust would be another way. *Id.* This was the Council's position, too, in 1989 when it expressed the opinion that it would not "be productive to attempt to judge what might have happened to inundated habitat if it had not been inundated, or to evaluate cumulative losses. Such an undertaking would be speculative, and the time and resources it would require would be better spent for on-the-ground wildlife mitigation." NPPC, Fish and Wildlife Program, Summary and Response to Comments, 3 (1989).

Another reason BPA has continuously rejected calls to annualize loss assessments is that BPA has only tabulated the lost wildlife habitat units mitigated to date through protection efforts such as acquisitions in fee or conservation easements. There have been no surveys of the increases in the habitat quality on those projects.[52] BPA anticipates substantial increases in habitat quality, and habitat units, from having those lands become protected and managed for wildlife. These uncounted improvement or enhancement habitat units are the converse of annualization's loss over time concept for they provide uncounted habitat gains over time.

Most importantly, BPA did not have an express or direct mitigation responsibility until 1980. By that time, the FCRPS projects ranged in age from 73 years (Minidoka) to 5 years (Libby) old. After this passage of time, Congress simply said mitigate for construction and operation impacts. Nothing in this mandate requires annualization, so BPA has a great deal of discretion to determine the extent of what constitutes mitigation for construction and operational impacts.

Prior to the Act the agencies that constructed the FCRPS mitigated pursuant to the Fish and Wildlife Coordination Act which requires construction agencies to seek appropriations for funding and constructing justifiable compensation measures.[53] The Coordination Act has no mandate for anything remotely resembling annualization.

As for the Northwest Power Act, its legislative history discusses BPA's mitigation duty in largely prospective terms.[54] In fact, the emphasis on mitigation of current and future impacts was so great that Representative Dingell pointedly emphasized that BPA should mitigate for *some* past impacts, but certainly not all of them.[55]

Annualization is costly, time consuming, and based on numerous unproveable assumptions. There are no credible models or professional credentials for making such assumptions.[56] In addition, BPA has not found, and wildlife managers have not produced, a standard for annualization being used elsewhere in the Basin. To the contrary, in a similar context a recent

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[52] Some acquisition projects also bring with them state and federal grazing leases that wildlife managers now control. Those leases are not tallied currently against BPA's mitigation obligation.

[53] *See* 16 U.S.C. § 662(c).

[54] *See, e.g.*, Interior Committee Report 96-976, Pt. II, 96th Cong., 2d Sess, at 54 (Sept. 16, 1980) ("Section 8(a) amends the Federal Columbia River Transmission System Act to permit BPA to use the BPA fund to make short term power purchases and to enable BPA to meet its obligations under the fish and wildlife provisions of this bill (e.g., to buy power to replace power generating capability that may be lost through a spill for fish passage purposes at a Federal dam)"); Cong.Rec. H9858 (Sept. 29, 1980) (Statement of Rep. Bonker) ("this legislation deals with the problem of the tremendous fish mortality that occurs at each of the hydroelectric facilities on the Columbia River").

[55] 126 CONG. REC. E105 (daily ed. Dec. 1, 1980); *id*. at H10683 (daily ed. Nov. 17, 1980).

[56] Some wildlife managers have recognized as much. For example, the USFWS argued to FERC in the Lake Chelan Project relicensing process that it wanted mitigation to be to pre-project levels. The Service, however, admitted the extent of losses to fish and wildlife due to development of the project was "virtually undocumented." FERC staff concurred with the PUD "that various factors other than project development may have contributed to any decline in the fish and wildlife resources. It is therefore concluded that fish and wildlife mitigation based on pre-project resource levels is unrealistic and unwarranted." PUD No. 1 of Chelan County, Washington, Project No. 637, Order Issuing New License (May 12, 1981) 1981 W.L. 35383, *6 (FERC).

