

# 1984

Columbia River Basin

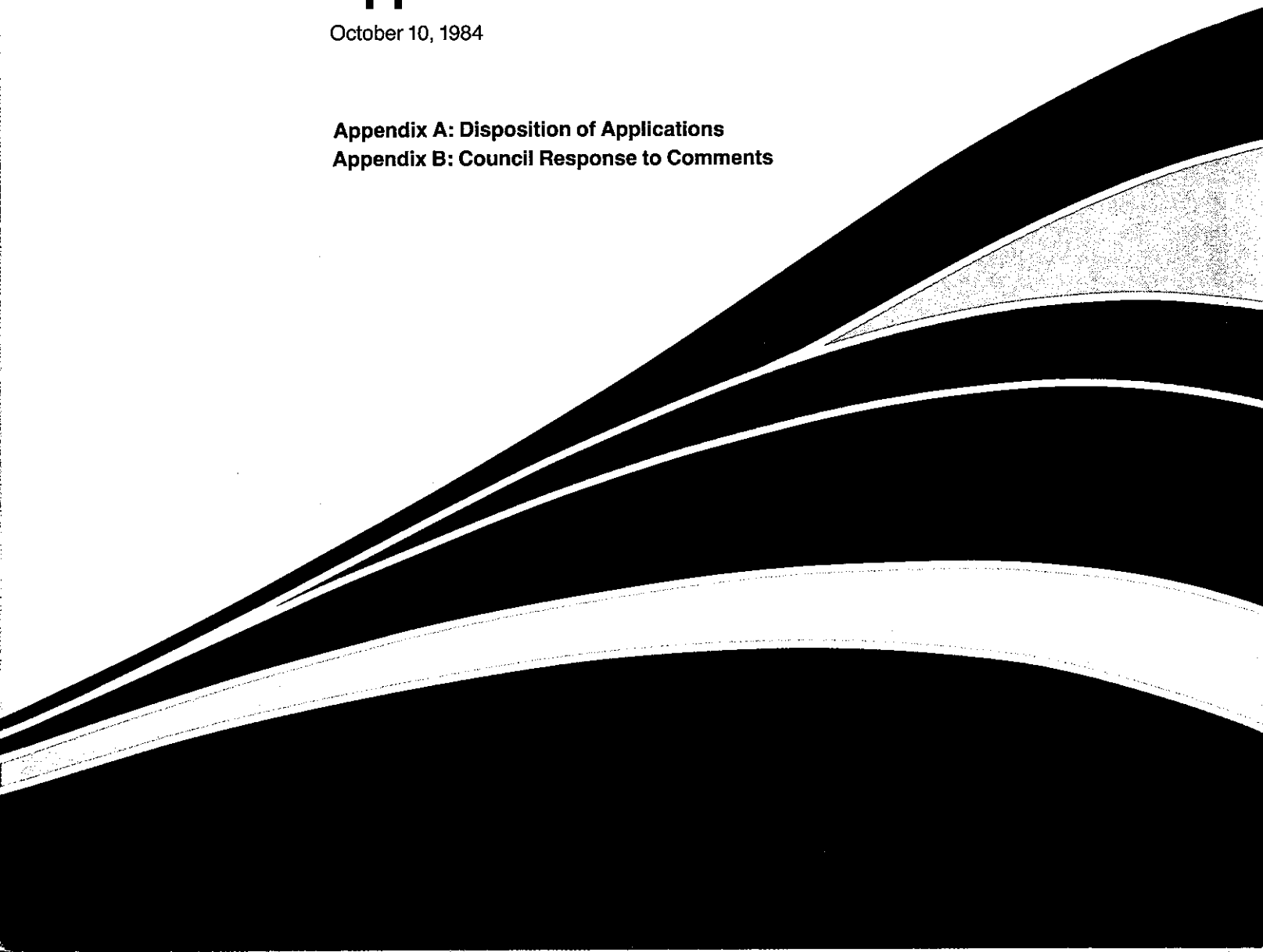
# Fish and Wildlife Program

## Appendices

October 10, 1984

**Appendix A: Disposition of Applications**

**Appendix B: Council Response to Comments**



## APPENDIX A

### DISPOSITION OF AMENDMENT APPLICATIONS

The Northwest Power Act, 16 U.S.C. 839, calls on the Northwest Power Planning Council to develop and revise the Columbia River Basin Fish and Wildlife Program by seeking recommendations from fish and wildlife agencies, Indian tribes, water management agencies, electric power-producing agencies and customers, and the public. The program is to be based on those recommendations, supporting documents, and views and information obtained through public comment and participation and consultation with the fish and wildlife agencies, tribes, and power entities.

The Northwest Power Act directed the Council to:

- Begin the program development and amendment process by soliciting recommendations;
- Make the recommendations available for review by the public, the Bonneville Power Administration and its customers, fish and wildlife agencies, appropriate Indian tribes, federal agencies, and electric utilities which manage, operate, or regulate hydroelectric facilities in the Columbia River Basin;
- Provide for oral and written public comment on the recommendations; and,
- Reject a recommendation only if it finds, in writing, that the recommendation would be inconsistent with specific statutory standards.

On November 15, 1982, as the result of an extensive process of public participation and receipt of more than 2,200 pages of recommendations, the Council adopted its program. On August 15, 1983, the Council requested recommendations for amendments to the program. In response to this request, by November 15, 1983 the Council had received 142 applications for amendments, proposing several hundred additions to or changes in the program. Comments were received on these proposed amendments through August 10, 1984, with public hearings held in Boise, Idaho; Missoula, Montana; Portland, Oregon; and Spokane, Washington. Extensive consultations were held with fish and wildlife agencies, project owners and operators and Indian tribes.

On October 10, 1984, the Council adopted a number of proposed amendments. It rejected others. This appendix is designed to explain how the Council disposed of each of the amendment applications. The first part lists those amendment applications which the Council incorporated into its revised program. The second part lists those

applications which the Council rejected and explains why the Council concluded that they failed to meet the statutory standards for program measures. A separate part provides the Council response to comments on the draft amendment document, released for public review in June 1984.

Under the Northwest Power Act, if the Council rejects any recommendation, it must explain in writing why the recommendation would be less effective than the adopted recommendations or would fail to:

- Protect, mitigate, and enhance fish and wildlife affected by the development, operation, and management of Columbia Basin hydroelectric facilities, while assuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply;
- Complement the existing and future activities of the federal and the region's state fish and wildlife agencies and appropriate Indian tribes;
- Be based on, and supported by, the best available scientific knowledge;
- Utilize, where equally effective alternative means of achieving the same sound biological objective exist, the alternative with the minimum economic cost;
- Be consistent with the legal rights of appropriate Indian tribes in the region; and
- In the case of anadromous fish:
  - (i) provide improved survival of such fish at hydroelectric facilities located on the Columbia River system; and
  - (ii) provide flows of sufficient quality and quantity between such facilities to improve production, migration, and survival of such fish as necessary to meet sound biological objectives.

The Council is charged by the Northwest Power Act as being the final decision maker on all recommendations. In this role the Council has modified some applications for amendment and adopted parts of others, on the basis of comments received or information obtained during the comment period.

Copies of the amendment applications and an index of the application code numbers are available in the Council's public reading room at 850 S.W. Broadway, Suite 1100, Portland, Oregon 97205.

## ADOPTIONS

Note that the original or primary source of the amendments is indicated, but the Council modified many of the original proposals, in response to comments and other information in the record of decision.

Section Number	Original or Primary Source	Section Number	Original or Primary Source	Section Number
105, p. 4	Council	704(e)(1)	NP/700	<b>REJECTIONS</b>
109, p. 2	Council	704(g)(1)	Council	(Council explanation follows this section.)
201(2)	Council	704(g)(2)	Council	CB/202
201(4)	IT/201	704(h)(2)(A), (B)	Council	CB/404-2
201(5)	IT/201	704(h)(2)(C)	OT/701, Council	CB/404-3
202, p. 1; 804(e)(16)	Council	704(h)(2)(D)-(F)	Council	CE/404(b)(19)
202, p. 2	Council	704(i)(1)	Council	CB/604
304(c)(3)	Council	704(j)(2)	CB/504(b)(2)	CB/604(c)(2)
304(c)(4)	IT/1304(c)(3)	704(l)(3)	YI/504(b)(2)	WG/604(d)
404(b)(2)	Council, CE/404(b)(2)	704(i)(4)	Council	BL/700
404(b)(4)	CB/404(b)(4)	704(j)(1)	Fish Propagation Panel	NP/700-2
405(b)(5)(A)	Council	704(k)(1)	Council	CB/704
404(b)(8)	CB/404(b)(8)	704(k)(2)	Council	CB/704(b)
404(b)(9)	CB/404(b)(10)	704(k)(3)	Council	BL/704(d)(1)
404(b)(17)	Council	800/202	Council	DL/704(d)
404(b)(18)	CE/404(b)(20)	801	MP/801	IF/704(d)(1)-1
404(c)(3)	CB/404-1	802	MP/801	IF/704(d)(1)-2
503	Council	804(b)(9)	CI/804(b)(9)	US/704(d)(1)-8
504(a)(1)	Council	804(d)(1)	CE/804(d)(1)	US/704(d)(1)-11
504(b)	Council, OT/704(d)	804(e)(1)	Council	US/704(d)(1)-12
504(b)(1)(C)	Council	804(e)(7)	PN/804(e)(7)	US/704(d)(1)-16
504(b)(1)(D)	Council	804(e)(8), margin	Council	US/704(d)(1)-17
504(c)	Council	804(e)(8)	SF/804(f)	US/704(d)(1)-18
504(d)(2)	YI/504(b)(2), CB/504(b)(2)	804(e)(11)	WW/804(e)(11)	WG/704(d)
504(d)(3)	Council	804(e)(12)	NP/800	IF/704(e)
504(e)	CB/501(d)	804(e)(13)	US/804(e)-4, CB/804-1	OF/704(e)-1
604(b)(3)	CB/604(b)(3)	804(e)(14)	OF/804-1, OF/804-2	OF/704(e)-2
604(c)(2)	Council	804(e)(15)	CT/800(e)	OF/704(e)(1)-3
700	MP/700	804(e)(16)	Council	US/704(e)(1)-6
701	OT/701	904(b)(1)	Council	US/704(e)(1)-7
703	Council	904(c)(1)	Council	US/704(e)(1)-8
704(a)(1)	Council	904(d)(1)	CB/904(d)(1)	PB/704(e)(3)
704(c)(1)	CE/704(c)(1)	904(d)(2)	CB/904(d)(2)	CB/704(h)(1)
704(c)(2)	CE/704(c)(2)	904(d)(4), Table 6	CB/904(d)(4)-1	OF/704(h)-1
704(c)(3)	CE/704(c)(3)	904(d)(5)	CB/904(d)(5)	OF/704(h)-2
704(d)(1)	CB/604(c)(3)	904(e)(1)	YI/504(b)(2)	IF/704(k)
	CB/604(c)(4)	1003	Council	US/704(e)(1)-6
	NP/700-3	1004	NP/1000-1	Subbasin planning (no number)
	OF/704(e)-3		NP/1000-2	BL/800
	OF/704(e)(1)-1		NP/1000-3	SP/800
	OF/704(e)(1)-2		NP/1000-4	CB/804-2
	OF/704(e)(1)-4		NP/1000-5	OF/804-4
	SC/704(d)		SK/1000	OF/804-5
	US/704(d)(1)-1		CT/1000	CF/804(a)(7)
	US/704(d)(1)-2		US/1000	WS/804(e)
	US/704(d)(1)-3		CB/1004(b)	WG/804(e)-1
	US/704(d)(1)-4		PN/1004(b)(1), etc.	WG/804(e)-2
	US/704(d)(1)-5		CB/1004(b)(2), etc.	WG/804(e)-3
	US/704(d)(1)-6		JP/1004(b)(2)	US/804(e)-2
	US/704(d)(1)-7		MF/1004(b)(2), etc.	US/804(e)-3
	US/704(d)(1)-9		US/1004(b)(2)-1	PB/804(e)(8)
	US/704(d)(1)-10		US/1004(b)(2)-2	CB/804(e)(8)
	US/704(d)(1)-13		MF/1004(d)(2)	CB/804(e)(8)
	US/704(d)(1)-14	1004(b)(2), (3), (4), (5)	Council	PB/804(e)(12)
	US/704(d)(1)-15	1004(c)(1)	Council	CB/904(d)(4)-2
	US/704(e)(1)-1	1004(d)(1), (2)	Council	JP/1004(d)(2)-1
	US/704(e)(1)-2	1204(a)(1)(E)	Council	JP/1004(d)(2)-2
	US/704(e)(1)-3	1204(d)(1)	Council, CZ/404(b)(13)	CE/1004
	US/704(e)(1)-4	1404(b)	Council	CB/1204(a)
	US/704(e)(1)-5			CB/1204(c)
	UT/704(d)(1)-1			PB/1204(c)(1)
	UT/704(d)(1)-2			CE/1304(e)(2)
	UT/704(e)(1)			
	Council			
704(d)(2)	Council			
704(d)(3)	Council			
		<b>DELETIONS</b>		
		Former 304(b)(2)	Council	
		<b>WITHDRAWALS</b>		
		CB/704(c)(3)		

## REJECTIONS

### SECTION 100: INTRODUCTION

None.

