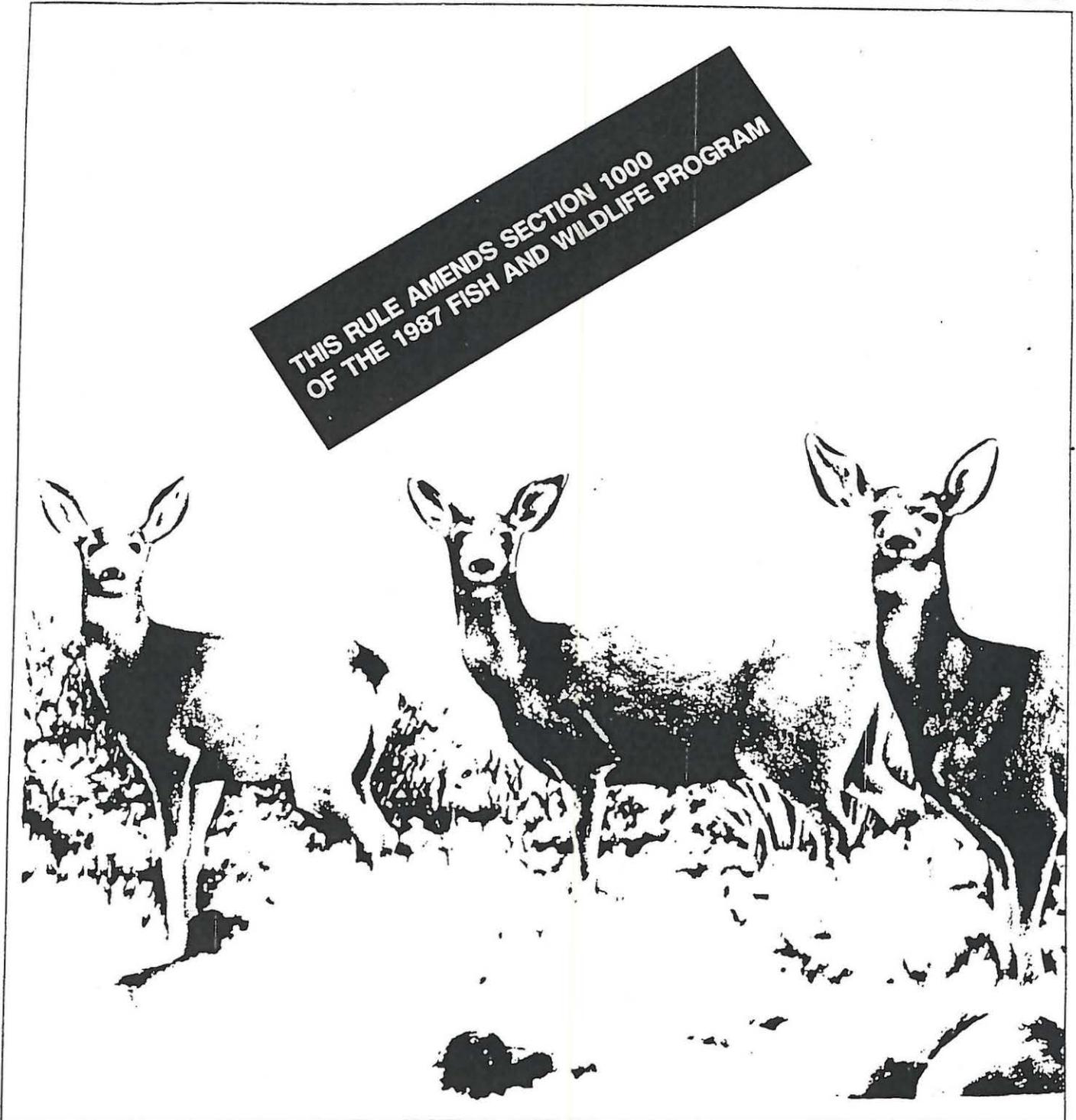


# WILDLIFE MITIGATION RULE AND RESPONSE TO COMMENTS

89-35

THIS RULE AMENDS SECTION 1000  
OF THE 1987 FISH AND WILDLIFE PROGRAM



**NORTHWEST POWER PLANNING COUNCIL**  
November 21, 1989

# NORTHWEST POWER PLANNING COUNCIL

TOM FRU LOVE  
CHAIRMAN  
Washington

R. Ted Bottger  
Washington

John C. Brenden  
Montana

Stan Grace  
Montana

851 S.W. SIXTH AVENUE • SUITE 1100  
PORTLAND, OREGON 97204-1348 • (503) 222-5161

Toll free number for Idaho, Montana & Washington: 1-800-222-3355

Toll free number for Oregon: 1-800-452-2324

AMES A. COLLIER  
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Idaho

Robert (Bob) Sasyik  
Idaho

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Oregon

November 21, 1989

## TO INTERESTED PARTIES:

Enclosed is the new Council rule that provides for mitigation of wildlife losses at hydroelectric projects in the Columbia River Basin. It represents what is likely to be the largest wildlife enhancement program ever undertaken in the Northwest.

The rule was adopted by a 7 to 1 vote at the Council's October meeting, and became final at the November meeting with the adoption of the Council's written response to those who commented on the wildlife proposals. The "Response to Comments" is included in this packet.

In addition, some Council members have clarified their positions on the wildlife rule, and their individual comments are included.

The wildlife rule now becomes a formal amendment to the Columbia River Basin Fish and Wildlife Program. As such, it will be implemented by the Bonneville Power Administration and other agencies guided by the program.

These agencies will begin to redress damage done to wildlife by 13 Columbia Basin hydropower dams for which habitat loss statements have been submitted. The rule also provides a process for dealing with other dams as other loss statements are presented.

Highlights of the rule include the following.

- **The rule sets an interim goal for wildlife mitigation.** Given uncertainties about the region's ability to achieve a long-term goal, an interim goal was established. This goal calls for mitigation of approximately 35 percent of the lost habitat units over 10 years. There appeared to be general consensus that 35 percent was well within the losses that could be attributed to hydropower. This is a change from the initial proposal which called for an interim goal of mitigation for up to half of the habitat losses allocated to hydropower. During the 10-year period, the Council will focus on wildlife resources with the highest priority. A long-term goal would be considered after all remaining mitigation plans have been submitted.

- **The rule provides for independent audit of the loss statements prior to their final acceptance.** Not everyone agreed on the magnitude of the losses presented by the wildlife agencies and tribes. Therefore, they will

be reviewed by an independent consultant. The loss statements that have been submitted will be used as sufficient evidence of losses in order to begin mitigation efforts, but their final number could be changed when the audit is completed.

- **The rule calls for mitigation plans to be evaluated against specific standards.** These include a showing that the plans complement existing activities, are the least costly way to achieve the objective, are supported by the best available scientific knowledge, address specific wildlife losses (e.g., tribal) in areas that formerly had salmon and steelhead runs, protect species of special concern, provide habitat that may benefit both fish and wildlife, and address concerns over public land ownership and local communities (e.g., loss of tax base).

- **The rule establishes an advisory committee to set wildlife priorities.** The committee will be chaired by Council staff and include members from representative agencies, tribes, utilities, and conservation groups. The committee will review mitigation plans from an overall basinwide perspective and make recommendations to the Council on the order of priority over a period of years.

- **The rule calls for Council review of wildlife loss assessments and mitigation plans.** All mitigation plans will be reviewed and approved by the Council before implementation by Bonneville.

- **The rule provides for Bonneville Power Administration funding and implementation of mitigation plans.** Upon Council approval, Bonneville will implement wildlife measures in priority order at federal projects. Bonneville will invite wildlife proposals and evaluate them according to whether they complement existing activities, are the least costly method to achieve an objective, protect habitat or species that would not be available without prompt action, encourage partnerships to reduce project costs, have measurable objectives, and do not impose others' funding responsibilities on Bonneville.

We hope the enclosed information is useful to you. Please feel free to call if you have questions.