Ninth Circuit decision told FERC not to hark back to the pre-development era when analyzing the mitigation obligations for hydropower developers. To do so "defies common sense and notions of pragmatism."[57] All of these facts suggest Congress would not approve of BPA using its authorities to reach back and assume a mitigation duty to annualize losses or compound habitat "interest" beginning in 1909.

VIII. Secondary Losses And Other Project Purposes

Secondary losses are equally unsupportable. Proponents for this loss category populate it with impacts enabled by the dams, such as industrial development, ranching, and farming. BPA has found no precedent within the Basin for mitigation being required for secondary losses at other Corps, Reclamation, or FERC licensed hydro facilities in the Region. Then there is the question of secondary gains: most niches in the Region's ecosystems remain filled—maybe with new or different species than those present prior to hydrosystem development, but filled with wildlife, nonetheless. These gains would have to offset any secondary losses.

The extension of the secondary loss theory to development, such as irrigation, ultimately proves to be the unraveling of any reasoned justification for the inclusion of secondary losses. For many of the hydro projects, irrigation was an authorized purpose that carries its own cost allocation.[58] Thus, many of the secondary losses recognized by wildlife managers were actually planned, primary losses resulting from an express non-power project purpose. Or, if they were not specifically planned, they were certainly Congress' desired outcome resulting from BPA implementing its earliest mandate "to encourage the widest possible use of all electric energy that can be generated and marketed and to provide reasonable outlets therefore."[59]

Cumulative impacts are sometimes mentioned as another kind of injury to wildlife and wildlife habitat that BPA should mitigate. Cumulative impacts are not mentioned in the Act. The phrase is borrowed from NEPA. In NEPA, however, there's a growing body of opinion that cumulative impacts are not a distinct kind of impact.[60] Moreover, when it comes to the Columbia Basin, adverse impacts to wildlife and their habitats come from federal projects, non-federal projects, industry, agriculture, development, logging, mining, grazing, harvesting, and recreation. Under an Act that requires that ratepayers pay for the mitigation attributable to only the development and operation of electric power facilities and programs,[61] a proposal for BPA to cover mitigation of cumulative impacts is untenable. For these reasons, and those articulated in earlier BPA

[57] American Rivers v. FERC, 201 F.3d 1186, 1197 (9th Cir. 2000). "To the extent a hypothetical pre-project or no-project environment can be recreated, evaluation of such an environment against current conditions at best serves to describe the current cumulative effect on natural resource of these historical changes." *Id.*
[58] For a general description of project cost allocations related to BPA's fish and wildlife funding obligations, see Memorandum from Harvard P. Spigal, BPA General Counsel, to Randall W. Hardy, Administrator, Interpretation of Section 4(h)(10)(C) of the Northwest Power Act (June 6, 1994).
[59] 16 U.S.C. § 832a(b).
[60] *See, e.g.*, Owen Schmidt, MASTERING NEPA 254-257 (2001).
[61] 16 U.S.C. § 839b(h)(8)(B).

comments to the Council, BPA will not change its policy to one that requires mitigation using annualization, cumulative impacts, or secondary losses.

IX. Wildlife Credit from Fish Mitigation Measures

The Council has also recognized the wildlife benefits of many fish actions. In the 1995 Program it called upon BPA and the wildlife managers "to develop a method for crediting wildlife benefits from fish projects."[62] With this measure the Council does not question the legitimacy of wildlife credit from fish projects, it simply wants an agreed upon crediting methodology.

To date, BPA has protected over 100,000 acres of wildlife habitat with fish measures.[63] These habitat units are not reflected in the BPA's tally of completed mitigation. It does not matter legally what the underlying intent of a mitigation expenditure may be—there is only one BPA fund from which all measures are funded. If the implementation of a fish measure also benefits wildlife, then it is appropriate for BPA to take wildlife credit for that action.[64] The Act does not limit how BPA may take or use wildlife credit from fish measures. Failure to credit wildlife habitat protected or enhanced in fish mitigation projects would place a greater burden on ratepayers than Congress authorized. For these reasons BPA believes it must take wildlife credit for either construction or operational impacts to wildlife mitigated by fish measures.