### SECTION 200: PROGRAM GOALS

**CB/202.** In application CB/202, CBFWC recommended adoption of a two-part measure that called for Bonneville funding of a resident fish goals study and Council establishment of resident fish goals. The Council rejected the application because it concluded that a resident fish goals study would be less effective and more costly than a project-by-project approach and is not supported by the best available scientific knowledge. 16 U.S.C. 839b(h)(6)(B), (C). The information available to the Council indicates that construction of hydroelectric projects actually may have expanded populations of resident fish. Many resident fish are predators that use juvenile salmon and steelhead as a principal food source. In addition, the cost of performing a basinwide loss assessment and goals study, similar in scope and cost to the anadromous fish goals study, would be less effective in promptly mitigating resident fish losses than the project-by-project approach in the amendment adopted by the Council. Resident fish projects can proceed as justified by the application of criteria in proposed alternative language developed by the Council for Section 804(e)(16). During the comment period, no entity supported reinstatement of the resident fish goals study approach. All comments supported the project-by-project approach.

### SECTION 300: WATER BUDGET

None.

### SECTION 400: DOWNSTREAM MIGRATION

**CB/404-2.** CBFWC proposed that Bonneville fund a technical expert to oversee and review implementation of Section 404 and to provide an annual report on such implementation to the Council. The Council did not adopt this measure because overseeing and reviewing efforts associated with downstream migration and passage are traditional fishery management agency responsibilities. Moreover, the application would duplicate the activities of the Technical Coordinating Committee of the Fish Passage Development and Evaluation Program of the Corps, which is an interagency body coordinating and evaluating fish passage development at federal mainstem dams. The proposed amendment, therefore, would not be the minimum cost alternative to achieve the same biological objective. 16 U.S.C. 839b(h)(6)(B).

**CB/404-3.** CBFWC proposed Bonneville funding of fish condition studies at juvenile bypass collection facilities. A major component of this study would be the physiological measurement of stress. The Council did not adopt this proposal for several reasons. The technical basis for relying on physiological indicators of stress, such as blood cortisol, as a means for correcting operational problems at mainstem dams is questionable since it cannot be determined whether elevated levels of cortisol are due to stress caused by bypass systems or by handling and sampling. Also, the Corps and Bonneville have indicated that they are currently funding fish condition studies. Therefore, this proposal may duplicate existing efforts. Therefore, this proposed amendment is not based on the best available scientific knowledge; it is not the least cost alternative available to achieve the objective, and it would not be more effective than the current program. 16 U.S.C. 839b(h)(6)(B) and 839b(h)(6)(C). If these technical issues were resolved, further research might be considered for funding as part of measure 304(d)(2).

**CE/404(b)(2).** In application CE/404(b)(2), the Corps requested that the program be changed to delay installation of traveling screens at John Day Dam from 1986 to 1988. The Council rejected the proposed delay because of the critical need for John Day bypass facilities to adequately protect, mitigate, and enhance anadromous fish. Such an amendment would be inconsistent with Section 4(h)(7)(C) of the Northwest Power Act in that it would be less effective than the adopted date for the protection, mitigation, and enhancement of fish and wildlife. 16 U.S.C. Section 839b(h)(7)(C).

**CE/404(b)(19).** Proposed amendment CE/404(b)(19) would have eliminated the completion date for juvenile transport studies and continued the studies without a completion date. The Council rejected this application for several reasons. The Corps reported on November 15, 1983, that studies on transportation originated in 1965. The Corps concluded in that report that transportation has proven

successful for steelhead and subyearling chinook salmon, is promising for fall chinook trucked from McNary Dam, and is poor for spring chinook. The Corps has reported that actions taken as a result of these studies include transport guidelines and criteria for 1984 and beyond. The Corps cited a list of scientific studies developed under Corps-funded transportation research, but failed to provide an adequate scientific basis for recognizing transportation as a primary bypass method, for justifying indefinite continuation of investigations, and for accepting an annual report and proposals for an indefinite period in the future. The Corps also failed to demonstrate how existing and future activities of fish and wildlife agencies and tribes would be complemented by the amendment. 16 U.S.C. 839b(h)(6)(A). The application further failed to show how the Corps proposal would provide for improved survival of anadromous fish at hydroelectric facilities located on the Columbia River system through use of transportation as a primary bypass method. For these reasons, the Council rejected this application. See 16 U.S.C. 839b(h)(6)(A), (6)(B), (6)(E)(i).

### SECTION 500: HARVEST CONTROLS

None.

### SECTION 600: UPSTREAM MIGRATION

**CB/604.** CBFWC proposed that Bonneville fund a study of adult fish counting procedures at mainstem dams for the purpose of improving the accuracy of fish count information. The Council rejected this proposal because fish counting procedures already are addressed in existing program measures 604(d)(1) and 604(d)(3). The application also would duplicate the activities of the Fish Counting Subcommittee of the Columbia Basin Fisheries Technical Committee, which is the primary interagency body coordinating and evaluating counting procedures at federal mainstem dams. The proposed amendment, therefore, would not be the minimum cost alternative to achieve the same biological objective, nor would it be more effective than the current program. 16 U.S.C. 839b(h)(7)(B).

**CB/604(c)(2).** CBFWC proposed that Bonneville fund studies to investigate adult fish passage problems associated with Portland General Electric Company's (PGE) North Fork Clackamas River hydroelectric projects. The Council has learned from CBFWC that an agreement has been reached between the fish and wildlife agencies and PGE to solve these problems in a cooperative manner. Therefore, this amendment proposal would not be an effective use of the region's funds or provide the most effective method for achieving protection, mitigation, and enhancement of fish and wildlife. 16 U.S.C. 839b(h)(7)(C).

**WG/604(d).** WDG proposed that Bonneville fund a study to monitor and evaluate anadromous fish returns, including catch and escapement, to allow evaluation of the overall success of the Council's Fish and Wildlife Program. The Council has not adopted this proposal because gathering catch and escapement information is a fishery management agency responsibility and is necessary on all streams regardless of whether there are hydropower impacts on fish. The Council expects that each of the region's fish and wildlife agencies will fulfill this resource management function in its particular jurisdiction. Furthermore, evaluation of the overall success of the Council's Fish and Wildlife Program using escapement information will be most useful when the Section 201 anadromous fish goals are established. Finally, the recommendation is not the minimum cost alternative for effectively achieving a sound biological objective where equally effective means exist and will not complement the existing and future activities of the region's fish and wildlife agencies and Indian tribes. 16 U.S.C. 839b(h)(2)(A), (6)(A), (6)(C), (7)(B).

### SECTION 700: WILD NATURAL, AND HATCHERY PROPAGATION

**CB/704.** CB/704 proposed a new section directing Bonneville to fund unspecified hatchery improvements. The Council rejected this application because the fish and wildlife program contains measures that require studies to identify problems at existing hatchery facilities and to make recommendations for correcting those problems. See, e.g., Sections 703, 704(f), 704(h)(2), 704(i)(4). Initial study results are due in about one year. As a result, it would be premature to provide blanket approval for unspecified actions at this point. Therefore, the Fish and Wildlife Program more effectively addresses hatchery improvements than this proposal. See 16 U.S.C. 839b(h)(7)(C).

**CB/704(b).** CBFWC proposed that Bonneville fund a study to: 1) Develop habitat preference curves for resident and anadromous fish of the Columbia River Basin for use in Instream Flow Incremental Methodology (IFIM) studies; 2) Test the ability of IFIM to predict fish distribution within a study reach under different flow conditions; and, 3) Determine instream flow needs for the study reaches. The Council has not adopted this proposal because it has concluded that the proposed amendment is neither the most effective method nor the minimum economic cost alternative for achieving the same biological objective of protection, mitigation and enhancement of fish and wildlife. See 16 U.S.C. 839b(h)(7)(B), (7)(C). Specifically, the Council has learned from the U.S. Fish and Wildlife Service (USFWS), Western Energy and Land Use Team, Fort Collins, Colorado, that it developed and published a set of habitat preference curves in 1978 for all fish species, life stages and habitat data available at that time. USFWS presently is updating these preference curves with the most recent information available, including a narrative description of the data source and curve development so field personnel can evaluate better the applicability of the curves to each situation. USFWS also is writing an information paper about how to develop species criteria for micro-habitat preference curves. Both USFWS papers should be published in early 1985. The Council has concluded that this information should be analyzed before designing and undertaking a research project of this scope.

The Council already has adopted program measure 1204(a)(1), which requires hydroelectric developers in the basin to mitigate harm to fish, including a requirement to identify and maintain adequate instream flows for all life stages of fish. The Council has concluded that the region's fish and wildlife agencies can continue to work cooperatively with the water management agencies and FERC to ensure that hydroelectric developers provide the necessary information, including the development of habitat preference curves, to establish instream flow requirements to protect fish.

The Council also has concluded that WDG's proposed study does not provide clearly for the improved survival, production, or mitigation of anadromous fish. The development of additional habitat preference curves in the Columbia River Basin does not ensure their generic applicability and use in all situations. The Council has determined that utilization of IFIM often requires modification of existing habitat preference curves or development of new curves to represent most accurately site-specific hydraulic conditions and species-specific behavior.

**CB/704(c)(3).** This application was withdrawn by the applicant.

<b>OF/704(e)(1)-1</b>	<b>Lewis and Clark River</b>
<b>OF/704(e)-2</b>	<b>Youngs River</b>
<b>BL/704(d)(1)</b>	<b>Mohawk River</b>
<b>US/704(d)(1)-16</b>	<b>Fall Creek (Willamette River)</b>
<b>US/704(d)(1)-17</b>	<b>McKenzie River</b>
<b>US/704(d)(1)-18</b>	<b>South Santiam River</b>
<b>US/704(e)(1)-6</b>	<b>Fall Creek (Willamette River)</b>
<b>US/704(e)(1)-7</b>	<b>Santiam River</b>
<b>US/704(e)(1)-8</b>	<b>McKenzie River</b>
<b>WG/704(d)</b>	<b>Walla Walla River</b>
<b>US/704(d)(1)-11</b>	<b>Umatilla River</b>
<b>US/704(d)(1)-12</b>	<b>Walla Walla River</b>
<b>IF/704(d)(1)-1</b>	<b>Salmon River Tributaries</b>
<b>IF/704(d)(1)-2</b>	<b>Salmon River Tributaries</b>
<b>IF/704(e)</b>	<b>Little Salmon River</b>
<b>BL/700</b>	<b>American River</b>
<b>NP/700-2</b>	<b>Big Canyon Creek</b>
<b>DL/704-(d)</b>	<b>Grande Ronde River</b>

All of these applications request Bonneville funding for habitat and passage improvement as offsite enhancement. The Council rejects these applications because the applicants failed to submit sufficient information in the applications and during the comment period to allow the Council to determine whether the proposals would complement the existing and future activities of the fish and wildlife agencies and tribes, are based on and supported by the best available scientific knowledge, or otherwise are consistent with the standards for program measures in the Northwest Power Act. 16 U.S.C. 839b(h)(5), (6), (7). As set out in Section 1400 of the Council's program, individuals and entities wishing to propose an amendment to the program must complete an application form developed by the Council. The form requests information to help the Council and other interested parties determine whether the requirements of the Northwest Power Act have been met. The Council received more than 50

applications for offsite enhancement activities throughout the Columbia River Basin. The quantity and quality of information responsive to the application form varied significantly. To process the volume of applications in a uniform, impartial manner, the Council screened each application to determine the adequacy of the supporting information and satisfaction of statutory standards. Each of the applications listed above was determined to be substantially deficient in certain areas. The applicants were advised of the opportunity to provide additional information during the comment period. Several of the 704(d) and 704(e) applications originally proposed for rejection have been adopted by the Council because the applicants provided additional information. However, no new substantive information was provided to support the applications listed above.

Among the problems in the applications listed above are failure to indicate the species to be enhanced, failure to indicate the character and extent of biological benefits (in terms of smolt production and adult escapement) to be gained from the expenditure, and failure to indicate where the proposed project would be coordinated with related activities of the fish agencies, Indian tribes, and other affected parties. That information is essential if the Council is to determine whether the proposed projects are based on and supported by the best available scientific knowledge and actually will enhance fish, and will do so in a way that complements existing and future activities of the fish and wildlife agencies and tribes. See 16 U.S.C. 839b(h)(5), (6). As a result, the Council has received insufficient information to allow it to conclude that the above-listed applications satisfy the statutory standards or that they would be as effective in enhancing fish as the many recommendations in Section 704(d). See 16 U.S.C. 839b(h)(7).

**Subbasin Planning.** The Council rejected the subbasin planning proposal recommended by the Fish Propagation Panel, an advisory committee to the Council, for two reasons: 1) It appears that subbasin planning would be less effective than other recommendations, adopted in Section 201 and 1204(c) and proposed in Sections 704(d) and 704(e), for protecting and enhancing anadromous fish; and, 2) It does not appear to utilize the alternative with the minimum economic cost where there are equally effective alternative means of achieving the same sound biological objective. See 16 U.S.C. 839b(h)(6)(C), (7)(C).

The subbasin planning proposal was described fully in an issue paper released by the Council and made a part of the record of these amendment proceedings. In general, the panel proposed subbasin planning as a systematic and biologically based process for selecting among and setting priorities for habitat improvement and passage restoration proposals. The Council found, however, that many aspects of subbasin planning would duplicate elements of the anadromous fish goals study under Section 201 and of the "protected area" study under Section 1204(c), as well as enhancement planning under provisions of the Salmon and Steelhead Conservation and Enhancement Act of 1980 (16 U.S.C. 3311) and other activities conducted by fishery, land, and water management entities. As a result, the Council concluded that in the long run the objectives of subbasin planning can be accomplished without starting a new comprehensive planning effort. In the short run, the Council concluded that Sections 704(d) and 704(e) can be altered to provide a mechanism for screening habitat improvement and passage restoration projects without stopping such projects pending completion of subbasin planning. The Council has amended Section 704(d) accordingly.