Sincerely,



Dulcy Mahar, Director  
Public Involvement

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TOM FRELLOVE  
CHAIRMAN  
Washington

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Washington

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Montana

Stan Grace  
Montana

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AMIE A. LOVELL  
VICE CHAIRMAN  
Idaho

Robert (Bob) Savvik  
Idaho

Fred Hallock  
Oregon

Norma Paulus  
Oregon

November 9, 1989

## NORTHWEST POWER PLANNING COUNCIL FINAL RULE

### Section 1000

#### Wildlife

#### 1001. THE PROBLEM

The development of the hydropower system in the Columbia River Basin has affected many species of wildlife as well as fish. Some floodplain and riparian habitats important to wildlife were inundated when reservoirs were filled. In some cases, fluctuating water levels caused by dam operations have created barren vegetation zones, which expose wildlife to increased predation. In addition to these reservoir-related effects, a number of other activities associated with hydroelectric development have altered land and stream areas in ways that affect wildlife. These activities include construction of roads and facilities, draining and filling of wetlands, stream channelization and shoreline riprapping (using large rocks or boulders to reduce erosion along streambanks). Finally, in some cases the construction and maintenance of power transmission corridors has altered vegetation, increased access to and harassment of wildlife, and increased erosion and sedimentation in the Columbia River and its tributaries.

The habitat that was lost because of the hydropower system was not just land, it was home to many different, interdependent species. In responding to the system's impacts, we should respect the importance of natural ecosystems and species diversity.

While the development of the hydropower system has caused negative effects on wildlife, it also has resulted in a number of beneficial effects. For example, the creation of reservoirs has provided important resting, feeding and wintering habitat for waterfowl. In addition, where reservoir storage is used for irrigation as well as power generation, the irrigation water has promoted extensive growth of grass and food that could not otherwise exist in such a dry climate. These areas have provided important habitat for wildlife; on the other hand, a large body of scientific evidence shows that some of the species have not sustained initial population increases. Programs to protect, mitigate and enhance wildlife affected by hydroelectric development should consider the net effects on wildlife associated with hydropower development.

## 1002. THE REMEDY

To address the effects of hydropower development and operations on wildlife in the Columbia River Basin, the Council established a process to mitigate wildlife losses. That process includes development of status reports on wildlife planning and mitigation programs at each hydroelectric project in the Columbia Basin; statements identifying losses of wildlife or wildlife habitat; mitigation plans; and the subsequent incorporation of approved plans or appropriate alternatives into the fish and wildlife program. [See Section 1003(b) and Tables 3 and 4.]

In 1987, the Council added wildlife mitigation plans for Montana's Hungry Horse and Libby dams to the program, which are being implemented. [See Table 4.] During that process, the Council decided that wildlife plans should be considered in Section 1300 amendment proceedings before they are added to the program for funding.

In 1989, the Council amended the program to adopt interim goals for the wildlife program, to use habitat loss estimates as a starting point for the mitigation effort, and to authorize use of the wildlife mitigation plans for Palisades, Black Canyon, Anderson Ranch, Grand Coulee, Albeni Falls, and the Willamette River Basin projects as a starting point for the identification of wildlife priorities. The Council also established a process for implementing wildlife projects, and modified the process for yet-to-be developed mitigation plans. An underlying theme of the process is a concern for the maintenance of natural ecosystems and species diversity over the long term. The Council also clarified measures for nonfederal projects. The Council deferred establishing a long-term goal until all mitigation plans are received.

The Council also has adopted measures to describe special considerations when acquiring land is proposed as a mitigation tool and to ensure that wildlife interests are represented in future Columbia River Basin hydropower system matters, including transmission corridors. [See Sections 1003(a), (b)(4)(C) and (c)-(d)(e).]

## 1003. MEASURES

### (a) Wildlife Representation

(1) The Council will ensure, through monitoring and future measures if necessary, that wildlife is considered in all matters concerning the planning, management and operation of the Columbia River Basin hydropower system where appropriate to provide equitable treatment for wildlife resources. In developing consultation and coordination arrangements pursuant to Section 1203(c): Coordination, the federal project operators and regulators shall give particular attention to fish and wildlife agencies and interested tribes when carrying out activities that affect wildlife and its habitat.

(2) The Council will establish a wildlife management coordinator position. The coordinator will act as a liaison between the wildlife and power interests and will coordinate and monitor the Council's wildlife program.

### (b) Mitigation Planning and Implementation

(1) Wildlife Program Goal.

(A) Losses.

The Council will use the wildlife losses estimates for the federal dams listed in Table 5 as a starting point for identifying wildlife measures, and authorizes the use of the mitigation plans prepared for those dams as a starting point for wildlife priorities. In doing so, the Council finds that the loss estimates represent sufficient evidence of losses to begin a ten-year mitigation effort, subject to revision if review by an independent analyst shows there are grounds for revision. The Council will contract with an independent third party to sample the loss estimates and assess whether they reasonably reflect the probable gains and losses of wildlife habitat.

(B) Ratepayer share.

Wildlife measures should address losses caused by hydroelectric projects, including power-related storage or regulatory dams. Electric ratepayers should pay no more than the cost of fish and wildlife measures attributable to electric power facilities and programs.

(C) Goal.

The Council's interim goal is to protect, mitigate, and enhance approximately 35% of the lost habitat units identified in Table 5 over the coming ten-year period. During this time period, the Council will focus on wildlife resources with highest priority under the procedures described below. An orderly and predictable pace for implementation is important. The Council recognizes that Bonneville may nevertheless have to adjust its level of annual wildlife program funding depending on a given year's revenues. Wildlife measures should complement the activities of the fish and wildlife agencies and Indian tribes, and where equally effective means of achieving a biological objective exist, the least costly measure should be chosen.

Upon submission of the remaining mitigation plans to the Council, the Council will again consider the overall losses caused by hydroelectric facilities, and consider the need for and scope of a long-term wildlife goal.

(2) Status Reports. Mitigation status reports have been completed for all federal hydroelectric projects in the Columbia River Basin.

(3) Losses Statements. Bonneville shall fund studies to develop statements of wildlife and/or wildlife habitat losses at the projects listed in Table 3, including power-related storage and regulatory dams. These statements shall take into account all existing information pertinent to the project area and shall address both realized and potential positive and negative effects. The lead agency conducting the studies described in this measure is expected to comply with the provisions of Sections 1203(c)(2) and (4): Coordination.

(4) Mitigation Plans.

- (A) Upon completion of the Section 1003(b)(3) studies, the appropriate fish and wildlife agencies, tribes, Bonneville and project operators shall review the results and discuss the options available to provide wildlife protection, mitigation and enhancement in accordance with the Northwest Power Act. The Council's wildlife coordinator will participate in such discussions.
- (B) Bonneville shall fund the development of mitigation plans for each of these projects listed in Table 3, including power-related storage or regulatory dams. For each mitigation plan, including the plans for Anderson Ranch, Black Canyon, Grand Coulee, Palisades, Albeni Falls, and the Willamette River Basin Projects, Bonneville shall fund the entity or entities preparing each plan to conduct appropriate public involvement activities to ensure that interested and affected parties are informed concerning the mitigation plans and have been afforded the opportunity to comment on them. Each mitigation plan shall include a certification by the entity or entities preparing the plan that the following public involvement activities have taken place: consultations with local government, public meetings in which the losses statements and mitigation planning process are explained, distribution of and public comment on draft mitigation plans, and responses to significant comments.
- (C) The entity or entities preparing each plan shall document how the plan's proposals comply with Sections 4(h)(5)-(6) and (10)(A) of the Northwest Power Act, and the extent to which the plans:
  - (1) Complement the activities of the region's state and federal wildlife agencies and Indian tribes, and in particular how the plans would complement agency or tribal policies or programs to protect or enhance natural ecosystems and species diversity over the long term.
  - (2) Are the least costly way to achieve a biological objective (expressed in habitat units protected, mitigated, or enhanced);
  - (3) Are based on, and supported by, the best available scientific knowledge;
  - (4) Address special wildlife losses in areas that formerly had salmon and steelhead runs that were eliminated by hydroelectric projects (for example, societal and tribal wildlife losses);
  - (5) Protect high quality, native, or other habitat or species of special concern, whether at the project site or not, including endangered, threatened, or sensitive species;
  - (6) Provide riparian or other habitat that may benefit both fish and wildlife;

- (7) Address concerns over additions to public land ownership and impacts on local communities, such as reduction or loss of local government tax base, special district tax base, or the local economic base; or consistency with local governments' comprehensive plans;
  - (8) 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;
  - (9) Mitigate losses in-place, in-kind, where practical. When a wildlife measure is not directly related to a hydroelectric-caused loss, the habitat units protected, mitigated or enhanced by that measure will be credited against mitigation due for one or more hydroelectric projects, including power-related storage or regulatory dams; and
  - (10) Help protect or enhance natural ecosystems and species diversity over the long term.
- (D) Mitigation plans should identify generic mitigation objectives (number of habitat units of a certain habitat type) rather than specific mitigation projects at specific sites. Such plans will be submitted to the Council for review and approval.
- (E) The Council will charter an advisory committee to be chaired by Council staff, with members drawn from the fish and wildlife agencies, Indian tribes, the Bonneville Power Administration, the region's utilities, land management agencies, habitat acquisition groups, and conservation organizations. The wildlife advisory committee will review the mitigation plans from a basinwide perspective, and submit all plans to the Council together with a recommended order of priority for implementation over a period of years. The advisory committee will review the recommendations annually and, if necessary, revise them.