X. Operational Impacts: A Solution of Sorts for Annualization, Secondary Impacts, and Credit for Fish Projects

In its new Program amendments, the Council recommends that operational losses, including secondary losses, be mitigated through the subbasin planning processes.
This planning, combined with actions BPA will take under the National Marine Fisheries Service 2000 FCRPS Biological Opinion, will include additional habitat acquisitions and improvements. Through the course of the next decade, BPA anticipates considerable amounts of habitat to be protected and enhanced through these related efforts. In addition, there are tens of thousands of acres of wildlife habitat protected under the anadromous fish mitigation side of the Program that have not been counted toward BPA's wildlife mitigation obligation. Between the new mitigations, and the past uncounted mitigations, BPA believes it will provide full 1:1 mitigation to wildlife for the operational impacts of the FCRPS.

The Council suggests BPA accept annualization, secondary or incidental losses, as well as operational losses as being addressed through subbasin planning. BPA declines to do so for several reasons. Most simply put, BPA has no legal obligation to mitigate for other than direct

[62] NPPC, Fish and Wildlife Program, Section 11.3C.2 (1995). The 2000 Program Amendments provided that directives such as this were still the Council's recommended course. NPPC, Fish and Wildlife Program, Section IX, Transition Provisions (2000).
[63] Typical fish habitat projects with wildlife benefits include the purchase of Forest Service grazing permits that are then permanently retired and leases of grazing rights on tribal lands.
[64] And conversely, where wildlife measures provide fish benefits BPA intends to take credit toward its obligation to fish.

construction and operation losses. Then there is the absence of documented examples of other federal hydroprojects being required to mitigate for these tangential losses under the Fish and Wildlife Coordination Act or other applicable laws.[65] Therefore, BPA will apply credit gained through subbasin projects to operational and construction impacts only.

Conclusion

BPA has for years publicly embraced 1:1 crediting for calculating its wildlife mitigation responsibilities against the loss assessments prepared by the Region's wildlife managers. BPA will continue to take 1:1 credit for all of its wildlife mitigation. This level of mitigation goes beyond what Congress has in the past sought from federal hydroprojects in the Columbia River Basin. It helps undo mistakes of the past without undoing the power developments. It is more than the non-federal utilities in the Columbia Basin do for their dams. It has for years been the most successful element of the Council's Program—arguably the largest fish and wildlife mitigation effort in the world. And BPA already has agreements with most wildlife managers who have accepted that BPA should take 1:1 credit for measures they help implement. Given that BPA has spent $145 million to reach approximately 43% mitigation of the loss assessments at 1:1 crediting,[66] the increment to 2:1 would undoubtedly create an economically significant increase that no entity has quantified or analyzed.

BPA agrees with the Council's 2000 amendments to the program calling for loss assessments for operational losses. BPA will address these losses, at least initially, through the subbasin planning processes. In this way wildlife mitigation will continue after BPA fulfills the construction loss assessments using 1:1 crediting because fish habitat acquisition and improvement projects based on subbasin planning will have wildlife benefits as well.

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[65] BPA's requests from wildlife managers and Council staff for verification of these purported examples have gone unfulfilled.

[66] BPA, Sum of Obligations for Wildlife [by fiscal year from 1983 to 2001] (Dec. 10, 2001). This figure includes costs for all loss assessments, coordination costs, and wildlife studies as well as actual on-the-ground mitigation measures. The 43% estimate is from BPA's draft wildlife crediting spreadsheets located at http://www.efw.bpa.gov/portal/Wildlife/Wildlife_Mitigation.htm. BPA recognizes it needs to work with the Council and others regarding what trade-offs to make when off-setting of HUs of one species for HUs of another as contemplated by HEP. *See generally*, USFWS, Habitat Evaluation Procedure,102 ESM 6. While the crediting spreadsheets currently posted on BPA's website provide a good idea of BPA's mitigation to date, neither they nor this enclosure are intended to answer those trade-off questions.