**US/704(d)(1)-8.** US/704(d)(1)-8 proposed Bonneville funding to complete the habitat surveys of Methow River. The Council has rejected the application because it duplicates components of the Section 201 goals study and of the Section 1204(c) protected areas study. The Council has received no information to indicate that this proposal would complement the activities of the fish and wildlife agencies and tribes pursuant to Program Sections 201 and 1204(c) or that the proposal would protect fish as effectively as the application of the results of those studies.

**OF/704(e)(1)-3.** OF/704(e)(1)-3 proposed Bonneville funding of a survey to locate diversions as an offsite enhancement program measure. The Council rejected this application because it is the responsibility of state water agencies to maintain records of water diversions. At this point, use of Bonneville funds on existing mitigation requirements would be more effective than use on identifying the needs for further mitigation projects. (See, e.g., 704(d), Table 2.) As a result, the Council has concluded that this proposal would be less effective than adopted recommendations calling for Bonneville funding of mitigation efforts. See 16 U.S.C. 839b(h)(7)(C).

**PB/704(e)(3).** PB/704(e)(3) called for funding by Bonneville and the Idaho Power Company of a study concerning fish passage through Hells Canyon, Oxbow and Brownlee dams. The Council rejected the application because an earlier study found use of the upper Snake River for anadromous fish production to be impractical. The practicality of passage development in the upper Snake River drainage also was seriously questioned. There is no evidence to indicate that those study results were incorrect. As a result, the Council has rejected this application because it is not based on the best available scientific knowledge. 16 U.S.C. 839(h)(6)(B), (7)(B).

**OF/704(h)-1.** ODFW proposed developing methods to detect wild, straying steelhead in the Deschutes River. The Council rejected the application because of its failure to explain the proposed experimental design and study methods. Testimony provided by the applicant failed to resolve Council questions. No further information was provided to clarify the proposed study. As a result, the Council is unable to conclude that it is based on the best available scientific knowledge.

**OF/704(h)-2.** OF/704(h)-2 called for Bonneville funding of a study for use of the Pelton Dam fishway as a smolt rearing facility. The Council rejected this amendment because it does not appear that, at the current time, Pelton Dam could be used effectively for the rearing of smolts. PGE is required by FERC to meet adult fish quotas. PGE still is working to increase its production and meet the FERC quotas. Until the quotas are met, fish eggs for the proposed rearing facility will remain unavailable. Use of Bonneville funding would replace the duty of PGE to meet adult fish goals and would be a less effective use of ratepayers' money than the existing system. 16 U.S.C. 839b(h)(7)(A), (7)(C).

**CB/704(h)(1).** CB/704(h)(1) proposed changing the program emphasis on improvement of existing hatcheries over construction of new facilities. It would give equal priority to new construction and improvements. The Council rejected this application pursuant to the Council's policy to increase the effectiveness of hatchery propagation and to promote the full use of existing facilities before authorizing construction of new hatcheries. See Program Sections 703, 704(b), 704(h), and 704(i)(4). The recommendations adopted previously would be more effective than this proposal and would help achieve the same biological objective equally effectively and at a lower cost. 16 U.S.C. 839b(h)(6)(C), (7)(B), (7)(C).

**IF/704(k).** IF/704(k) would require Bonneville to fund the planting of salmon fry in the Salmon and Clearwater river drainages on the basis that the habitat in those drainages is underutilized. The action proposed would use hatchery fish to supplement naturally spawning stocks in the Snake River habitat. The Council rejected this application because existing measures 704(k)(1) and (2) require development of methods to supplement naturally spawning stocks. Until these studies are completed, proceeding with this proposal would be premature. 16 U.S.C. 839b(h)(6)(B), (7)(B), (7)(C).

## SECTION 800: RESIDENT FISH

**WG/804(e)-2.** WG/804(e)-2 called for Bonneville funding of a study to evaluate the effects of the Water Budget on resident fish in Grand Coulee Reservoir (Lake Roosevelt). The Council rejected this amendment application because the best available scientific knowledge indicates there is no significant impact due to Water Budget implementation on the walleye fishery in Lake Roosevelt. In addition, USFWS recently completed a comprehensive four-year study of the resident fish in Lake Roosevelt, which is an equally effective means of achieving the same result at a lesser cost. Therefore, the Council believes there is currently no need for future study. See 16 U.S.C. 839b(h)(6)(B), (C).

**CF/804(a)(7).** CF/804(a)(7) proposed Bonneville funding of a study to develop operating procedures for Libby Dam to control the severe fluctuations of the Kootenai River. The Council rejected this application for amendment because it has determined that current program measures about the Kootenai River and Libby Dam adequately address the concerns raised. See 16 U.S.C. 839b(h)(7)(C). The program also anticipates consultation among all parties. See Program Section 1304(c)(2). Under those terms, MDFWP and the Corps should consult with the Kootenai Tribe during the research on all Section 804 measures concerning the Kootenai River and Libby Dam.

**CB/804(e)(8), PB/804(e)(8).** These applications proposed funding of sturgeon studies. The Council has rejected these amendments on white sturgeon protection, mitigation and enhancement

activities and has adopted the white sturgeon language provided in SF/804(f). The Council believes that many of the concepts developed in CB/804(e)(12) and PB/804(e)(8) are less effective than those contained in SF/804(f). See 16 U.S.C. 839b(h)(7)(C).

**WG/804(e)-3.** WG/804(e)-3 proposed Bonneville funding of a study to identify different methods of enhancing resident fish in Lake Roosevelt and of measures to enhance resident fish in that lake. The Council has rejected this amendment because it would duplicate the effects of a current study performed by USFWS titled "Assessment of the Fisheries and Limnology in Lake F.D. Roosevelt." This study was a four-year research effort funded by the Bureau of Reclamation. Therefore, this amendment application is not the most effective method for achieving protection, mitigation and enhancement for fish and wildlife. U.S.C. 839(h)(7)(C).

**PB/804(e)(12).** PB/804(e)(12) proposed that Bonneville and the Idaho Power Company fund the reintroduction of food snails in the Snake River below C.J. Strike Dam. The Council has rejected this amendment because it believes the USFWS, Office of Endangered Species, is the more appropriate agency to implement this proposal. Therefore, this amendment application is not the most effective method for protection, mitigation and enhancement of fish and wildlife and fails to show how it would complement the activities of the fish agencies. U.S.C. 839(h)(6)(A), (7)(C).

**OF/804-5.** OF/804-5 called for Bonneville funding of the design and construction of a warmwater fish hatchery in Oregon to compensate for uncontrollable nongame fish populations and water management regimes in reservoirs. The Council rejected this amendment application because it appears that construction of a warmwater hatchery to compensate for the uncontrollable nongame fish populations would not be the most effective method of achieving protection, mitigation and enhancement of fish and wildlife. There is no information in this proposed amendment to indicate that significant biological gains would be provided or that the project would not result in significant conflict with anadromous fish. See 16 U.S.C. 839b(h)(6)(B), (7)(C).

**WS/804(e).** WS/804(e) proposed Bonneville funding of the design, construction, operation and maintenance of a resident fish hatchery on Lake Roosevelt. The Council has rejected this amendment application because there is insufficient information in both the amendment application and the Council's record to document whether significant biological gains would be provided by the construction and operation of a hatchery at Lake Roosevelt. As a result, the Council is unable to conclude that the proposal for the hatchery is based on the best available scientific knowledge. See 16 U.S.C. 839b(h)(6)(B).

**BL/800, SP/800, OF/804-4, US/804(e)-2 and US/804(e)-5.** These applications called for Bonneville funding of habitat improvement projects and enhancement opportunities to benefit resident fish resources. The Council rejected the applications because they contained no documentation of or agreement on resident fish losses attributable to hydroelectric facilities, no evidence that significant biological gains would be achieved, and no evidence that no significant conflict from efforts to restore anadromous fish would result. As a result, the Council was unable to find that the proposals are based on the best available scientific knowledge and directed at the effects of hydropower operation and development on resident fish. See 16 U.S.C. 839b(h)(5), (6)(B).

**CB/804-2.** CB/804-2 proposed Bonneville funding of the development of rough fish control methods to optimize the production of game fish. The Council rejected this amendment application because Bonneville is currently funding various predator/prey research studies in relation to measure 404(c)(1) of the Fish and Wildlife Program. Further studies in the area of rough fish control should not begin before the results of those studies and investigations are available. See U.S.C. 839b(h)(6)(A), (6)(B), (7)(C). In addition, there is insufficient information in the record to indicate that this amendment would not conflict with the production of anadromous fish. See U.S.C. 839(h)(6)(B).

**US/804(e)-3.** US/804-3 calls for Bonneville to fund resident fish habitat enhancement opportunities in specified reaches of the Clackamas River. The Council has rejected this amendment application because there is no documentation of or agreement on the existence and extent of hydroelectric responsibility for the fish habitat problems addressed by the application. See, 16 U.S.C. 839b(h)(5).

**WG/804(e)-1.** WG/804(e)-1 proposed Bonneville funding of a study to evaluate the potential to enhance and manage resident game

fish in mid-Columbia reservoirs. The Council rejected this amendment application because Bonneville currently is funding various predator/prey research studies in relation to measure 404(c)(1) of the Council's Fish and Wildlife Program. The Council believes that the results of these studies will determine better the advisability of further resident fish planning and enhancement opportunities. See U.S.C. 839b(h)(6)(A). In addition, the Council does not believe there is sufficient information in the record to conclude that this proposal would not conflict with the production of anadromous fish. See U.S.C. 839(h)(7)(B).

**US/804(e)-1 and OF/804-3.** US/804(e)-1 and OF/804-3 are identical amendment applications calling for Bonneville funding of resident fish habitat enhancement improvements in specified reaches of the Metolius River. The Council has rejected these amendment applications because there is insufficient documentation of the biological benefits of the proposed project and of the nature and extent of unmitigated losses attributable to hydropower development and operation to be addressed by the project. Specifically, the applications note disease and predation problems and do not explain how those problems would be addressed so that the potential benefits of the proposed rearing pools could be realized. They do not explain whether the project would be compensation for resident fish or anadromous fish losses. They further fail to state clearly which hydropower effects are being addressed and do not document the unmitigated losses attributable to the pertinent hydropower projects. The applications also fail to make a clear case for Bonneville funding since they do not indicate whether systemwide or project-specific impacts are being addressed. See 16 U.S.C. 839b(h)(8)(A). As a result, the Council is unable to conclude that the proposed amendments are based on the best available scientific knowledge and are related to the adverse effects of hydropower operations and development. 16 U.S.C. 839b(h)(5), (6). If the applicants provide information addressing these points, the Council will review the proposals in future amendment proceedings. See Program Section 1400.

#### **SECTION 900: YAKIMA RIVER BASIN ENHANCEMENT**

**CB/904(d)(4)-2.** In amendment application CB/904(d)(4)-2 CBFWC requested that adult and juvenile bypass facilities at Naches-Cowiche diversion dam be funded by Bonneville. Subsequently, the Council learned that the City of Yakima will receive funding from the Washington Department of Ecology (WDOE) for both juvenile and adult facilities. In light of the WDOE commitment, the amendment is unnecessary. Alternative biological approaches or solutions are not being suggested at this project. Through the approach developed by the City of Yakima, funding from WDOE would impose the minimum economic cost on Bonneville ratepayers. 16 U.S.C. 839b(h)(7)(B). The rejection of this amendment does not alter the Council's commitment to restoration of anadromous fish runs in the Yakima Basin as stated in the program.

#### **SECTION 1000: WILDLIFE**

**JP/1004(d)(2)-1.** JP/1004(d)(2)-1 proposed changing the text of Section 1004(e)(2) from "the Council will consider approval of funding" to "the Council will fund." This program section deals with the acquisition of suitable onsite and offsite habitat for wildlife. Amended Section 1004(d)(2) indicates that the Council reviews proposals for funding of acquisition of suitable offsite and onsite habitat, but the funding will come from Bonneville, project operators or other appropriate sources. The amended section would be more effective than the approach proposed by this application because a wider range of funding sources would be explored. 16 U.S.C. 839b(h)(7)(C).

**JP/1004(d)(2)-2.** JP/1004(d)(2)-2 would add Bonneville Dam to Table 5, Section 1004, requiring the acquisition of offsite wildlife habitat. The Council rejected this amendment because amended Section 1004(d)(2) makes it clear that the Council will consider recommending approval of funding land acquisition for projects listed in Tables 4 and 5. Bonneville Dam already is part of Table 4. See 16 U.S.C. 839b(h)(7)(C).

**CE/1004.** CE/1004 was submitted by the Corps to increase the level of specificity in Program Section 1004 and to describe the exact concepts to be achieved by various measures under that section. The Council rejected this amendment because it deviates too much from the intent of the current planning approach developed in Program Section 1004(b). While many of the Corps' suggestions are worthwhile, they can be incorporated into the statement of work developed by Bonneville for measures 1004(b)(2) and (3) without

being part of the program. The concepts of strong consultation requirements and use of all available information when developing the 1004(b) process were two main points of the Corps' amendment application. These concepts have been incorporated into the amendment language. The Council also added a statement at the closing of Section 1004(b) which explains that the Council recognizes the existence of ongoing federal, state and tribal wildlife programs outside the program. By identifying these programs in the Section 1004(b) process, the duplication of existing wildlife efforts will be eliminated and the ability for other entities, such as the project operators and land management agencies, to participate voluntarily in the Council's program will be enlarged. The rejection also reflects many of the comments that were received. Most of those comments stated the preferred approach in Section 1004(b) is clarifying the planning and implementation requirements of the current program rather than adopting a very detailed new process, such as the Corps proposal. The Corps proposal would be less effective than the adopted recommendations. 16 U.S.C., 839b(h)(7)(C).