(5) Council Review and Amendments. The Council will review additional loss assessments, mitigation plans for the dams listed in Table 3, and priorities recommended by the advisory committee. The Council will consider amending loss assessments and mitigation plans into the program. Mitigation priorities will be reviewed and accepted, rejected or changed by the Council, but need not be amended into the program. After Council action, Bonneville shall fund implementation as specified in 1003(b)(7) and Table 5.

(6) Agreements. If it is determined, in consultations or in any planning stage throughout the Section 1003(b) process, that a satisfactory level of protection, mitigation or enhancement can be agreed upon by all parties for a particular facility, then the need for further planning will be eliminated.

(7) Bonneville implementation. Bonneville shall implement Council approved mitigation priorities and plans at federal projects through the implementation planning process. In that process, Bonneville will invite proposals for specific measures to achieve the mitigation priorities approved by the Council. Proposed measures will include estimates of capital, operation and maintenance funding needs. In reviewing proposals, the implementation planning process will consider the extent to which proposals would:

- (A) Complement the activities of the region's state and federal wildlife agencies and Indian tribes;
- (B) Be the least costly way to achieve the biological objective;
- (C) Protect or enhance special habitat or species that would not be available unless prompt action is taken; such proposals should be implemented only with the consent of the Council;
- (D) Encourage the formation of partnerships with other persons or entities, which would reduce project costs, increase benefits and/or eliminate duplicative activities;
- (E) Have measurable objectives, such as the restoration of a given number of habitat units;
- (F) Not impose on Bonneville the funding responsibilities of others, as prohibited by section 4(h)(10)(A) of the Northwest Power Act;
- (G) Address special wildlife losses in areas that formerly had salmon and steelhead runs that were eliminated by hydroelectric projects (for example, societal and tribal wildlife losses);
- (H) Protect high quality, native, or other habitat or species of special concern, whether at the project site or not, including endangered, threatened, or sensitive species.
- (I) Provide riparian or other habitat that may benefit both fish and wildlife;
- (J) Address concerns over additions to public land ownership and impacts on local communities, such as reduction or loss of local government tax base, special district tax base, or the local economic base; or consistency with local governments' comprehensive plans;
- (K) 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;

- (L) Mitigate losses in-place, in-kind, where practical. When a wildlife measure is not directly related to a hydroelectric-caused loss, the habitat units protected, mitigated or enhanced by that measure will be credited against mitigation due for one or more hydroelectric projects, including power-related storage or regulatory dams.; and
- (M) Help protect or enhance natural ecosystems and species diversity over the long term.

The Council will review the implementation planning process work plan annually. At least once each year, the chairman of the Council or the chairman's designee will meet with the Administrator to review Bonneville's implementation of the wildlife mitigation plans and determine Bonneville's progress toward achieving the goal established in Section 1003.

(c) Monitoring and Evaluation.

Bonneville shall develop, in consultation with the Council, the fish and wildlife agencies and tribes, utilities and other interested parties a comprehensive program to monitor and evaluate the effectiveness of the wildlife program. The proposed monitoring and evaluation program shall be submitted to the Council for review and approval.

(d) Lower Snake River Compensation Program. The Corps of Engineers is developing and implementing mitigation plans for the Lower Snake River projects. Mitigation plans should be submitted to the Council for review and coordination with other wildlife mitigation activities.

(e) Non-federal projects

Non-federal hydroelectric projects are licensed by the Federal Energy Regulatory Commission (FERC). The Electric Consumers Protection Act of 1986 (ECPA) mandates that the FERC give equal consideration to the protection, mitigation of damage to, and enhancement of wildlife in licensing and relicensing.

In developing license conditions, the FERC should take into account to the fullest extent practicable the standards established in this section, and the measures taken by Bonneville and others to implement this section, and section 1103(a)(2) of this program. In particular, it is important for the FERC to take into account the mitigation projects at federal projects undertaken pursuant to this section, to assure that FERC license conditions are consistent with and complement these wildlife mitigation projects and contribute fully and proportionately to regional wildlife mitigation goals.

The Council will monitor the FERC licensing and relicensing proceedings and comment or intervene where appropriate.

ACTION PLAN: SECTION 1400.

1402. THE REMEDY

\* \* \* \*

Wildlife and Resident Fish

The Action Plan addresses the need to protect, mitigate and enhance wildlife to the extent it has been affected by hydroelectric operation and development. The Action Plan calls for continued mitigation planning; reflects interim goals and a new process for establishing basinwide priorities and implementing approved projects; continues two major mitigation efforts to address the effects of Hungry Horse and Libby dams in Montana; and continued conditions on new hydroelectric development to avoid adverse effects on wildlife.

1403. Action Items.

\* \* \* \*

(8) Develop and implement plans to mitigate hydropower related losses of wildlife.

The wildlife section of the program sets out a means for assessing the extent of hydroelectric effects on wildlife and for developing and implementing mitigation plans to address those effects. Mitigation efforts will be initiated at several projects, including Albeni Falls, Anderson Ranch, Black Canyon, Grand Coulee, Palisades, and the Willamette Basin projects, making use of generic mitigation objectives developed by wildlife agencies and tribes for each project, priorities approved by the Council with advice from an advisory committee, and an implementation process guided by Council standards. Mitigation efforts also will continue in the areas affected by Hungry Horse and Libby dams in Montana. Other mitigation proposals may be reviewed by the Council in future program amendment proceedings. The Council's wildlife coordinator will continue to monitor progress and help schedule implementation. The Council also will continue to support protection of wildlife from new hydroelectric development.

Bonneville Actions

\* \* \* \*

- 8.1 Fund loss statements when needs are identified. [Section 1003(b)(3).]
- 8.2 Initiate consultation on loss statements when the statements are completed. [Sections 1003(b)(3) and (5).]
- 8.3-10 [Change references from Table 5 to Table 4].

\* \* \* \* \*

- 8.11 Fund public involvement activities concerning mitigation plans. [Section 1003(b)(4)(B)].
- 8.12 Fund implementation of mitigation priorities and plans approved by the Council as specified in section 1003(b)(7). [Section 1003(b)(5), (7)].
- 8.13 Develop, in consultation with the Council, the fish and wildlife agencies and tribes, utilities and other interested parties, a monitoring and evaluation program. Submit the proposed program to the Council for review and approval. [Section 1003(c)].

#### Bureau of Reclamation, Corps and FERC Actions

- 8.14 Seek alternatives to finance measures to address non-power wildlife impacts (Bureau and Corps), and to address nonfederal wildlife impacts (FERC). [Sections 1003(b)(4)(A), 1003(d), 1003(e)]
- 8.15 When and where feasible, implement on a voluntary basis, management plans designed to protect wildlife and wildlife habitat identified in Section 1003. [Section 1003(b).]

#### Fish and Wildlife Agencies and Tribes Actions

- 8.16 Identify needs and priorities for development of loss statements and mitigation plans. [Sections 1003(b)(2)-(4).]
- 8.17 Conduct public involvement activities to ensure interested parties are informed and have opportunity to comment on mitigation activities, and certify that appropriate activities have occurred. [Section 1003(b)(4)(B)].
- 8.18 Document how mitigation plan proposals comply with Northwest Power Act sections 4(h)(5)-(6) and (10)(A), and the extent to which the plans satisfy sections 1003(b)(4)(C)(1)-(10).
- 8.19 Submit mitigation plans with generic mitigation objectives (number of habitat units of a certain habitat type) to the Council.
- 8.20 Work directly with non-federal project operators to develop wildlife mitigation plans to address the effects of non-federal projects, as provided in Sections 1003(b)(6) and 1403 (action item 8.16). [Section 1003(b)(6).]

#### Council Action

- 8.21 Contract with an independent party to assess loss estimates. Revise estimates if assessment shows grounds for revision. [Section 1003(b)(1)(A)].

- 8.22 Charter an advisory committee to review mitigation plans from a basinwide perspective and submit all plans to the Council with a recommended order of priority. [Section 1003(b)(4)(E)].
- 8.23 Review additional loss assessments and mitigation plans for dams listed in Table 3, and priorities recommended by advisory committee. Consider amending loss assessments and mitigation plans into the program. [Section 1003(b)(5)].
- 8.24 Review the implementation planning process work plan annually. [Section 1003(b)(7)].
- 8.25 At least once each year, meet with the Administrator to determine progress toward interim goal. [Section 1003(b)(7)].
- 8.26 Monitor FERC licensing and relicensing proceedings and comment or intervene where appropriate. [Section 1003(e)].