#### **SECTION 1100: ESTABLISHMENT OF FISH AND WILDLIFE COMMITTEE.**

None.

#### **SECTION 1200: FUTURE DEVELOPMENT**

**CB/1204(a), CB/1204(c).** These proposals called for Bonneville funding of fish and wildlife agency biologists to develop protected area criteria and to evaluate proposals for operation of small, low-head hydropower projects in the Columbia River Basin. The Council rejected these applications because the Section 1204(c) protected areas study is an equally effective alternative means of achieving the same sound biological objective and is the alternative with the minimum economic cost. 16 U.S.C. 839b(h)(6)(C). The fish and wildlife agencies and tribes are represented on the Hydropower Assessment Steering Committee, an advisory committee to the Council, and will be invited to comment on key aspects of the Pacific Northwest Hydro Assessment Study, which is designed to help collect information to aid designation of protected areas. In addition, the Council will provide opportunities for comment prior to its designation of protected areas. The Council intends to continue to give due weight to the recommendations, expertise, legal rights, and responsibilities of the federal and the region's state fish and wildlife agencies and appropriate Indian tribes. The evaluation of hydropower proposals is an ongoing activity of the fish and wildlife agencies, not an activity created by the Northwest Power Act, the Council's Power Plan or its Fish and Wildlife Program. 16 U.S.C. 839b(h)(6)(A), (7)(B).

**PB/1204(c)(1).** PB/1204(c)(1) proposed classification and study of specific stream and wildlife habitat to be protected from further development. The Council rejected this proposal for the same reason that it rejected CB/1204(a). In addition, the Council's current approach to the protected areas designation through the Pacific Northwest Hydro Assessment Study does not define or limit the information that can be used in designating protected areas, as would this proposal. For this reason, the proposed amendment would be less effective than the existing program measure. 16 U.S.C. 839b(h)(7)(C). An opportunity for public comment will be provided prior to designation of protected areas.

#### **SECTION 1300: COORDINATION OF RIVER OPERATIONS**

**CE/1304(e)(2).** This amendment, proposed by the Corps, requested the Council to modify substantially the language of Section 1304(e)(2). The effect of this proposed amendment would be to remove the Council's role in overseeing Bonneville funding of program measures and substitute the Corps and other federal project operators for funding decisions. The Council rejected this amendment because it misstates the language and intent of the Northwest Power Act and is inconsistent with the Northwest Power Act. See 16 U.S.C. 839b(h)(10)(A), (11)(A). A recent court decision (*Confederated Tribes and Bands of the Yakima Indian Nation v. FERC*, 734 F.2d 1347 (9th Cir. 1984)), confirmed the thrust of the Fish and Wildlife Program, that the Northwest Power Act imposed new and substantive obligations on the Corps, among others. Section 4(h)(11)(A) of the Northwest Power Act gives specific direction to the Corps so that fish and wildlife are given a new importance. The proposed amendment from the Corps would understate the effect of the Northwest Power Act on federal project operators and managers and, contrary to the law, de-emphasize the importance of fish and wildlife to those managers and operators.

The purpose of Section 1304(e)(2) was to provide for expeditious federal responses to program measures and to provide a mechanism for federal agencies to consult on ways to best implement the program. This section is consistent with the requirement of Sections 4(h)(10)(A) and 4(h)(11)(A) of the Northwest Power Act which require the use of the Bonneville fund to protect, mitigate, and enhance fish and wildlife.

The Northwest Power Act has given specific directions to use the Bonneville Fund for the protection, mitigation and enhancement

of fish and wildlife. Prior to the Northwest Power Act, Bonneville funding of fish and wildlife projects operated with little statutory direction. The Northwest Power Act provided this specific direction, requiring Bonneville to fund program measures to protect, mitigate and enhance fish and wildlife affected by hydroelectric development. When the Congress passed the Northwest Power Act, it changed laws which had been less effective than desired and gave all federal project operators and managers new direction with respect to fish and wildlife.



## APPENDIX B

### COUNCIL RESPONSE TO COMMENTS

One of the primary purposes of the Northwest Power Act is to provide for public participation in development of the Council's regional energy plan and its Columbia River Basin Fish and Wildlife Program. In Section 4(h)(5) of the Act, Congress directed the Council to develop its program on the basis of "views and information obtained through public comment and participation," as well as on the basis of the program recommendations, supporting documents, and views and information obtained in consultation with certain fish and wildlife agencies, federal project operators and regulators, tribes, and Bonneville customers.

Comments were received on the proposed amendments to the program through August 10, 1984. The Council invited written and oral comments, conducted public hearings and sponsored special consultations with interested organizations.

The Council found many of the suggestions for improvement of the proposed amendments to be well-considered and worth incorporating into the final amendments. It decided that other suggestions could not or should not be followed because they conflicted with the standards Congress set for the Council's program or for other reasons.

In this document the Council explains how it addressed the major oral and written comments on the proposed amendments. The Council and its staff have reviewed each comment. Many comments praised the draft amendments, or particular sections of them, as written. The Council appreciated those comments, but it is unable to list each of them here. Other comments expressed general disapproval of the proposed amendments, without offering specific suggestions to which the Council is able to respond. A number of individuals and groups made identical or similar points about amendment proposals. Other comments raised general issues on the Council's approach and repeated those concerns in comments on each program section. The Council consolidated many of those comments for purposes of response.

The Council made some changes in the program on the basis of comments which are not explained here because they simply clarified the Council's original intent, corrected factual or typographical errors, or involved other noncontroversial matters. The Council also consolidated some repetitious sections, altered the organization of the program, renumbered sections and otherwise modified the program to make it easier to understand.

The following abbreviations are used in this section:

Abbreviations	Full Name
Bonneville	Bonneville Power Administration, U.S. Department of Energy
Bureau of Reclamation	Bureau of Reclamation, U.S. Department of the Interior
CBFWC	Columbia Basin Fish and Wildlife Council
Corps	Corps of Engineers, U.S. Department of the Army
CRITFC	Columbia River Inter-Tribal Fish Commission
Federal land managers	Bureau of Indian Affairs, Bureau of Land Management, National Park Service, U.S. Department of the Interior; Forest Service, U.S. Department of Agriculture
Federal project operators and regulators	Bonneville; Bureau of Indian Affairs; Bureau of Reclamation; Corps; and FERC
FERC	Federal Energy Regulatory Commission, U.S. Department of Energy
USFWS	Fish and Wildlife Service, U.S. Department of the Interior
IDFG	Idaho Department of Fish and Game

Abbreviations	Full Name
MDFWP	Montana Department of Fish, Wildlife and Parks
NMFS	National Marine Fisheries Service, U.S. Department of Commerce
ODFW	Oregon Department of Fish and Wildlife
PNUCC	Pacific Northwest Utilities Conference Committee
WDF	Washington Department of Fisheries
WDG	Washington Department of Game

#### SECTION 100: INTRODUCTION

No comments received.

#### SECTION 200: PROGRAM GOALS

##### Anadromous Fish Goals

**1. 201. PNUCC and CBFWC supported removing the dates in Section 201 to allow realistic schedules to be set.**

**Council response:** The deletion of the date in Section 201 is part of a series of program amendments designed to remove dates from the program and place scheduling activities into the action plan. In this way, greater overall program flexibility is achieved without sacrificing program objectives.

**2. Pre-McNary Goal. NMFS, ODFW, the Idaho Power Company, Pacific Fisheries Enhancement Corporation and the Nez Perce Tribe all made comments relative to the adoption of a pre-McNary run size goal.**

**Council response:** The Council is not considering the pre-McNary goal in these amendment proceedings. This issue is being addressed in a separate process, as described in Section 201, which will be the subject of a separate series of hearings and consultations.

##### Resident Fish Goals

**1. 202. PNUCC and CBFWC supported the amendments to this section. PNUCC stated that the present language is acceptable but that there should be no conflicts with anadromous fish projects rather than no "significant" conflicts. Both supported the use of criteria by which projects were to be judged.**

**Council response:** The Council has considered removing the word "significant" from this program measure regarding conflicts with anadromous fish. The Council believes that removal of this word might prevent any resident fish work in the basin where anadromous fish are also present. This approach, suggested by PNUCC, is too restrictive, might impede reasonable resident fish projects, and would not allow a determination on the merits of the individual project(s). The criteria in new 804(e)(16) allow for a project-by-project evaluation of relative merits and of effects on resident fish or migrating salmon and steelhead populations.

**2. 202. PNUCC also recommended addition of habitat improvement criteria for resident fish projects similar to those in Section 704(d)(1), for anadromous fish.**

**Council response:** The Council did not incorporate this proposal at this time since it is not supported by the best available scientific knowledge. The criteria developed for amendment 704(d)(1) were developed specifically for anadromous fish and are not applicable to resident fish problems. The recommendation even acknowledges this by suggesting "similar" criteria to 704(d)(1). The recommendation does not include suggested changes to 704(d)(1) criteria nor is information submitted to allow the Council to develop such criteria. Nothing is in the record of these proceedings that would support the development of such criteria. Furthermore, the Council is reluctant to include an indefinite reference to project criteria in the program without further consideration and development of the available scientific information.

## SECTION 300: DOWNSTREAM MIGRATION — WATER BUDGET

### Section 304(c)(4).

1. **Water Budget coordination.** The Corps commented that it is not opposed to this amendment application but has stated its concern that the measure should make it clear that the Water Budget Manager representing the Columbia River Basin Indian tribes is the only person with whom the federal operating agencies will consult on all Water Budget matters. The Corps stated it does not want to be in the position of having to consult with each individual tribe to coordinate Water Budget activities and to duplicate the Water Budget Manager's role as liaison with the federal agencies.

**Council response:** The Council notes that Program Section 304(b)(2) clearly states that the two designated Water Budget Managers "will be the primary points of contact between the power system (operators) and the fish and wildlife agencies and tribes on matters concerning the Water Budget."

2. **Consultation.** The Bureau of Indian Affairs (BIA) suggested that Bonneville consult and coordinate any additional funding of the Columbia River Basin tribes with BIA to ensure effective use of federal funds.

**Council response:** The Council has determined that additional Bonneville funding to sponsor Columbia River Basin tribal meetings to coordinate Water Budget activities is one way to encourage full participation of policy and technical representatives by all Columbia River Basin tribes. The Council urges Bonneville to consult fully with BIA to ensure the most effective use of federal funds according to 16 U.S.C. 839b(g)(3).

3. **Adoption.** CRITFC, WDF, and WDG have indicated strong support in their comments for this proposed measure. CRITFC supports adoption of this proposed amendment on the basis that providing all Columbia River Basin Indian tribes the opportunity to meet and guide their Water Budget Managers' activities will strengthen an important section of the Council's Fish and Wildlife Program.

**Council response:** The Council took these comments into account.

4. **Fish and wildlife agency coordination.** WDF recommended broadening the scope of this measure to include Bonneville funding for state and federal fish and wildlife agencies' Water Budget coordination activities.

**Council response:** The original application, sponsored by CRITFC, called for funding for tribal coordination activities only. The Council notes that the region's state and federal fish and wildlife agencies are represented through the Columbia Basin Fish and Wildlife Council which provides the policy direction and oversight for the agencies' Water Budget Manager. No similar tribal organization represents all of the Columbia River Basin Indian tribes.

5. **Bonneville funding.** Bonneville's comments recommend that the Council remove the language calling for Bonneville funding from this proposed measure on the basis that only the incidental expenses incurred by the tribal Water Budget Manager in conducting such meetings are eligible for Bonneville reimbursement. Bonneville commented that it does not fund travel expenses of non-Bonneville employees, e.g., tribal representatives. Bonneville claims that tribal expenses are the responsibility of the tribes they represent.

**Council response:** Presently most tribal participation in Water Budget activities comes from the four tribes of CRITFC which receive limited funding for fishery programs from the BIA. There has been little or no participation from the other tribes, due to lack of funding. The Council believes that adoption of the CRITFC application would ensure Water Budget participation and coordination from all Columbia River Basin Indian tribes which is necessary for successful management and operation of the Water Budget.

6. **Water Budget.** Several commentators (Professor Michael Blumm, CRITFC, Corps, Warm Springs Tribes) addressed Corps implementation of the Water Budget section of the program.

**Council response:** Corps implementation of the Water Budget is not an amendment issue. The Council is addressing Water Budget problems outside these amendment proceedings.

## SECTION 400: DOWNSTREAM MIGRATION

### 404(b)(2). John Day passage.

1. **Timely installation.** CBFWC and WDG did not object to removing the reference to Bonneville funding in this measure, but expressed concern that it could eliminate the Corps' incentive to complete timely installation of bypass facilities, due to limited Corps funding from Congress.

**Council response:** It is the Council's intention to continue to work through Congress to support appropriation of the necessary funds to complete bypass facilities at John Day Dam by March 30, 1986, in time to protect the 1986 smolt outmigration.

### 404(b)(5). Bonneville Dam passage.

1. **Delete berm removal.** The Corps, PNUCC, PPC, and ALCOA each asserted that there is no scientific information available to the Council indicating that the forebay berm at Bonneville Dam's second powerhouse is the reason for the low fish collection efficiencies or that forebay excavation is a viable solution to this problem. The Corps indicated that less costly options to forebay excavation or berm removal may be available to improve bypass efficiencies. Examples include raising hydraulic operating gates, placement of flow deflection devices on the trashrack, and extension of the existing traveling screens. Each of these commentators recommended deletion of all references to berm removal or forebay excavation from this measure.

**Council response:** The Council has taken this information into account in its decision on this measure and has indicated that the Corps is expected to continue to investigate all alternatives, including forebay excavation, for solving the passage problems at Bonneville second powerhouse, and to report the cost and feasibility of these alternatives to the Council.

2. **Solve juvenile passage problems.** CBFWC, WDF and WDG indicated concern over the lack of success of the juvenile passage facilities at the Bonneville second powerhouse and stated that finding a solution to this passage problem is a very high priority. CBFWC stated that research conducted in 1983 and 1984 indicated that the berm in the forebay at Bonneville second powerhouse may be a significant factor contributing to poor juvenile bypass efficiency, but it is not the only factor nor is its removal the only solution at present. The fish and wildlife agencies expressed support for Corps evaluation of all alternatives to solve this passage problem including, but not limited to, the feasibility and cost of forebay excavation alternatives, as well as other structural and operational modifications. CBFWC also recommended that an interim passage plan be developed for the Bonneville Dam second powerhouse. The fish and wildlife agencies noted that the powerhouse should not be shut down in instances when its operation is needed for fish passage or for testing purposes.

**Council response:** The Council has taken this information into account in its final decision on this measure. The Council has determined that it is essential that adequate protection be provided for approximately 31 million hatchery fish released into the Bonneville pool each year as well as millions of wild outmigrants, all of which must pass this project since Bonneville Dam is the most downstream dam on the Columbia River. The Council has concluded that until the juvenile passage problems are corrected at the second powerhouse, the Corps is to develop and implement an interim juvenile passage plan which includes sufficient levels of spill and second powerhouse outage to achieve an 85 percent fish passage efficiency at the Bonneville project.

### 404(b)(4), (b)(8), (b)(9). The Dalles, Lower Monumental and Ice Harbor dams.

1. **Collection and bypass system.** PNUCC, the Corps, ALCOA, and the Public Power Council (PPC) all supported implementation of an interim juvenile passage plan and development of the necessary information, through prototype testing, to determine if a powerhouse collection and bypass system would have an incremental fish collection benefit to warrant its cost. Each commentator supported the development of a coordinated permanent juvenile passage plan which would recommend to the Council the most cost-effective passage alternatives, including consideration of a powerhouse collection and bypass system, and a proposed schedule for installation of all feasible

improvements. The commentors did not support requiring installation of powerhouse collection and bypass systems at The Dalles, Lower Monumental, or Ice Harbor dams without complete evaluation of cost-effectiveness and biological effectiveness data.

The Corps also asserted that the decision to install additional bypass facilities at Ice Harbor and Lower Monumental dams should be deferred indefinitely until ongoing studies to improve fish guidance efficiency at Lower Granite and Little Goose dams are completed and until it is determined if sufficient numbers of juvenile fish can be transported past these projects to negate the need for additional bypass facilities.

**Council response - 404(b)(4):** The Council has taken this information into account in its final decision on this measure. Based on best available sluiceway bypass efficiency information, the Council has concluded that improvement of juvenile fish passage facilities at The Dalles Dam is a high priority action item in the program since ODFW research estimates the maximum sluiceway passage efficiency under no spill conditions to be 40 percent. Also it is the second most downstream project on the Columbia River. In 1984, more than 39 million smolts were released from hatcheries upstream, and a great number of these as well as millions of wild smolts must migrate past this project. The Council has not prejudged the type of bypass system to be installed at The Dalles Dam, but has indicated to the Corps, with a sense of urgency, that it is expected to initiate immediately a progressive, step-by-step process of gathering the necessary data to demonstrate the most feasible structural bypass system available, designed to achieve 90 percent fish guidance efficiency, and then to install it as soon as practicable.

**404(b)(8):** The Council has concluded that installation of a powerhouse collection and bypass system at Lower Monumental Dam also is a high priority action item in the program, since this project presently has no juvenile fish passage facilities, and more than 13 million hatchery released smolts potentially must pass this project which has been measured to have about a 20 percent turbine-related juvenile mortality rate. The Council has determined that significant juvenile fish passage past Lower Granite and Little Goose collector dams occurs because of spill and turbine passage due to variable collection efficiencies. For the past few years the fishery agencies and tribes have supported spill at these upriver projects instead of transportation to pass Snake River spring chinook migrants. The Council intends to review, evaluate and decide the future of the Corps' Snake River smolt transportation program during 1985. The Council's decision on transporting smolts as a bypass alternative for the Snake River project will not directly affect the need for and priority of juvenile bypass facilities at this project since the Council has concluded it wants adequate bypass facilities installed at all mainstem dams. In addition, 250,000 steelhead smolts were released in 1984 from Lyons Ferry Hatchery and release sites immediately upstream from Lower Monumental Dam. These hatchery smolts, as well as wild outmigrants from the Tucannon and Palouse rivers, all must pass this project. The Council has concluded that it is important that these natural and hatchery outmigrants are protected sufficiently with the best available passage facilities. The Council has not prejudged the type of bypass system to be installed at Lower Monumental Dam but has indicated to the Corps that it initiate immediately a progressive, step-by-step process of gathering the necessary data to demonstrate the most feasible structural bypass system available designed to achieve 90 percent fish guidance efficiency and then to install it as soon as practicable.

**404(b)(9):** The Council has concluded that improvement of juvenile fish passage facilities at Ice Harbor Dam is a high priority action item in the program since Corps research recently concluded that sluiceway passage efficiency is only about 51 percent. In addition, 13 million hatchery smolts are released into the river above this project, which has been measured to have about a 30 percent turbine-related juvenile mortality rate. The Council has determined that significant juvenile fish passage past Lower Granite and Little Goose dams' powerhouse collection and bypass systems occurs because of spill and turbine passage due to variable collection efficiencies. For the past few years the fishery agencies and tribes have supported spill at these upriver projects instead of transportation to pass Snake River spring chinook migrants. The Council intends to review, evaluate and decide the future of the Corps' Snake River smolt transportation program during 1985. The Council's decision on transporting smolts as a bypass alternative for the Snake River project will not directly affect the need for and priority of juvenile bypass facilities at this project since the Council has concluded it wants adequate bypass facilities installed at all mainstem dams. In addition, large smolt

releases from Lyons Ferry Hatchery and release sites immediately upstream from Lower Monumental and Ice Harbor dams, as well as wild outmigrants from the Tucannon and Palouse rivers, all must pass this project. The Council has concluded that it is important that these natural and hatchery outmigrants are protected sufficiently with the best available passage facilities. The Council has not prejudged the type of bypass system to be installed at Ice Harbor Dam but has called on the Corps to initiate immediately a progressive, step-by-step process of gathering the necessary data to demonstrate the most feasible structural bypass system available designed to achieve 90 percent fish guidance efficiency and then to install it as soon as practicable.

**2. Interim juvenile passage plans.** Bonneville recommended changing each of these measures to require Corps implementation of interim juvenile passage plans at The Dalles, Lower Monumental, and Ice Harbor dams. When combined with passage plans at other federal facilities, this will result in average systemwide turbine bypass levels comparable to those achieved at McNary Dam. Bonneville also stated it has initiated a process to develop a policy to provide spill for fish passage in years of low runoff.

**Council response:** The Council has rejected the proposal to establish average systemwide turbine bypass levels because it intends to improve juvenile fish passage at each mainstem project having inadequate bypass facilities, not just at some projects. Moreover, since McNary Dam presently has a state-of-the-art mechanical bypass system which achieves high turbine bypass levels, it is unrealistic to expect that enough projects will achieve consistently better turbine bypass levels than McNary over the next five years to offset projects with inadequate passage facilities to obtain an average systemwide bypass level comparable to McNary. The Council also has concluded that Bonneville could be included in the consultation process to develop coordinated criteria for fishery operations, such as spill for fish passage, as part of the requirement to formulate interim juvenile fish passage plans for each of these projects. The Council has responded previously to Bonneville's notice of intent to develop a spill policy.

**3. General.** CBFWC indicated full support for all proposed amendments to these measures. CBFWC stated that the actions proposed in these measures are supported by the Northwest Power Act's mandate for equitable treatment for fish and wildlife, prompt remedy for juvenile fish protection at mainstem hydroelectric projects, and the standard of best available scientific knowledge.

**Council response:** The Council has taken this information into account in its final decision on this measure. The Council has designated a 90 percent project survival objective as an interim measure to be met at The Dalles, Lower Monumental and Ice Harbor dams. The Council has concluded that the method for determining the level of smolt survival at each project shall be prescribed by the fish and wildlife agencies and tribes, in consultation with the Corps. As a long-term standard, the Council has selected a 90 percent guidance efficiency criterion for the design of turbine intake deflection devices at these projects. The Council recognizes that it may not be feasible to achieve this design standard in actual operating conditions at all projects and for all species of fish. The Council also expects the Corps to measure the fish guidance efficiencies of each project's bypass system and to report the findings in its annual report to the Council. The Council will consider developing a performance standard for juvenile fish passage facilities during the next five years.

#### **404(b)(4). The Dalles Dam juvenile fish passage facilities.**

**1. Eliminate reference to Detailed Fisheries Operating Plan.** The Corps, Bonneville, and PNUCC commented that the Detailed Fisheries Operating Plan (DFOP), referred to in the draft amendment document, is a unilateral product prepared by the fishery agencies and tribes and does not reflect the opinion of the Columbia River system operators and utilities. Each recommended that all reference to DFOP be deleted from the program until a new DFOP is prepared jointly and accepted by all parties responsible for Columbia River Basin hydropower operations and fish management.

**Council response:** The Council has taken this information into account in its decision on this measure. The Council has determined that there is a need for the Corps, in consultation with the fish and wildlife agencies and Indian tribes, to cooperatively develop adult and juvenile fish passage criteria, similar to the criteria specified in DFOP. These criteria are necessary to ensure equitable treatment for fish and wildlife and should help coordinate power system and fish passage operations.

The Council is not adopting the 1984 DFOP as part of the program because it has not received information in these amendment proceedings indicating whether all elements of DFOP reflect the best available fish passage information and because the 1984 DFOP will be reviewed and updated annually. Nevertheless, the Council considers DFOP to represent significant progress in addressing system-wide passage problems and to merit full attention by the Corps, Bonneville and the utilities in working with the tribes and fish and wildlife agencies in the future to develop fish passage plans.

#### **404(b)(8). Lower Monumental passage.**

1. **General.** CBFWC indicated full support for the proposed amendments to this measure, especially installation of juvenile bypass facilities at Lower Monumental Dam to protect smolts migrating from upriver sites such as releases from Lyons Ferry Hatchery, natural outmigrants from the Palouse and Tucannon rivers, and those smolts that pass Lower Granite and Little Goose collector dams.

**Council response:** The Council took these comments into account in making its final decisions.

2. **General.** An individual recommended that the Corps spend all its monies and efforts on installation of a permanent juvenile bypass system at Lower Monumental Dam to be completed by July 1987.

**Council response:** The Council took this information into account in its final decision on this measure and has indicated to the Corps that it begin a step-by-step process of gathering the necessary data to demonstrate the most feasible structural bypass system available and then to install it as soon as practicable.

#### **404(b)(9). Ice Harbor passage.**

1. **General.** An individual recommended that the Corps spend all its monies and efforts on installation of a permanent juvenile bypass system at Ice Harbor Dam, to be completed by July 1987.

**Council response:** The Council has taken this information into account in its final decision on this measure and has indicated to the Corps that it begin a step-by-step process of gathering the necessary data to demonstrate the most feasible structural bypass system available and then to install it as soon as practicable.

#### **Comprehensive Evaluation of Juvenile Transportation.**

1. **404(b)(17).** The region's fish and wildlife agencies all support adoption of this amendment calling for a comprehensive evaluation of past transportation activities and recommendations for future activities. CBFWC believes that research on transportation should continue as long as fish are being transported from mainstem dams. The Corps stated that it still believes there is adequate scientific information to indicate that transportation should be included in the Council's program as a primary means of providing juvenile bypass. However, it stated that it would provide the Council with a comprehensive evaluation of smolt transportation.

**Council response:** The Council has not taken the position that transportation should not continue to be evaluated nor has it rejected the use of transportation as a primary means of juvenile fish bypass. Rather, the Council is seeking a comprehensive review of past transportation activities so that it will have the information necessary to make an independent determination on the future role of transportation.

3. **404(b)(17).** The Idaho Wildlife Federation commented that all transportation should be phased out and spill programs should be established at all mainstem hydroelectric projects.

**Council response:** The Council does not believe that it has an adequate scientific basis to eliminate transportation programs at this time. The measure that the Council has adopted is intended to provide that information.

4. **404(b)(17).** An individual recommended that the Idaho Department of Fish and Game conduct all studies to improve the success of transportation.

**Council response:** The Council has recognized the role of the Idaho Department of Fish and Game and has called on the Corps to consult with fish and wildlife agencies and tribes when developing proposals for future transportation activities.

#### **Homing Behavior Studies.**

1. **404(b)(18).** WDF supports this measure to conduct studies of homing behavior, but recommended that it be modified to require full consultation with the agencies and tribes.

**Council response:** The Council does not believe that this modification is necessary since such consultation is already required by measure 1304(c) of the Program.

2. **404(b)(18).** WDG and an individual commented that they do not believe this measure is necessary.

**Council response:** Neither of these commentators stated any reasons for their opinion. Therefore, the Council has no basis for accepting these suggestions.

3. **404(b)(18).** CRITFC stated that the measure should be modified to specifically state that this will be a study of homing behavior of fish transported directly to natural production areas. It does not support this measure as written.

**Council response:** The measure at issue is intended to determine the homing success of fish transported for the purpose of reducing juvenile mortality. The CRITFC proposal is directed at determining the success of homing in response to reprogramming. That type of research is currently addressed in measure 704(k)(1). In amending this measure, the Council was simply clarifying that homing behavior studies of transported fish would be conducted on fish transported directly from selected hatcheries, rather than from designated dams.