Table 3  
Hydroelectric Projects at which Losses Statements,  
Mitigation and Enhancement Plans will be  
Developed Pursuant to Section 1003(b)

**PROJECT OR AREA: COUNCIL CONCERNS**

Bonneville Dam      Emphasis should be placed on identifying losses of wildlife habitat from inundation, erosion and, more recently, the 3-foot fluctuations in pool levels. Wildlife mitigation reports for the second powerhouse developed under the Fish and Wildlife Coordination Act should be the basis for developing future mitigation measures.

Dworshak Dam      The effects on wildlife of the initial inundation and current project operation at Dworshak Dam should be analyzed. In developing the Sections 1003(b)(23)-(34) studies and plans for the Dworshak facility, the following elements proposed by the Nez Perce Tribe will be incorporated:

- (A) Evaluation of the effects of altered water temperature and flow level regimes on aquatic mammals in the mainstem Clearwater River below Dworshak Reservoir;
- (B) Identification of any effects of the hydroelectric operation on osprey and bald eagles downstream from Dworshak Reservoir;
- (C) Evaluation of the impacts of hydroelectric generation on waterfowl production on the mainstem Clearwater River below the confluence of the mainstem and the north fork; and
- (D) Evaluation of the hazards posed to deer and elk by the formation of ice on Dworshak Reservoir.

When preparing the Section 1003(b) studies and plans, all affected parties will coordinate in an effort to incorporate the results of these studies into the mitigation plan developed for the Dworshak facility.

John Day Dam      Public Law 89-298, passed by Congress in 1965, authorized the Corps to acquire land to mitigate losses and enhance wildlife at the John Day Project. Further mitigation, if needed, should be directed toward current dam operations and their effects on wildlife.

McNary Dam      Wildlife agencies believe the adverse effects of McNary Dam have been only partially addressed and that further mitigation is needed. The potential impacts of a new

second powerhouse proposed at McNary Dam are to be addressed under the terms of Section 1100: Future Hydroelectric Development.

Columbia River Gorge  
between the Hood  
and Sandy rivers  
(Hydropower system  
impacts)

Upon completion of the Section 1003(b)(1) studies for the mainstem projects, the U.S. Forest Service (Mt. Hood National Forest), Oregon Department of Fish and Wildlife, and Washington Department of Game will undertake an on-site survey within the Columbia River Gorge to identify wildlife, wildlife habitat and enhancement opportunities. This survey will be completed on both sides of the Columbia between the Hood and Sandy rivers. This survey will be coordinated with the Corps. The development of the survey and resulting recommendations will follow the process explained in Section 1003(b).

Albeni Falls,  
Anderson Ranch  
Black Canyon, Big  
Cliff, Cougar,  
Detroit, Gr. Coulee,  
Green Peter/Foster,  
Hills Creek,  
Lookout Point/Dexter,  
Palisades.

BPA review the mitigation priorities approved by the Council, work with the agencies, tribes, utilities and others to develop specific projects addressing those priorities, and submit proposed projects to the Council as part of the annual implementation work plan.

Ice Harbor,  
Little Goose, and  
Lower Monumental  
projects.

The Council will monitor and review mitigation planning by the Corps under the Lower Snake River Compensation Plan.

Cascade  
Chandler, Chief  
Joseph, Deadwood,  
Minidoka, Roza,  
and The Dalles  
projects.

Complete losses assessments and mitigation planning, and submit to the Council.

Table 4  
Wildlife Mitigation Projects

\* \* \* \* \*

[Delete final paragraph on page 139]

TABLE 5

(Losses are preceded by a "-" symbol, gains by a "+").

## ALBENI FALLS

Species	Total Habitat Units
Mallard Duck	-5,985
Canada Goose	-4,699
Redhead Duck	-3,379
Breeding Bald Eagle	-4,508
Wintering Bald Eagle	-4,365
Black-Capped Chickadee	-2,286
White-tailed Deer	-1,680
Muskrat	-1,756
Yellow Warbler	+171

## ANDERSON RANCH

Species	Total Habitat Units
Mallard	-1,048
Mink	-1,732
Yellow Warbler	-361
Black Capped Chickadee	-890
Ruffed Grouse	-919
Blue Grouse	-1,980
Mule Deer	-2,689
Peregrine Falcon	-1,222 acres*

\*Acres of riparian habitat lost. Does not require purchase of any lands.

## BLACK CANYON

Species	Total Habitat Units
Mallard	-270
Mink	-652
Canada Goose	-214
Ring-necked Pheasant	-260
Sharp-tailed Grouse	-532
Mule Deer	-242
Yellow Warbler	+8
Black-capped chickadee	+68

## PALISADES

Species	Total Habitat Units
Bald Eagle	-5,941 breeding -18,565 wintering
Yellow Warbler/	-718 scrub-shrub
Black Capped Chickadee	-1,358 forested
Elk/Mule Deer	-2,454
Waterfowl & Aquatic Furbearers	-5,703
Ruffed Grouse	-2,331
Peregrine Falcon*	-1,677 acres of forested wetland -832 acres of scrub-shrub wetland +68 acres of emergent wetland

\* Acres of riparian habitat lost. Does not require purchase of any lands.

WILLAMETTE BASIN PROJECT

Species	Total Habitat Units
Black-tailed Deer	-17,254
Roosevelt Elk	-15,295
Black Bear	-4,814
Cougar	-3,853
Beaver	-4,477
River Otter	-2,408
Mink	-2,418
Red Fox	-2,590
Ruffed Grouse	-11,145
California Quail	-2,986
Ring-necked Pheasant	-1,986
Band-tailed Pigeon	-3,487
Western Gray Squirrel	-1,354
Harlequin Duck	-551
Wood Duck	-1,947
Spotted Owl	-5,711
Pileated Woodpecker	-8,690
American Dipper	-954
Yellow Warbler	-2,355
Common Merganser	+1042
Greater Scaup	+820
Waterfowl	+423
Bald Eagle	+5693
Osprey	+6159

GRAND COULEE

Species	Total Habitat Units
Sage Grouse	-2,746
Sharp-tailed Grouse	-32,723
Ruffed Grouse	-16,502
Mourning Dove	-9,316
Mule Deer	-27,133
White-tailed Deer	-21,362
Riparian Forest	-1,632
Riparian Shrub	-27
Canada Goose Nest Sites	-74

NORTHWEST POWER PLANNING COUNCIL  
FINAL WILDLIFE AMENDMENTS  
SUMMARY AND RESPONSE TO COMMENTS

November 9, 1989

1. Introduction.

Wildlife mitigation at Columbia River Basin hydroelectric dams is required under the Northwest Power Act. In September 1988, the Council distributed a wildlife issue paper discussing various wildlife mitigation issues. The Council invited comment on the issue paper and held a number of consultations and discussions with interested parties through July, 1989. In July, 1989, the Council proposed a number of wildlife amendments to the fish and wildlife program. Between July and September 30, 1989, hearings were held in the four Northwest states, and a number of consultations were held. More than 1,000 written comments were submitted on the issue paper and proposed rule. Below, the Council responds to comments on major issues.

The comments reflect a broad recognition that the Northwest Power Act's mandate must be and should be carried out. Said one electric utility, "Owing to the benefits of the hydroelectric system that Salem Electric's customers have received for nearly five decades, the Board recognizes the moral and legal obligation to compensate for the damage to wildlife habitat caused by the hydroelectric dams . . . ."

At the same time, commenters saw that there are few easy answers in determining how this obligation should be met. As one commenter put it:

I grew up in Vancouver, Washington, and all those wonderful dams meant two things to me: no more devastating floods like "Vanport," and cheap electricity. Now that I am older I realize that while those two advantages are very real and very wonderful, they were not free, or even inexpensive.

Wildlife lost homes, and lives. Wildlife gone forever is a human loss, too; we as a species are diminished as we destroy the wild places and the animals and birds who lived here. Yet we will increase in numbers, we will use more of our natural resources \* \* \*. What difficult choices we must face.

There was no substantial disagreement among commenters that funding for wildlife mitigation should not be at the expense of an economical power system. Many commenters addressed the potential costs of a wildlife program, rate impacts, and economic effects. The program adopted by the Council is designed to assure an adequate, efficient, economical, and reliable power system, and a cost-effective wildlife program.