#### **Bypass Research.**

1. **404(c)(3) and (4).** CBFWC supports both of these measures which address research on bypass conduit facilities and deflection screens. However, it believes that the success of these measures is directly linked to consultation with the fish and wildlife agencies, tribes and project operators.

**Council response:** The Council believes that consultations among all parties are of critical importance to the success of all aspects of the Fish and Wildlife Program and fully expects that such consultations will be carried out as required by measure 1304(c).

2. **404(c)(3).** The Corps opposed the draft amendment. The Corps believes that such research is not appropriate and that systems should be designed for individual projects. Also, if accelerated completion schedules are required for juvenile bypass facilities, the results of this research may be too late to be applied. In addition, the Corps states that it will attempt to expedite current studies to determine if alternative conduit systems are better than those currently in use.

**Council response:** The measure, as adopted by the Council, does not preclude cooperative efforts or continuation of existing studies. The Council encourages such cooperation. Research on alternative conduit systems, such as open flume systems, could apply in cases where new bypass systems or modifications of existing systems will be required. The systems currently in use cause significant mortalities, and research that can lead to methods for reducing these mortalities is important to the overall survival of juvenile fish.

3. **404(c)(3).** Bonneville commented that it does not believe that the use of its funds to carry out this measure has been adequately justified. It suggested that the cost will be \$10-20 million dollars. It also believes this effort should be funded by the Corps, whose staff is more experienced in these matters.

**Council response:** The Council believes that Bonneville has assumed erroneously that the cost of carrying out this measure would be \$10-20 million. Testimony from the applicant before the Council has indicated that the measure as now written would cost between \$300,000 and \$650,000. The Council believes that this is a reasonable expenditure to evaluate alternative fish conduit systems that could be applicable in the design of new multimillion dollar bypass systems to be installed at hydroelectric projects currently lacking such facilities.

The Council also believes this research could apply to the entire Columbia River hydroelectric system, including both federal and non-federal projects. The Council also understands the necessity of completing this research on a timely schedule in order to assure that the results can be used in the design of new bypass systems which are to be constructed in the near future. If the Corps were to fund this study, it would be delayed for two or more years since the Corps has already budgeted funds through 1986. Because of this, and because of the importance of this study to assure the best bypass systems, the Council has concluded that it is appropriate for Bonneville to fund this systemwide study.

4. **404(c)(4).** Bonneville commented that it believes that additional research is necessary on turbine intake deflection devices and that it supports this measure. The Crown Zellerbach company also supports this amendment but urges the Council to ensure that the

measure provides enough flexibility to accommodate more than one project and to encourage cost-sharing arrangements.

**Council response:** The Council took these comments into account in adopting this measure. The Council believes that the measure as currently worded does not preclude studies at more than one project. The measure states Bonneville shall fund "studies," not a single study. The Council also believes that the existing language does not preclude cost-sharing arrangements and would encourage such arrangements where appropriate.

**6. 404(c)(4). The Washington Farm Bureau recommended deletion of this amendment on the basis that it duplicates ongoing efforts by the Corps and Bonneville.**

**Council response:** The Council is not aware of any other research in this area by the Corps and Bonneville that is duplicated by this measure. No other measures in the Fish and Wildlife Program call for evaluation of new designs for turbine intake screens.

#### **Oversight of Mainstem Passage Activities.**

**1. CB/404-2. PNUCC supports the Council's rejection of this measure.**

**Council response:** The Council took this comment into account in reaching its final decision on this measure.

### **SECTION 500: HARVEST CONTROLS**

#### **504(a). Escapement Objectives**

**1. General.** In general there was broad support from all parties for the establishment of spawning escapement objectives that achieve the production goals adopted by the Council. The Columbia Basin Fish and Wildlife Council (CBFWC) and the Washington Department of Fisheries (WDF) stated, however, that given the present state of runs, even immediate closure of the fisheries would not achieve escapement levels necessary to reach production goals. They requested that the Council support stock rebuilding schedules in addition to supporting the establishment of spawning escapement objectives.

**Council response:** The Council agrees with CBFWC and WDF and has included the development of rebuilding schedules in the measure.

**2. Tributary escapements.** The American Fisheries Society pointed out that tributary escapement objectives would have to be set to measure the success of program measures effectively.

**Council response:** The Council expects that escapement objectives will be those required to meet the production goals and objectives established as part of the 201 goals study.

#### **504(b). Consultation and Coordination**

**1. General.** Two entities requested that they be added to the Council's consultation list. The Shoshone-Bannock tribe asked to be included and this was supported by CBFWC and WDF. They stated that the Shoshone-Bannock tribes have a reserved right to harvest salmon and steelhead in their traditional ceremonial and subsistence fisheries which are located in the upper Salmon River Basin. CRITFC requested that the Council reword the consultation list to read "*Federally recognized treaty tribes responsible for management of Columbia River stocks, including the Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Confederated Tribes and Bands of the Yakima Indian Nation, and Nez Perce Tribe.*" CRITFC said the addition of the italicized words would recognize the legal status and responsibility of the four treaty tribes listed. PNUCC asked that "the Columbia River owners and operators of hydroelectric facilities and BPA customers" be added.

**Council response:** The Council is not taking a position on the relative rights of various tribes in the Columbia River Basin. The Council has amended the draft language to read "tribes." The Council does not list hydroelectric project owners and customers of Bonneville because the intent is to consult with fisheries managers. In practice, it will listen to all those who wish to comment on harvest management issues. The Council also plans to discuss harvest controls at least annually with opportunity for public comment by any interested party.

### **Electrophoresis**

**1. General.** CBFWC would like the proposed amendment altered so that the demonstration program can be used to protect any Columbia River stock requiring protection. The current language limits the demonstration program to upriver stocks only. The Washington Department of Fisheries submitted extensive comments describing how electrophoresis would be used to monitor stocks during the fishing season. WDF also described the differences between coded-wire tagging and electrophoresis and related costs.

**Council response:** The Council has amended the language to include all Columbia River stocks that need protection and has taken WDF comments into consideration.

#### **704(k)(3). Stock Identification Research**

**1. General.** WDG states that it supports inseason monitoring of stocks but does not believe that electrophoresis alone can do the job. It stated that marking and scale analysis also are required. WDG also stressed the importance of tributary monitoring as well as mainstem and ocean monitoring of stocks. WDF and CBFWC made similar comments. These commentors requested reinstatement of the original 704(k)(3) language.

**Council response:** The Council agrees with the concerns of WDG, WDF and CBFWC, and has reinstated measure 704(k)(3) as measure 504(c)(3). However, the Council has modified the original language to include funding of known-stock fishery demonstration programs only. The Council believes that ongoing fisheries management is the responsibility of the fisheries management agencies.

**2. Funding.** PNUCC supports continued development of data and new techniques to increase the ability to monitor and manage known-stock fisheries, but does not support Bonneville funding of such activities. Instead, PNUCC recommends that the Council and Bonneville support and assist the fishery management agencies and tribes in obtaining Congressional appropriation for a five-year demonstration program.

Bonneville acknowledged that improved inseason stock monitoring will protect ratepayer investment in upstream production and survival; however, it does not believe it has responsibility for funding any harvest management activities. It states this would defeat the purpose of Section 4(h) of the Northwest Power Act to increase the flow of resources into restoring runs rather than merely shifting costs to the ratepayers. Bonneville commented that harvest management activities are the responsibility of the fisheries management agencies such as the Pacific Fisheries Management Council.

Bonneville identified five factors that influence its decision on whether to fund measures. They include: 1) whether or not another entity or entities have specific authority and responsibility for the activity a measure calls for, 2) the extent to which the problem a measure addresses is associated with the impacts of hydroelectric development, 3) whether Bonneville has control or influence in the area, 4) whether the measure serves purposes other than the protection, mitigation, or enhancement of fish and wildlife affected by hydroelectric development and operation, and 5) the extent to which the benefits which a measure yields are susceptible to quantification for the purpose of crediting against Bonneville's protection, mitigation, and enhancement obligation.

Although Bonneville has funded development of electrophoresis in the past, it does not believe that funding was inconsistent with its current position because it believes that Section 4(h) of the Northwest Power Act expands Bonneville's role but circumscribes it at the same time. Prior funding for electrophoresis began in 1979 under authorities not specific to fish and wildlife.

**Council response:** The Council agrees with PNUCC that Congressional appropriation for stable long-term funding is a good approach. The Council does not agree with Bonneville's and PNUCC's rationale for not funding these measures at all. The Council believes sections 4(h)(8)(A) and 4(h)(11)(A) of the Act clearly state Bonneville's responsibility for funding measures for offsite protection. The Council believes that development of known-stock fisheries is an important, cost-effective way to protect stocks the Council's program is trying to restore. The Council believes it is in the interest of the ratepayer to fund programs to demonstrate the effectiveness of known-stock fisheries.

The Council also believes the ratepayers have an obligation to fund known-stock fisheries because of the linkage between hydroelectric development and the mixed stock fishery. If dams had not been constructed, hatchery mitigation would not be necessary. The contribution of hatchery fish to the ocean fisheries is one of the root causes of the problems posed by the mixed stock fishery.

The Council also notes that under the 1976 Magnuson Fishery Conservation and Management Act, 16 U.S.C. 1801, the Pacific Fisheries Management Council is directed to promote management plans which achieve optimum yield from each fishery. Concepts of optimum yield balance economic consideration against conservation considerations. Often this means setting regulations below what would be optimal if conservation were the only consideration. For this reason, the Council, which perceives conservation to be its highest priority, believes it has an obligation to promote new technologies that further conservation objectives in the ocean fishery.

Finally, the Council has designated the activities in this section as demonstration projects as a way to indicate that any proposed program should be of limited duration.

#### **504(d)(2). Yakima Hatchery**

**1. General.** Most of the comments relating to the Yakima Hatchery are addressed in the response to comments on 704(i)(3). There was support from the fisheries agencies and tribes for the Council's proposal to allow construction of the Yakima hatchery as long as fish produced contributed to adequately controlled fisheries. CBFWC requested that additional language be added to ensure tribal and fish and wildlife agency participation in the Council's decision on which stocks may be produced at the hatchery. CRITFC requested that the Council assist the Yakima, Warm Springs, Umatilla, and Nez Perce tribes in their efforts to control ocean harvest to ensure the success of the measure. Bonneville commented that the stocks to be produced should be decided before design begins and that the Council "review" rather than decide which stocks will be produced.

**Council response:** The Council believes that the concern of CBFWC and Bonneville will be addressed by the master plan. The Council will decide whether to approve the master plan which will contain a production profile. The Council plans to monitor harvest regulations, as reflected in the new language for Section 500.

**2. Definition of "adequate controls" and contribution of spring chinook to ocean harvest.** PNUCC objected to initiation of construction of the hatchery prior to imposition of adequate harvest controls. It also disagreed with the assessment that spring chinook are not caught in substantial numbers off Alaska and Canada. It agreed that sockeye and steelhead are not subject to substantial ocean harvest.

**Council response:** The Council has assessed the status of ocean fisheries. This assessment has shown that some stocks do not contribute to the ocean fishery at all, while others contribute to controlled fisheries. It also showed that some stocks migrate off Canada and Alaska where they are overharvested. Based on this assessment, the Council decided to proceed with construction of the hatchery as long as stocks produced contribute to controlled fisheries.

Regarding the contribution of upriver spring chinook, the Council believes that PNUCC is basing its findings on an article by Wahle, *et al.*, in the Marine Fisheries Review, December 1981, 43(12). Agency scientists believe that the Wahle data is unreliable because it is based on fin marking that was very similar to fin marking being done at the same time in the Sacramento River. Efforts by WDF to replicate the results of the Wahle study have not been successful.

#### **504(d)(3). General Enhancement Policy**

**1. General.** Oregon Trout expressed concern regarding the Council's proposal to gear enhancement activities toward stocks that contribute to adequately controlled fisheries. It believes this would undermine the Council's goal of restoring upriver runs. The American Fisheries Society expressed a similar concern.

**Council response:** The Council recognizes these concerns and has amended the draft language so that the proposed policy will not undermine its overall objectives.

#### **504(e) Ocean Plume Research**

**1. General.** PNUCC and Bonneville object to funding this research because they believe it is not a ratepayer responsibility.

**Council response:** The Council believes that construction and operation of the hydroelectric facilities have influenced the environment in the Columbia River plume and that this environment may be important to survival of juvenile salmon.

### **SECTION 600: UPSTREAM MIGRATION**

#### **CB/604. Adult Fish Counting Procedures**

**1. Fish Count Accuracy Standard.** CBFWC recommended this proposed amendment to improve the accuracy of fish counts at individual mainstem projects and the comparability of counts among projects. CBFWC stated that it believes it would be appropriate for the Council to adopt a fish count accuracy objective, recommended to be 5 percent, to serve as a standard for all mainstem project operators.

**Council response:** The Council has concluded that this amendment proposal duplicates existing program measures 604(d)(1) and 604(d)(3), as well as the activities of the Fish Counting Subcommittee of the Columbia Basin Fisheries Technical Committee, which is the primary interagency body responsible for coordinating and evaluating counting procedures at federal mainstem dams. The original proposed amendment wording did not suggest Council adoption of a numerical accuracy standard. Moreover, the Council has not been presented with information to substantiate the proposed 5 percent standard, or to document whether this standard is or is not being attained presently at mainstem projects.

**2. Rejection.** PNUCC commented that it supports rejection of this proposed amendment for the reasons outlined by the Council.