Finally, there was little dispute among commenters that wildlife mitigation should begin, and that further planning and analysis should not delay the start of on-the-ground activities.

In the following, the Council addresses these and other major comments in further detail.

## 2. Net wildlife losses.

### Comments:

There was general agreement that the Habitat Evaluation Procedure (HEP) is the best available scientific method for evaluating wildlife habitat losses. The Nature Conservancy said that natural heritage data bases available in each state would help in determining losses by habitat type.

The Grand Coulee mitigation plan acknowledges that there were some gains for some species because of Lake Roosevelt, but says they are negligible. Comments of utilities, farmers, and surrounding communities said, however, that gains were substantial.

As a general matter, the loss estimates do not assess irrigation impacts on wildlife, which many utility commenters and Columbia Basin irrigators believe were positive, and which agency and tribal biologists believe were negative. The Upper Columbia United Tribes (UCUT) submitted substantial scientific literature indicating no net benefits, but many people living in neighboring areas, and the Pacific Northwest Utilities Conference Committee (PNUCC) panel of wildlife biologists said that there were increases.

A PNUCC wildlife panel provided a list of mitigation projects that have already been undertaken in connection with some projects. The wildlife agencies say that all this mitigation is attributable to non-hydropower project purposes.

The loss statements do not consider cumulative wildlife losses that have occurred since the time of inundation; nor do they consider whether losses would have resulted from development other than inundation. The Pacific Northwest Utilities Conference Committee (PNUCC) urged the Council to evaluate what might have happened to the habitat if it hadn't been flooded. Dr. Adrian Farmer, a leading national expert on HEP from the U.S. Fish and Wildlife Service, said that such an analysis would be highly judgmental, and would not be based on a defined methodology. Wildlife agencies and tribes said that if this type of analysis were undertaken, they would want to evaluate the cumulative wildlife losses since inundation. The Army Corps of Engineers said that they typically do not perform either kind of analysis in their impact studies, and assume that the two would likely cancel each other out.

Commenters also noted that the loss estimates do not address operational and other losses not associated with dam construction and inundation.

### Response:

The Council found that questions regarding the reasonableness of the estimates should be assessed by an independent expert, but without delaying the

start of mitigation efforts. An independent consultant should: (1) review the methods and data used in the loss estimates, to be sure that gains are adequately identified and past mitigation is adequately accounted for; (2) propose alternatives for balancing gains, mitigation, and losses among different species; and (3) provide an opinion whether wildlife gains and losses from irrigation are likely significant. The reviews should be a spot-check rather than an in-depth review or re-study. The consultant should determine whether any oversights or omissions would materially change the loss estimates, and whether there is significant risk that mitigation efforts over the next ten years would go beyond net losses. The consultant may find the natural heritage data bases of assistance in checking the loss estimates.

The consultant's conclusions will be considered by the Council. If mid-course corrections in the wildlife program are needed, the Council can make corrections then. Meanwhile, the loss estimates will be used as a starting point, and mitigation activities will proceed.

Based on the record in this rulemaking, the Council does not believe it would 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.

Operational and other losses were not addressed by the proposed amendments, and are beyond the scope of this proceeding.

### 3. The goal.

- a. What does it mean to "accept" the loss statements and mitigation plans as a starting point?

#### **Comments:**

A commenter said that it is unclear what the Council means when it proposes not to adopt the losses estimates, but to accept them as a starting point. Bonneville suggested "accept" be replaced with "will use", to clarify that the loss estimates will be the basis for action. Commenters also sought to interpret "as a starting point". The Corps thought the habitat units in the loss estimates were necessarily "ball park" numbers rather than precise targets. The Upper Columbia United Tribes (UCUT) interpreted this to mean that losses may be studied further, and mitigation may be expanded.

#### **Response:**

The loss estimates in Table 5 of the amendments are based on a disciplined process that the Council believes reflects the best available scientific knowledge. The estimates nevertheless involve considerable judgment, and should be understood in that light. The loss estimates are not "the last word" on what actually was lost, nor is it possible to arrive at precision in making such an estimate. Those who prepared the loss estimates have nevertheless done a great deal of the work needed to develop an estimate in which the region can have confidence. An independent consultant should either confirm that confidence, or turn up areas in which there are either over- or under-

estimates. In the meantime, the Council believes that the estimates are sufficient evidence of losses to begin on-the-ground mitigation activities.

b. Allocation formula.

**Comments:**

There was support for the idea that ratepayers should pay no more than their share of wildlife mitigation, but no consensus on how this share should be determined. Wildlife interests generally favored 100% ratepayer-funded mitigation or the reimbursement-from-power-revenues approach, while the utilities and Bonneville insisted that only the joint capital cost approach is consistent with the Northwest Power Act. Bonneville also suggested that the choice of an allocation formula should be Bonneville's. The Corps would use the joint capital cost approach for development costs, and joint operating costs for operation and maintenance costs. PNUCC would add the loss estimates into a basin-wide number derived through the joint capital costs method, which the Council may allocate around the basin. One commenter said "Individuals familiar with the repayment costs of federal projects are aware that power and irrigation 'pay back' costs were subsidized by inflated assessments to the federal government for flood control and recreation. I therefore do not support the proposed rule that compensation should be based only on a portion of the repayment costs from power and irrigation users." Another commenter said, "You have tremendous flexibility in defining 'mitigation.' You could ignore all numbers relating to losses."

**Response:**

The Council has found it unnecessary to attempt to resolve the debate over allocation formulas. The Council's job is to determine what mitigation is due. In the course of the Council's consultations, it became clear that the utilities do not dispute that the federal power system is responsible for approximately one-half of the wildlife damage caused by the federal hydroelectric projects. Table 5 shows those losses. By setting a goal of addressing 35% of the total losses for the interim, ten-year period, wildlife mitigation will not go beyond any definition of the power system's responsibility. The Council is arranging a review by an independent consultant to address criticisms of the loss estimates, and the loss estimates could change based on that review. There is no need at this time to settle on a particular method for determining how much mitigation may ultimately be due, particularly because not all mitigation plans have been submitted to the Council.

In order to equitably distribute mitigation projects among the various hydroelectric projects, mitigation at any one project should not exceed the total wildlife losses at the project multiplied by the "Percent of Total Returnable From Power Revenues" for each project as listed in Schedule A of the Bonneville Annual Report.<sup>1</sup> The Council intends these percentages to establish

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1/ The Bonneville Annual Report does not list separately these percentages for some Bureau of Reclamation projects. To establish its interim goal, the Council intends that the percentage applicable to the following Bureau projects be as follows: Anderson Ranch, 52.9%; Black Canyon, 52.9%;  
(Footnote 1 Continued on Next Page)

a framework within which mitigation can proceed without disputes over how much mitigation associated with each project may be undertaken.

In short, the Council does not believe that the debate over allocation formulas needs to be resolved at this time. For purposes of the interim program, two limits will apply: (1) no more than the "Percent of Total Returnable From Power Revenues" should be implemented for any given hydroelectric project; and (2) the interim program as a whole should aim for approximately 35% of total basinwide losses. Determining the power system's ultimate wildlife responsibility is left for the future.

c. "Up to" 35% of the lost habitat units.

**Comments:**

Some commenters said that "up to" a portion of (now determined to be 35%) the lost habitat units provides no guidance on the pace of the effort, but only establishes a ceiling on mitigation. Some suggested "at least" would be more appropriate than "up to".

Other commenters said that the Council should set a per-project goal, to ensure that mitigation is spread throughout the region, so a few projects do not garner a disproportionate share. The Yakima Tribe urged that there be opportunities for off-site mitigation.

**Response:**

The Council amended the rule to replace "up to" with "approximately" to express the Council's intention that wildlife mitigation should aim to achieve approximately 35% of the lost habitat units over the ten-year period. If implementation proves more difficult than we anticipate because of biological uncertainties or institutional obstacles, the Council does not intend to insist that exactly 35% the losses be addressed. In other parts of the rule, the Council has provided that Bonneville should have flexibility in funding these efforts year-to-year. At the same time, it is not the Council's intention that wildlife efforts should aim to achieve somewhere between zero and 35% of the lost habitat units. Thirty-five percent should be the goal.

The Council did not require that the interim goal be tied to each project. Although making the goal project-specific would spread the program's benefits evenly, it would be a much more rigid goal. Mitigation standards requiring special consideration for blocked areas, and in-place and in-kind mitigation should help ensure that mitigation is generally in proximity to the site of the loss, especially in areas that have experienced special losses. The Council did not preclude off-site mitigation where especially important species or habitats are involved. The Council intends that any off-site mitigation be credited against the losses of a specific dam.

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(Footnote 1 Continued from Previous Page)

Cascade, 52.9%; Chandler, 6.2%; Deadwood, 52.9%; Minidoka Dam, 77.4%; Palisades Dam, 43.2%; Roza, 4.1%.

- d. Should habitat units be used to establish the goal and an accounting system, or should the goal be based on wildlife priorities and opportunities?

**Comments:**

PNUCC and others suggested that a further process be undertaken, using cover types to define wildlife impacts, and defining high priority measures to address those impacts. PNUCC said that acres, not habitat units, should be used to set program goals and accounting. The Nature Conservancy suggested that Table 5 list cover types associated with the listed indicator species. The Corps suggested that goals be set for specific species in specific subbasins.

**Response:**

The process established by the amendments should identify high priorities and good opportunities. While cover types might be a useful way to approach this problem, cover types might have to be reconverted to habitat units or otherwise adjusted for accounting purposes. The Council doubts that coming to agreement on using acres and cover types instead of habitat units would be as easy as some commenters predict and has, accordingly, continued to express losses solely in terms of habitat units.

- e. Losses for Cascade, Deadwood, and American Falls reservoirs.

**Comments:**

The amendments call for mitigation for Cascade and Deadwood reservoirs in principle, and for loss estimates to be developed for the projects. Bonneville commented that it does not consider Cascade and Deadwood to be part of the Federal Columbia River Power System, and would not fund mitigation for these projects. The Shoshone-Bannock Tribes urged the Council to include American Falls reservoir in the program.

**Response:**

Authorizing legislation and legislative history indicates that the Cascade and Deadwood projects were authorized in part for power purposes. Bonneville offered no documentation of its contrary position. The Council may review this question further if Bonneville produces information showing that these projects should not be included in Bonneville-funded work.

The Council did not propose to include American Falls in the draft rule. Although American Falls may have been authorized for power purposes, it has never had a generator and evidently is not considered a power storage or regulatory dam. The Council will review American Falls further if new information is produced showing that American Falls should be included.

- f. A stronger biological theme for the wildlife program.

**Comments:**

Some suggested that the proposed wildlife rule lacks a guiding theme, or vision -- is the wildlife program a series of disconnected habitat measures, or does it have a coherent biological principle to guide it?

**Response:**

The projects flooded ecosystems -- land that supported a diverse collection of interdependent species. Several of the standards in the proposed rule (provide riparian habitat for fish and wildlife, protect high quality native habitat, endangered species) can be seen as attempting to address the concern for species diversity. The Council has changed the rule to more directly encourage projects that help protect or enhance natural ecosystems, and promote species diversity.

- g. Non-hydropower mitigation at federal projects.

**Comments:**

Several commenters suggested that the Council acknowledge that the Council is not addressing the wildlife impacts of non-hydropower project purposes, and commit to explore options to address these impacts.

**Response:**

Recognizing that there are significant wildlife losses associated with the nonpower purposes of the federal dams, the Corps of Engineers and the Bureau of Reclamation should seek alternatives for funding mitigation to address the full scope of wildlife losses. The Action Plan, section 8.14, has been amended to reflect this. The Council will cooperate with the Corps, the Bureau, and others to identify alternatives.

**4. The process.**

- a. Public involvement in mitigation plan development.

**Comments:**

Bonneville supported the idea of public involvement in developing mitigation plans, but questioned whether more public involvement was needed in the plans for Anderson Ranch, Black Canyon, Grand Coulee, Palisades, and the Willamette Basin.

**Response:**

The Council agrees that over the course of this rulemaking, there has been substantial involvement of interested parties in areas surrounding these projects. However, the Council also believes that further efforts should be made to explain the mitigation planning process in local areas, and to give local

residents an opportunity to comment. The Council does not believe that a great deal of time or money will be required to do this.

b. Mitigation standards:

1) Are the standards requirements or considerations?

**Comments:**

Some commenters were confused about the significance of the standards. Some of the considerations (that proposals: complement wildlife agencies' and tribes' activities; represent the least costly way to achieve biological objective; be based on best available scientific knowledge; and not require ratepayers to assume obligations of other agencies) are based on the Act's requirements. Yet these statutorily-based standards were treated the same as other considerations that are not statutory requirements. Does the Council intend that all the standards should have the same weight?

**Response:**

The statutory standards are mandatory. The non-statutory standards are not mandatory, but are subjects that must be addressed in writing in any wildlife proposal. Once the non-statutory criteria are addressed, the Council, the advisory committee, and the implementation planning process have a basis for evaluation, but failing to satisfy one or more non-statutory standards would not disqualify a proposal.

2) Native habitat and endangered species.

**Comments:**

Some commenters suggested that the standard favoring high quality native or other habitat or species of special concern could lead to protection of isolated parcels. These commenters suggested that the program should be focussed more broadly, to favor actions that contribute to species diversity and make sense from an ecological perspective. On the other hand, there was widespread support for the standard as drafted, especially from conservation groups.

**Response:**

This standard reflects biological concerns that the Council believes should not be overlooked in the mitigation process. When viewed in the context of a concern for ecosystems and species diversity, this standard should not lead to fragmented mitigation actions.

The Council eliminated references to those who "determine" threatened, endangered, or other species. The Council did not want to imply authority to "determine" species to be sensitive where there is no such authority under existing law.

3) Riparian land benefiting both fish and wildlife.

**Comments:**

Some commenters said the standard favoring projects that provide riparian or other habitat that help both fish and wildlife tilts the amendments toward fish at the expense of wildlife. These commenters said the fish and wildlife program is already skewed toward fish, and the Council should delete this standard.

**Response:**

It is not the Council's intention to bias the program for fish and against wildlife. This standard should help ensure that the broad ecological benefits of riparian land are given full consideration.

4) Management agreements and enhancement of public land in preference to land acquisition.

**Comments:**

Commenters had a variety of concerns over the proposed preference for using public lands or management agreements rather than private land acquisition:

- Public lands are committed to various purposes by statute, which may preclude exclusive wildlife management on public land. Accordingly, there may be problems using public land not already devoted to wildlife.
- Enhancement of public land and management agreements could result in temporary rather than enduring wildlife measures. Short-term measures may be more less cost-effective than long-term measures.
- Land acquisition is sometimes the most desirable approach, according to many conservation organizations, land acquisition groups, and utilities involved in wildlife mitigation.
- Precluding land acquisition would be inconsistent with the Northwest Power Act.

**Response:**

The Council's intention in adopting this standard is not to preclude private land acquisition, but to ensure that all alternatives to land acquisition are considered first, and if land acquisition is proposed, it be justified. Management agreements and enhancement of public land should be cost-effective, and structured to achieve long-term benefits, and the Council has changed the rule to emphasize this. Measures that have short term gains should not be preferred to measures with long-term benefits, even if the latter involve land acquisition.

5) Additional standards for consideration in the implementation planning process.

**Comments:**

PNUCC commented that some of the standards proposed for the process of setting basinwide priorities were more suitable to the implementation planning process.

**Response:**

The Council added standards 4 through 9 of section 1003(b)(4)(C) to the list of standards applicable to the implementation planning process.

c. The advisory committee.

**Comments:**

Many commenters supported the idea of an advisory committee, and urged that they be included on it. The wildlife agencies and tribes do not see the need for the advisory committee, but said they would participate on such a committee if the Council charters one. They also intend to make recommendations directly to the Council, reflecting their special status under the Northwest Power Act. Some commenters saw the advisory committee as a way to build in local public involvement, while others saw it as advising the Council on wildlife priorities from a basinwide perspective.

**Response:**

The rule calls for a policy-level committee to advise the Council on priorities among generic wildlife objectives from a basinwide perspective. The committee will be non-voting, will be encouraged but not mandated to achieve consensus, and policy disagreements should be brought to the Council. The mitigation plans for each project would have been subjected to local review and comment before they reached the advisory committee.

The Council will, of course, give due consideration to the recommendations, expertise, and legal rights and responsibilities of the wildlife agencies and Indian tribes in the course of considering basinwide wildlife priorities.

The Council changed the proposed rule to make clear that all mitigation plans submitted to the advisory committee, regardless of priority, are also submitted to the Council.

The Council will determine the membership of the advisory committee in its usual manner, by reviewing and approving an appropriate committee charter.

## 5. Implementation.

### a. Operation and maintenance funding.

#### Comments:

Some commenters were unsure whether Bonneville funding for wildlife measures would include operation and maintenance funds.