**Council response:** The Council took this comment into account in its deliberations on this measure.

#### **CB/604(b)(3). The Dalles North Shore Fish Counter**

**1. Recommends adoption.** CBFWC recommended modification of both the east shore and north shore fishways at The Dalles Dam from older horizontal counting boards to new vertical slot counters. CBFWC stated that even though The Dalles north shore fish ladder passes fewer fish (22 percent) than the east fishway, the north fishway is still important for a significant amount of fish passage, although of a lower priority for improvement than the east fishway. CBFWC indicated that the Corps has scheduled construction of a vertical slot counter at The Dalles Dam east fishway for the winter of 1985. CBFWC recommended reconsideration for the Corps to install a vertical slot counter at The Dalles north fishway for the following reasons: 1) This type of facility would reduce adult passage delays; 2) It would improve fish count accuracy by improving species identification; 3) It will be equally effective in addressing an upstream fish passage problem in the north ladder as existing measure 604(b)(3) will be in addressing a similar problem at the east shore fish ladder; 4) After completion of the modifications of the east fishway, the north shore facility will have the last horizontal counting board at the Corps' mainstem projects; and 5) The Corps has no objection to this proposal and has already begun preliminary engineering design work for the north shore fishway improvements.

**Council response:** The Council has taken this information into account in its final decision on this proposed measure.

#### **CB/604(b)(3). The Dalles Dam Fishway Counter**

**1. General.** The Corps stated that it concurs with existing measure 604(b)(3) and will be installing a new vertical slot counter at The Dalles Dam east fishway. The Corps also commented that installation of The Dalles Dam north fishway vertical slot counter is of a much lower priority in terms of saving or producing a large number of fish. The Corps indicated that it is studying currently this modification to the north fishway.

**Council response:** The Council has taken this information into account in its final decision on this measure.

**2. Funding transfer.** One individual commented that funding for upstream migration studies and monitoring of adult passage should not be transferred from Bonneville to the Corps. This individual stated that such studies should be conducted first by USFWS or the Bureau of Reclamation before allowing the Corps to do this work.

**Council response:** The Council has concluded that this improvement should be the responsibility of the project operator, in

this case, the Corps. The Council also has noted that this measure proposes to design and install a vertical slot fish counter, not a study.

#### CB/604(c)(2). North Clackamas Adult Passage

1. **General.** Both CBFWC and PNUCC have stated that Portland General Electric (PGE) has already indicated a willingness to work cooperatively with the fish and wildlife agencies to resolve adult passage problems at PGE's North Fork Clackamas River hydroelectric project. Because of this cooperative agreement, PNUCC stated that it supported rejection of this proposed measure to transfer funding responsibility to Bonneville to study these passage problems. CBFWC commented that it wants this measure included in the Council's Fish and Wildlife Program as a potential fall-back solution to adult passage problems on the North Fork Clackamas River if PGE fails to take action.

**Council response:** The Council has concluded that this amendment application, which was at one time withdrawn by CBFWC, would not be an effective use of the region's funds nor provide the most effective method for achieving protection, mitigation, and enhancement of fish life. The Council has determined that CBFWC and PGE should continue to cooperate to resolve this adult fish passage problem.

#### WG/604(d). Anadromous Fish Returns

1. **General.** Both the Seattle Audubon Society and WDG recommended reconsideration of this proposed amendment to fund in-season monitoring of steelhead stocks to assure harvest controls are adequate to provide escapement objectives. Seattle Audubon Society stated it believes that development of a methodology for escapement objectives is needed, but that funding for implementation and monitoring should be rejected. WDG stated that baseline escapement data is needed on anadromous and resident fish to provide a basis for evaluating success of the Council's Fish and Wildlife Program, such as in the Yakima Basin, and to monitor change and passage conditions.

**Council response:** The Council has concluded that gathering escapement data is a traditional fishery management agency responsibility. The Council has also determined that the amendment application requested Bonneville funds for monitoring escapement of anadromous fish, not for development of a methodology to determine escapement objectives. Furthermore, the Council has determined that evaluation of the overall success of the Fish and Wildlife Program, using escapement information, will be most useful when the Section 201 anadromous fish goals and losses are established to provide a measure of success.

2. **Rejection.** PNUCC commented that it believes funding for fishery agency or tribal management responsibilities, such as monitoring steelhead escapement, is outside of Bonneville's funding responsibility under the Northwest Power Act. PNUCC stated that it supported rejection of this amendment application.

**Council response:** The Council has taken this information into account in its final decision on the proposed measure.

### SECTION 700: WILD, NATURAL, AND HATCHERY PROPAGATION

#### Fish Propagation Panel

1. WDF and CRITFC urged the Council to replace the Fish Propagation Panel (FPP) with the fish and wildlife agencies and tribes and to develop a means of settling disputes, if the agencies and tribes could not agree. The American Fisheries Society proposed reinstatement of a group like the panel. Oregon Trout, Inc., commented that the Council needs firm technical direction. PNUCC proposed that the Council find an immediate "nonadvocacy" means for obtaining scientific guidance.

**Council response:** The Council will continue to seek scientific advice from the fish and wildlife agencies and tribes throughout program implementation, and will continue to encourage settlement of disputes. However, it also will continue to fund its own fish and wildlife staff to undertake appropriate contracting to augment the scientific advice of those agencies and tribes. In the future it may also appoint new advisory committees to provide scientific advice on selected problems.

#### CB/704(b). Study to Develop Habitat Preference Curves

1. **General.** IDFG and ODFW indicated that each uses habitat preference curves in the Instream Flow Incremental Methodology (IFIM) to determine instream flows necessary to mitigate small hydropower development. Both agencies use existing published preference curves and modify them to fit local conditions. IDFG expressed support for developing generic preference curves for selected species, life stages and streams throughout the Columbia River Basin. ODFW advocated developing site-specific curves only for large or controversial projects or diversions having potential adverse impacts on significant anadromous or resident trout populations, and then only to obtain more valid IFIM modeling results. No written comments or recommendations concerning Washington Department of Game's (WDG) proposed study were received from either IDFG or ODFW, since neither agency had reviewed the study proposal, nor had either agency been contacted by WDG about coordinating study needs for each state or cooperating in a cost-sharing study agreement.

**Council response:** The Council took this information into account in its consideration of CB/704(b).

2. **General.** MDFWP responded orally that it relies exclusively on the "wetted perimeter" method to determine minimum instream flows necessary for fish life.

**Council response:** The Council notes that the State of Montana would have little or no use for regionally developed habitat preference curves, since MDFWP does not use the IFIM method.

3. **General.** The USFWS Fort Collins Instream Flow Group developed and published a complete set of habitat preference curves in 1978 for species, life stages, and habitat data available at that time. USFWS is presently working on updating these preference curves. USFWS is also writing an information paper on how to develop criteria for microhabitat preference curves. Both should be published by early 1985. When applying the USFWS preference curves, one needs to compare the stream and conditions where the curve was developed and adapt/modify to the stream of study. It is permissible to adapt these curves from complex, diverse habitat types to less diverse conditions, but not vice versa. One has to use professional judgment when applying curves to another stream, basin, or region. Furthermore, very few studies have been able to develop widely adaptable or generic habitat preference curves. Most curves are developed incidentally as part of an instream flow study.

**Council response:** The Council took this information into account in its consideration of CB/704(b).

4. **General.** A FERC biologist in hydroelectric licensing stated orally that the instream flow conditions placed on developers varied as to whether the application was in the exemption or in the standard licensing process. In the exemption process, state or federal fish and wildlife agencies can require a hydropower developer to develop site- or species-specific habitat preference curves for use in the IFIM model to determine adequate instream flow levels. In this process the developer must comply with the specified conditions or not be exempted from FERC licensing. FERC has required the developer to produce site-specific preference curves as an exemption condition in several cases. In the standard licensing process, the fish and wildlife agencies try to reach an agreement with the developer concerning the biological and hydrological data that the developer will provide FERC, which also could include development or application of habitat preference curves for use in the IFIM process. Most often, a developer will apply published preference curves with the guidance of the fish and wildlife agency. If agreement on the type of data that is to be developed or provided cannot be reached with the developer, then FERC makes the final decision on how much and what type of information will be provided by the developer.

**Council response:** The Council took this information into account in its consideration of CB/704(b).

5. **Support for rejection.** Bonneville and PNUCC indicated support for rejection of this amendment application for the following reasons: 1) There is no clear demonstration of systemwide need or use for development of generic habitat preference curves, e.g., the existing literature shows that preference curves should be developed or modified to fit site-specific conditions to be most accurate. 2) This

type of study is not a clearly defined area of Bonneville involvement or Fish and Wildlife Program applicability, e.g., preference curves could be used for any number of mitigation activities not related to hydro-power development. 3) The region's fish and wildlife agencies can verify or develop these curves as needed, since that is a basic fish and wildlife agency resource management responsibility. 4) It is Bonneville's position that needed improvements or conditions at individual hydro facilities should rest exclusively with the developer or operator, whether federal or nonfederal.

**Council response:** The Council took these positions into account. It determined that use of IFIM often requires site-specific verification and/or development of habitat preference curves. The Council has therefore questioned the generic applicability of preference curves, since these curves often must be modified to meet site-specific hydraulic conditions and species-specific behavior. The Council also urges the region's fish and wildlife agencies to continue to work cooperatively with the water management agencies and FERC to ensure that hydroelectric developers provide the necessary information to establish instream flow requirements for fish life. The Council already has adopted program Section 1204(a)(1) which requires hydroelectric developers in the basin to mitigate project-specific resource impacts, including a requirement to identify and maintain adequate instream flows for all life stages of fish.

### **704(c)(1) and (2). Willamette Basin Temperature Control Studies**

1. The Corps and PNUCC commented that they were concerned that temperature control devices would be required regardless of the results of the feasibility studies called for in 704(c)(1) and (2).

**Council response:** The Council has changed the measure to avoid prejudging the results of studies which are not complete by requiring that recommendations be developed based on and supported by the study results.

2. PNUCC proposed addition of language requiring that actions taken be cost effective.

**Council response:** Section 4(h)(6)(C) of the Northwest Power Act directs the Council to select the minimum cost alternative when a decision between two equally effective actions is required. Based on the Corps' annual progress reports and the final feasibility study results (Section 704(c)(1) and (2)), the Council will be in a position to seek comments and make a decision concerning temperature control devices.

### **704(d)(1). Annual Spending Cap**

1. Oregon Trout, Inc., and the Seattle Audubon Society suggested a funding ceiling of \$25.0 million a year for all offsite enhancement. Their rationale for this comment was the desire that funding of passage restoration projects not be impeded. The Washington and Oregon fish and wildlife agencies, CBFWC and USFS suggested a \$3.0-3.5 million per year dollar figure be used as the cap for funding of habitat improvement only. The agencies intended that this amount would be split among the three anadromous fish producing states at \$1.0 million each per year. Passage projects would have no funding cap. PNUCC proposed an annual cap of \$3.0 million for habitat improvements and \$5.0 million for passage work. Bonneville suggested the Council should rely on the Bonneville staff capabilities as the controlling factor.

**Council response:** There is no apparent agreement on a specific dollar cap. The Council has not designated a funding level or spending cap; it will rely on the work plan to establish an appropriate level from year to year.

2. PNUCC and Bonneville commented that federal funds should be sought and used to supplement BPA ratepayer funds when offsite enhancement work is to be performed on federal lands.

**Council response:** This concept is incorporated in Program Section 704(d)(1) language encouraging cost sharing. However, the Council has altered the language to encourage cost sharing with "appropriate entities" rather than restricting it to land managers.

### **Combining habitat improvement and passage restoration.**

1. Various commentors expressed concern for combining these two measures because of the funding constraints suggested by imposing a cap on the spending level. There were also numerous suggestions to separate out particularly important and/or costly passage restoration projects for special funding considerations.

**Council response:** Without a cap on offsite enhancement projects, there is no rationale for separating these passage projects from the offsite enhancement program measure. By considering both activities in the same measure, a vehicle is provided for addressing all enhancement work in a subbasin. The Council has emphasized its interest in this concept by encouraging Bonneville to develop its annual work plan emphasizing a limited number of tributary sub-basins as units.

### **Previously rejected applications.**

1. CRITFC, CBFWC, Oregon Trout, USFS, Oregon Division of State Lands, Bonneville, Umatilla Tribe, and several public interest groups resubmitted applications or offered supporting comments concerning nine specific offsite enhancement projects in the basin that had been proposed for rejection in the draft amendment document for lack of information.

**Council response:** In the draft amendment document, the Council invited submission of additional supporting information and comment on offsite enhancement proposals, as well as other elements of the draft amendment document. The Council has adopted nine applications, originally proposed for rejection, because of the information added to the record during the comment period. The additional information included: detailed estimates of species-specific smolt and adult production benefits projected from proposed enhancement activities; discussions of cooperative arrangements among state, federal, and tribal entities concerning the lands involved; detailed and scientifically documented biological justification; results of physical surveys conducted specifically to verify habitat limiting factors; detailed descriptions, evaluations and interpretations of interagency planning studies for the affected subbasins; management strategies for implementation; evaluations of activities conflicting with fish production (e.g., irrigation); and plans to evaluate the effectiveness of habitat improvements, passage restoration and supplemental outplanting of hatchery fish to the enhanced sites.

2. WDG submitted additional information concerning the Walla Walla River habitat improvement projects (application WG/704(d)). The comments described the present condition of the river habitat, history of degradation, and general expectations of success.

**Council response:** WDG did not provide specific estimates of anticipated smolt production or existing levels of escapement. The application remains deficient in critical areas, failing to meet the Council criteria. Therefore, the Council has again rejected that project.

3. Several commentors objected to screening the applications with criteria not known to the applicants prior to their original submission.