#### Response:

Because the Council believes the amendments are already clear that Bonneville should fund operation and maintenance in connection with wildlife mitigation, the Council made no change in the final amendments. Bonneville funding for operation and maintenance costs was implicit in the draft rule, particularly in the provision calling for mitigation proposals to include estimates of operation and maintenance funding needs. In addition, the preference for enhancement of public land and private management agreements, which could only be characterized as operation and maintenance activities, implies the same.

### b. Monitoring, evaluation, and accounting: credit to be given for various wildlife measures.

#### Comments:

Commenters strongly supported monitoring and evaluation requirements generally.

One person noted that the mitigation plans (which propose specific wildlife measures) propose to give varying credit to ratepayers for various wildlife measures, but the plans do not appear to do this consistently.

#### Response:

The Council has not proposed to approve the proposals contained in the mitigation plans, so there is no need for the final amendments to address the problem of crediting on a plan-by-plan basis. The Council intends that Bonneville develop an accounting system as part of the evaluation program, which is consistent with the wildlife program's goal. The system should be submitted to the Council for review and approval.

## 6. Transmission line impacts.

#### Comments:

The program currently calls for Bonneville to negotiate agreements with the states regarding transmission corridors and their impacts on wildlife. Such agreements have been negotiated, and the draft rule proposed to delete this provision from the program. Some commenters said that continuing Council oversight is advisable.

**Response:**

The Council made no change in the draft rule. The Council can always review the agreements and any problems as they arise.

**5. Nonfederal projects.**

**Comments:**

The draft rule called on Bonneville to fund wildlife mitigation at federal projects, but not at nonfederal projects. For nonfederal projects, FERC would take into account the program's standards, the measures Bonneville and others take to implement the program, and the program's guidelines for wildlife mitigation in section 1103(a)(2) of the program.

The FERC, the Mid-Columbia PUDs and several other utilities supported the Council's proposal. The FERC said "We will take into account, to the fullest extent practicable, the wildlife mitigation standards developed in this amendment when licensing non-federal projects in the basin. The wildlife mitigation goals developed for the Columbia River Basin will be considered by the Commission under the comprehensive planning responsibility described in the Electric Consumers Protection Act and sections 10(a)(1) and 10(a)(2) of the Federal Power Act."

However, others suggested that it was the Council's responsibility to lead wildlife mitigation at both federal and nonfederal projects, and not to rely solely on FERC processes. These commenters thought the Council proposal would result in looser standards for nonfederal projects as compared to federal projects. A commenter observed that there are nonfederal projects that are not within FERC's licensing jurisdiction, and that it was important for these projects not to fall between regulatory cracks.

The Salish and Kootenai Tribes of the Flathead Reservation asked that the Council acknowledge that the Tribes are preparing a plan to address losses and mitigation needs for Kerr Dam, and that "access" to the Council should be provided when the plan is completed, to avoid the need for a rule-making.

**Response:**

The proposed rule provided standards for FERC to follow in setting wildlife conditions, but would not address each dam specifically. The Council made no change in the proposed rule. The Council calls on the FERC to take into account to the fullest extent practicable the standards adopted in the final rule, the measures taken by Bonneville and others to implement the final rule, and section 1103(a)(2) of the program. The Council is particularly concerned that FERC-ordered mitigation be consistent with this wildlife program, and contributes fully and proportionately to regional wildlife goals. If problems arise at individual projects, the Council may intervene to assert its concerns.

As for projects not within FERC's (or the Corps', the Bureau's, or Bonneville's) jurisdiction, the Council will examine this problem further outside the confines of this rulemaking.

The Council's action implies that any plan for Kerr Dam should be handled through FERC proceedings.

#### 8. Operational impacts of Libby project.

**Comments:**

A commenter observed that the operational impacts of Libby Dam, where river levels in Idaho fluctuate sharply, have not been addressed.

**Response:**

This subject was not addressed in the proposed rule, and cannot be addressed in the final rule without a further notice and comment period. Operational impacts of the projects are covered by the Northwest Power Act, and may have to be addressed later.

#### 9. Costs.

**Comments:**

A number of commenters expressed concerns over the costs and rate impacts of the proposed wildlife program, and urged the Council to spread costs among hunters and others who benefit from wildlife. Several commenters advocating a broad wildlife program said that their analyses showed no rate impact, and economic benefits for areas in the vicinity of wildlife mitigation projects.

**Response:**

Bonneville expenditures to comply with the proposed actions can be estimated only roughly, especially because Bonneville would have flexibility in year-to-year funding. In addition, it is likely that the wildlife program will start at a lower level and increase over time. We estimate that slightly less than \$5 million per year would be needed to fund the projects now before the Council. If additional plans are accepted by the Council later, this could rise to \$10-12 million per year over ten years. Although the rate impacts of these costs will be worked out in the context of a Bonneville rate case, the Council believes the impacts will be very small. The Council finds that the wildlife amendments assure the region of an adequate, efficient, economical, and reliable power supply.

While the Council can address only the impacts of hydroelectric facilities and programs, and cannot impose costs on hunters and others who benefit from wildlife, it is important to remember that the Council's wildlife program is only one of several wildlife habitat programs in the region. Others, such as the U.S. Fish and Wildlife Service, the state wildlife agencies, the tribes, and the U.S. Department of Agriculture, conduct separately-funded wildlife programs. Much of the funding for state and federal wildlife programs comes from proceeds of ammunition and hunting weapon sales, and license revenues. The Nature Conservancy, the Trust for Public Lands, the Rocky Mountain Elk Foundation, and other private, non-profit groups operate primarily with members' donations and grants. Combined funding under these government and private programs

can be expected to exceed ratepayer funding under the Council's wildlife program by a wide measure. Ratepayers will shoulder their share of wildlife mitigation, but these other funding sources will continue to play a significant role. In implementing the wildlife program, the Council encourages the formation of partnerships with these and other programs to reduce project costs, increase benefits, and avoid duplication.

#### 10. Imperative language.

##### Comments:

A commenter said that it found the Council's use of the word "shall" to give the misleading impression that the Council directs Bonneville's activities.

##### Response:

The Council uses the word "shall" in the sense that word is given in section 104 of the fish and wildlife program. The Council recognizes that the program must be implemented in accordance with the substantive and procedural requirements of the Northwest Power Act and other statutes under which Bonneville operates.

#### 11. Overlap with Corps programs.

##### Comments:

Some commenters said that they were not effectively included in planning for the Lower Snake River Compensation Program, and they wished to be better involved.

The Corps said they would like to see a procedure for accounting for Corps obligations versus Bonneville obligations, to ensure that the two sets of programs do not become "intermeshed".

##### Response:

In this rulemaking, the Council proposed to identify on an interim basis the ratepayers' responsibility for federal hydropower projects. The Lower Snake Compensation program is separately authorized by Congress to address more than just the effect of power facilities and programs. The Council has not proposed a specific way to separate wildlife mitigation funded by ratepayers from mitigation funded by the Corps. Nevertheless, mitigation under the Council's program should be coordinated with the Lower Snake program. The Council has called for the Corps to submit reports to the Council, and all interested parties will be included in the Council's process.

## 12. Trust funds.

### Comments:

A number of utility commenters said that they support the idea of wildlife trust funds, which the proposed amendments would allow. The Nez Perce Tribe also supported the idea of trust funds where appropriate.

### Response:

The Council retained the provision of the proposed amendments permitting trust funds and other innovative financing arrangements, where appropriate agreements are reached.

# NORTHWEST POWER PLANNING COUNCIL

TOM TRULOVE  
CHAIRMAN  
Washington

R. Ted Bottiger  
Washington

John C. Brenden  
Montana

Stan Grace  
Montana

851 S.W. SIXTH AVENUE • SUITE 1100  
PORTLAND, OREGON 97204-1348 • (503) 222-5161

Toll free number for Idaho, Montana & Washington: 1-800-222-3355

Toll free number for Oregon: 1-800-452-2324

JAMES A. GOLLER  
VICE CHAIRMAN  
Idaho

Robert (Bob) Saxvi  
Idaho

Ted Hallock  
Oregon

Norma Paulus  
Oregon

## CONCURRING STATEMENT OF COUNCIL MEMBERS STAN GRACE AND JAMES GOLLER

I recognize that the adopted final rule, as well as the response to comments regarding amendments recently approved, is a positive result of a long and arduous effort to accommodate a range of concerns and interests. The rule as passed is intended to be reasonable and flexible, while additionally providing the necessary checks and balances to mitigate wildlife losses it is intended to address in a fair and equitable manner. The rule does not relieve the Council of constant vigilance in pursuing implementation of its purposes.

The rule's provision for full Council review determining the merits of individual projects prior to requesting their implementation by the Administrator of the Bonneville Power Administration gives good indication of the importance placed by the Council on the prudent distribution of mitigation resources. Further flexibility is provided by the latitude given the Administrator by the Pacific Northwest Electric Power Planning and Conservation Act to make cost allocations among various hydropower projects and purposes.

The point of these remarks is to emphasize the need for present and future Council members as well as BPA Administrators to diligently pursue the opportunities the rule provides to address real wildlife needs. If hydropower-related losses no longer exist due to previous mitigation efforts, regardless of their originating agencies or funding mechanisms, then further mitigation on these projects becomes an inappropriate attempt to solve the problem addressed by this rule.

All federal, state and tribal agencies submitting mitigation plans should do so with a sincere desire to solve existing hydro-related wildlife losses. The Council's wildlife program should not be seen as simply another source of funding for fish and wildlife agencies. Money spent under the Council's program should be used solely for the effective mitigation of hydro-related losses.

We also should keep a sharp eye on the relationship between this program and other wildlife mitigation programs. Wildlife mitigation under this rule should not be funded unless there are genuine wildlife needs that are hydropower related and are not addressed by other programs. The "in-lieu" provisions of the Act make clear that ratepayer funds should not be used to compete with, let alone supplant, other wildlife programs.

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TOM TRULOVE  
CHAIRMAN  
Washington

R. Ted Bornger  
Washington

John C. Brenden  
Montana

Stan Grace  
Montana

851 S.W. SIXTH AVENUE • SUITE 1100  
PORTLAND, OREGON 97204-1348 • (503) 222-5161

Toll free number for Idaho, Montana & Washington: 1-800-222-3355  
Toll free number for Oregon: 1-800-452-2324

AMES C. COLLIER  
VICE CHAIRMAN  
Idaho

Robert (Bob) Savvik  
Idaho

Ted Hallock  
Oregon

Norma Paulus  
Oregon

## DISSENTING STATEMENT BY COUNCIL MEMBER JOHN C. BRENDEN REGARDING WILDLIFE MITIGATION RULE

This statement is intended to make known the reasons for my vote against the proposed wildlife mitigation amendment on October 11, 1989.

I recognize that the region's hydroelectric system has impacted wildlife and wildlife habitat. However information presented to the Council on the extent and severity of that impact was not conclusive. After hearing testimony from local landowners in the region -- people whose families have lived on the land for decades -- I am not convinced that we didn't have net increases in wildlife populations rather than net losses in many instances. I also speak from personal experience on this issue, having seen wildlife populations on my farm grow significantly over the past 40 years.

I am also very concerned about cost. Bonneville Power provides a lifeline of electricity to the people and businesses of the Pacific Northwest, and the cost of that electricity directly affects our economic health. Every additional financial burden that Bonneville is saddled with is passed on to the region's ratepayers, and comes out of their pocketbooks. In the case of paying for wildlife mitigation, we aren't certain how much the total cost will be. The Council staff's "best estimate" was admittedly a very rough, rough figure of between \$10 and \$12 million a year. I believe that it makes poor business sense to obligate ratepayers for an unknown amount of money over an uncertain period of time, with little assurance of what the results will be. The Montana wildlife trust concept is still the best way to proceed. We know how many dollars and for how long.

For instance, Bonneville spent approximately \$645 million on fish and wildlife between 1981-87. According to the agency's 1990 Congressional budget request, Bonneville expects to have spent another \$333 million in this category by 1994. This means that the region's ratepayers will have invested nearly \$1 billion for fish and wildlife, and we are still not sure what there will be to show for it. Indications today are that the Council's goal of doubling the anadromous fish runs is too optimistic. I wonder just how many more fish we will get for this huge investment. If we cannot redouble the run, will we just keep on doubling and redoubling the amount of money for the effort?

The question is whether it is reasonable to spend these large sums of money with so little assurance of what the end product will be. We have to remember who pays the bills. Ratepayers are not only individual homeowners, but large and small businesses that are equally vulnerable to rate increases. The aluminum companies and other manufacturing industries, for instance, are ratepayers themselves, and they employ individuals that are ratepayers. Through escalating electricity prices, we run the risk of putting

these industries and their thousands of workers out of business and out of jobs.

Cost increases in fish and wildlife proposals are not unusual. For example, we have seen cost estimates for the proposed Umatilla hatchery go from \$4 million up to a \$16 million facility, plus annual operating costs of \$1.5 million. And I would not be surprised if the hatchery ends up costing more than \$16 million! I also understand that the Nez Perce hatchery proposal, which started out at about a \$2 million cost, has been increased to a \$6 million facility. These are only two examples, but I believe that today's projections on the costs of wildlife mitigation will follow the same path. . . up!

Another important issue to me is the economic impact of further land acquisition by the public sector. The states and the U.S. government already own over 52% of the land in Oregon, 36% in Washington, 36% in Montana, and 68% in Idaho! This does not include all the private lands that are being purchased by other private fish, wildlife and environmental groups. Buyouts of private land for wildlife habitat or other amenity purposes impact the local tax base, and remove the opportunity to increase the economic development capacity of that area. I believe that wildlife mitigation should concentrate on enhancing the already existing large tracts of public land. Acquisition of private land should be the last resort, and the least amount of acreage possible.

One further concern I have relates to the Advisory Committee to be established to review wildlife proposals and make recommendations to the Council. I believe that representation within this group must balance the interests of both the public and private sector. The committee structure as proposed in the rule did not provide for equal input from all interests. For example, I would not like all members to be from the agency side, nor would I want all members to be from the private sector.

Although the Council adopted a rule that I am very disturbed and concerned about, I believe it is now up to the Council and Bonneville to implement the rule in the most cost-efficient and well-managed manner. This is the least we owe to the ratepayers in the region.

PACIFIC NORTHWEST ELECTRIC POWER AND  
CONSERVATION PLANNING COUNCIL

AGENCY: Pacific Northwest Electric Power and Conservation Planning Council (Northwest Power Planning Council).

ACTION: Notice of final wildlife amendments to the Columbia River Basin Fish and Wildlife Program and the Northwest Conservation and Electric Power Plan.

SUMMARY: On November 15, 1982, pursuant to the Pacific Electric Power Planning and Conservation Act (the Northwest Power Act, 16 U.S.C. section 839, et seq.) the Pacific Northwest Electric Power and Conservation Planning Council (Council) adopted a Columbia River Basin Fish and Wildlife Program (program). The program has been amended from time to time since then.

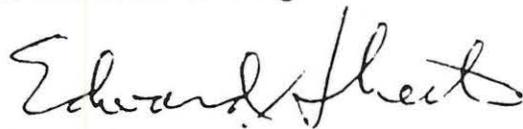
On July 13, 1989 the Council voted to initiate proceedings pursuant to section 4(d)(1) of the Northwest Power Act to amend the program's wildlife measures. Appropriate notices of the proposed amendments were published in the Federal Register and distributed through the Council's mailing lists and newsletters. In September, public hearings were held in: Coeur d'Alene, Twin Falls, and Boise, Idaho; Kalispell, Montana; Portland, Oregon; and Seattle, Washington. Consultations were held with interested parties, and written comments were received through September 30, 1989.

At its October, 1989 Council meeting, the Council adopted certain amendments to the program. On November 9, 1989, the Council adopted final amendments, action plan amendments, and a response to comments. These amendments:

- Authorize the use of loss estimates as evidence of wildlife losses for an interim, 10-year mitigation program.

- Call for a review of the loss estimates by an independent party.
- Establish an interim goal of addressing 35% of total wildlife losses due to the federal hydropower dams over the next 10 years.
- Call for mitigation plans and proposals to be evaluated against certain standards.
- Set procedures for developing future mitigation plans with public involvement.
- Call for an advisory committee to recommend mitigation priorities to the Council.
- Call for the Bonneville Power Administration to fund implementation of wildlife mitigation plans.
- Establish guidelines for wildlife mitigation at nonfederal hydropower projects.

FOR COPIES OF THE FINAL AMENDMENTS, THE RESPONSE TO COMMENTS, OR FOR FURTHER INFORMATION: Contact the Council's Public Involvement Division at 851 S.W. Sixth Avenue, Suite 1100, Portland, Oregon 97204 or (503) 222-5161, toll free 1-800-222-3355 in Idaho, Montana, and Washington or 1-800-452-2324 in Oregon.



Edward Sheets,  
Executive Director