**Council response:** The Council screened all proposals to determine whether they satisfied the standards of the Northwest Power Act for program measures. Those standards include requirements that measures be based on the best available scientific knowledge and that they complement the existing and future activities of the fish and wildlife agencies and tribes, among other requirements. See 16 U.S.C. 839b(h). Those standards are spelled out in the Northwest Power Act and were used as the basis for the Council's amendment application form.

4. The Oregon Division of State Lands asked for a review of their amendment (DL/704(d)) for a series of tributaries to the Grande Ronde River.

**Council response:** This area is covered by the adopted USFS amendment on the Upper Grande Ronde (US/704(d)(1)-14).

5. Bonneville suggested that the Council accept all offsite enhancement amendment applications. According to Bonneville, this would avoid the apparent favoring of lower river projects and provide a broader selection of projects for Bonneville staff.

**Council response:** It is not the Council's intent to favor lower river projects. The array of projects in the draft amendment document reflected the relative quality of the information provided in applications received, not a preference favoring lower river over upper river projects. The Council has not adopted all applications submitted because not all satisfy the standards of the Northwest Power Act for program measures.

6. The Bureau of Indian Affairs and CRITFC commented that they are opposed to offsite enhancement work below Bonneville Dam because the lower tributaries are managed for hatchery fish rather



than natural or wild stocks. The latter would be susceptible in the mixed-stock fishery.

**Council response:** Lower river tributaries do support naturally spawning stocks and, therefore, habitat enhancement in these basins does increase production. The Council also has added a number of habitat and passage projects in the upper basin and has emphasized its concern for the upper river stocks by adding related criteria to this effect in the outline of the annual work plan for offsite enhancement activities.

#### 704(d). Work Plan.

1. Numerous groups expressed concern for the development of an annual work plan by Bonneville which would require Bonneville to plan offsite enhancement activities each fiscal year. (See Section 704(d)(1).) These commentors requested an assurance that the work plan would incorporate the knowledgeable and necessary entities, e.g., the land management agencies.

**Council response:** The Council has responded by adding language to this effect to the outline of the Bonneville work plan in the amended measure 704(d)(1). The language now directs Bonneville to develop a work plan in consultation with the agencies and tribes. Further, Bonneville is to indicate to the Council the degree of concurrence among all participating entities.

2. A commentor urged that the Bonneville work plan indicate how priorities will be set among projects and specify which entity will select the projects for implementation.

**Council response:** New language has been added to the measure stipulating Council approval of the work plan prior to implementation. The new language also requires consultation among Bonneville and the fish, wildlife and land management agencies and tribes during development of the work plan.

#### Work Plan Criteria.

1. Oregon Trout, Inc., PNUCC and U.S. Forest Service suggested adding criteria concerning existing smolt production potential to the work plan.

**Council response:** The Council included existing production potential as a criterion.

2. USFS proposed that the work plan identify all factors limiting smolt production.

**Council response:** The Council recognizes the importance of determining the limiting factors in habitat enhancement efforts and has added this as a criterion to the work plan.

3. USFS and others commented that the Council must consider the effect of offsite enhancement on resident fish. The comment concerned the effects of providing passage in a stream historically inaccessible to anadromous fish or restoring passage in a stream devoid of anadromous fish for a long period.

**Council response:** The Council has added this as a criterion for Bonneville consideration in work plan development. The Council recognizes introduction of anadromous fish will have an impact on resident fish populations.

4. PNUCC and the Seattle Audubon Society expressed the concern that the work plan consider impacts on aesthetics and recreation that may occur due to development of passage at natural blockages to fish passage.

**Council response:** These matters should be covered adequately by the National Environmental Policy Act process which must be adhered to in the implementation of these types of projects.

#### 704(g). Hatchery Reprogramming

1. WDF suggested language additions requiring the review of reprogramming proposals by the agencies and tribes. CRITFC commented similarly but recognized possible program delays if consensus were required before action.

**Council response:** Existing program language (704(g)(1)) requires the cooperation of the agencies and tribes in the reprogramming effort.

2. PNUCC proposed language specifying criteria for selection of reprogramming stocks.

**Council response:** The fish and wildlife agencies and tribes will provide the appropriate detailed criteria for reprogramming stocks at the time of completion of the reprogramming plan.

3. IDFG commented that the Council should consider IDFG's draft anadromous fish plan in implementation of reprogramming measures.

**Council response:** The Council recognizes the existence of the Idaho plan. It will consider its contents in guiding implementation of related measures.

#### 704(h)(2)(A) and (B).

1. WDF and Bonneville supported the clarifications of hatchery effectiveness research. WDF stated that the new language will provide a broader base for research and development in artificial production techniques.

**Council response:** The Council recognizes the importance of hatchery technology in the Columbia River fisheries restoration. The Council modified program language to clarify the Council's intent.

2. CRITFC proposed several language additions to direct program emphasis to use of hatcheries to supplement natural production.

**Council response:** The program already is clear in requiring integration of artificial and natural propagation. (See, e.g., Sections 106, 703 and 704(k).)

3. PNUCC proposed language modifications in Program Section 704(h)(2)(A) stipulating that hatcheries constructed through the Fish and Wildlife Program be required to follow the practices established by program research.

**Council response:** The Council intends the results of hatchery effectiveness research to be applied, as appropriate, to hatcheries throughout the basin.

4. Bonneville proposed several language modifications to 704(h)(2)(A) which add "demonstration" as a component of the research and development leading to increased hatchery production. It objected to the use of the term hatchery smolt "quality" due to difficulties in defining the term. It also objected to the use of the term "hatcheries" in the requirement for testing of improved husbandry practices because the term "hatcheries" is unnecessarily restrictive. Bonneville commented that many other facilities could benefit equally well from these findings.

**Council response:** The Council has made appropriate alterations in the program language incorporating these comments. Program Section 704(h)(2)(A) requires demonstrations of new techniques and practices learned from research and development. This will aid in basinwide acceptance of research findings.

5. 704(h)(2)(B) PNUCC proposed that Bonneville develop, as part of a five-year research plan, specific research, development and testing proposals of hatchery rearing and release strategies aimed at improving operational efficiencies and increasing the adult contribution of artificially propagated fish.

**Council response:** The Council rejected the proposed reliance on Bonneville for specific research and development proposals. The technical expertise of the fish and wildlife agencies and tribes is considerable and should be relied on. While Bonneville may participate, the primary Bonneville task is implementation. Furthermore, the Council intends to undertake development of a research plan in consultation with Bonneville, other agencies and tribes as part of action plan item 39, to define the research needs of the fish and wildlife program.

6. PNUCC commented on the similarity between 704(h)(2)(A) and (B). Bonneville commented that measures 704(h)(2)(A) and (B) were redundant and (B) should be deleted.

**Council response:** The two measures are closely related, but not redundant. Section 704(h)(2)(A) addresses research and development on individual environmental and husbandry aspects, i.e., the biological components. Section 704(h)(2)(B) deals with applications of these practices to the operations and strategies that must be manipulated to improve production. The Council has clarified 704(h)(2)(B) to require the application of effective fish husbandry practices developed through research conducted under 704(h)(2)(A).

7. Bonneville proposed that the term "programs" be changed to "projects" in Program Section 704(h)(2)(D).

**Council response:** The Council has retained the word "program" to indicate the need for comprehensive and coordinated development of projects.

8. Bonneville recommended that the language referring to "diagnosis and control" be reinstated to the fish disease provisions in Program Section 704(h)(2)(D). Bonneville reasoned that much of its existing fish disease program has been developed on the basis of this language and to remove it now could be disruptive.

**Council response:** The program language in Section 704(h)(2)(D) calls for Bonneville funding of methods to improve diagnosis and control of fish disease and parasites.

9. Bonneville proposed deletion of the reference in 704(h)(2)(E) to the Pacific Northwest Fish Health Protection Committee, due to a perceived overlap in responsibilities between the committee and other unspecified groups.

**Council response:** The Council does not perceive an overlap in responsibilities and expects the Committee to provide guidance to development of a fish health program in the region.

10. PNUCC suggested that the development of a single smolt quality index, as stated in Program Section 704(h)(2)(F), will not meet the needs of fishery sciences in the Columbia River Basin. PNUCC stated that smolt quality will be species-specific and stock-specific and multiple indices will be required.

**Council response:** The Council recognizes the validity of PNUCC's concern and notes there is little agreement within the scientific community concerning smolt quality and indices for smolt quality or readiness to migrate. The Council has added the appropriate language to the measure to reflect the need to develop appropriate indices.

11. Bonneville suggested revising Program Section 704(h)(2)(F) to require Bonneville to conduct a workshop and generate proposals for smolt quality index research based on the workshop results.

**Council response:** The recommendation at issue was to develop further tests and apply them as necessary to improve the effectiveness of hatchery production. A workshop may be helpful in defining future research strategies.

#### 704(i)(2). John Day Acclimation Ponds

1. **Location.** CRITFC wants the program to state explicitly that fall chinook from reprogrammed Bonneville and Spring Creek hatcheries will be released in the Hanford Reach and Yakima River areas to enhance natural production and that acclimation ponds, if they are needed, should be located above McNary Dam. During consultations the fisheries agencies indicated they would prefer a site in the John Day Pool.

**Council response:** The Council believes that the primary emphasis of the acclimation ponds should be to improve survival of hatchery fish released to supplement natural production. The Council takes this position because it is in keeping with the Council's overall program goal of enhancing natural stocks. (See Program sections 106 and 703). Natural spawning habitat is not available in the John Day Pool. However, if during the planning phase it appears there are not enough technically suitable sites above McNary Dam, the fishery agencies and tribes are expected to consider putting acclimation ponds in the John Day Pool.

2. **Necessity of acclimation.** CRITFC stated that acclimation ponds are advisable, but not a necessity. It points out that all steelhead released into the mid-Columbia are released directly without acclimation.

**Council response:** The Council recognizes that the ability of acclimation ponds to improve survival is in some dispute. Therefore, one of the main purposes of the temporary ponds will be to assess their effectiveness.

3. **Nature of the facility.** CBFWC commented that the acclimation facilities should include an option for holding facilities for adult fish when they return to the acclimation site.

**Council response:** The Council has not ruled out the use of adult holding facilities in the permanent facilities. The temporary facilities, however, should include only those design elements necessary to test the effectiveness of acclimation. If the holding ponds are for year-round production or terminal fisheries, they should not be included in the temporary facilities. If they are used for brood stock collection, their inclusion in the plan should be considered.

4. **Planning criteria.** PNUCC suggests that the construction of the facilities be conditioned on the following criteria: (1) maintenance of genetic integrity of stocks potentially impacted by the proposed fish transfer; (2) compatibility of fish proposed for transfer with those naturally inhabiting the release location; (3) fish proposed for transfer are certified disease-free; and (4) harvest management objectives have been established for the stock proposed for transfer with consideration of potential mixed-stock fishery complications.

**Council response:** The Council has included most of these criteria (1-3) as the basis for guidelines to be developed as part of the planning process. Harvest management objectives will be established at the conclusion of the Section 201 goals study when escapement objectives are identified.

#### 704(i)(3)/904(e)(1). The Yakima Hatchery

1. **Location and nature.** Several commentors expressed confusion over the term "model hatchery." Several fish and wildlife agency personnel indicated that all new hatcheries are model, state-of-the-art hatcheries. Others indicated that hatcheries were so site-specific it would be difficult to determine exactly what model meant. One NMFS scientist suggested "central outplanting facility" as being more descriptive.

Other biologists indicated that hatchery design is dictated primarily by the water supply. Other considerations might include disease control by having separate water supplies for incubation and rearing ponds, and satellite acclimation ponds for outplanting.

Some biologists indicated the importance of using brood stocks that are appropriate to the area being supplemented with hatchery fish so that genetic diversity of the stocks is fully conserved. The emphasis on gene conservation also was supported by the Seattle Audubon Society.

Bonneville had the following comments: 1) Stock requirements for the hatchery should be identified prior to initiating design activity; 2) Bonneville does not want to be restricted to the Outlet Creek site and proposes instead an investigation of all potential sites within and outside the Yakima Basin; and 3) All references to a model hatchery should be deleted so it has the option of using low-cost production facilities to meet the objectives. Bonneville also submitted a detailed plan showing how planning and predesign as well as design and construction would be carried out.

PNUCC opposed construction of a hatchery without adequate information regarding selected species, use of hatchery production, and analysis of cost effectiveness.

**Council response:** The Council has taken these comments into consideration. Rather than using the term "model hatchery," the Council has defined the project as a central outplanting facility and specified planning, management and design considerations that will be addressed in the master plan. These considerations include identification of release sites, production profiles, facilities required, management policies, monitoring studies, and costs. The Council believes that by developing the master plan, the planning concerns of Bonneville and PNUCC will be addressed.

The Council believes that delay of the hatchery while sites for the central facility are surveyed and the potential of small-scale production is assessed is unnecessary in light of existing information. A 1979 feasibility study by USFWS and the Yakima Indian Nation (YIN) identified the Outlet Creek site as having an excellent water supply. The feasibility study estimated production to be about 300,000 pounds, a considerable amount but well below the 700,000 pounds estimated by the Bureau of Reclamation as necessary to achieve the potential of the basin. Based on these figures, the Council believes that there are important roles both for a central outplanting facility and small-scale, low-capital production.

2. **Coordination.** WDF requested that the management activities of YIN be coordinated with the activities of other fishery management agencies in the basin. YIN indicated it is willing to work with such agencies, as long as there is mutual agreement on the production goals at agency hatcheries as well.

**Council response:** The master planning phase of the project is intended to address management as well as design concerns. The master plan would be prepared in consultation with the other fisheries agencies and tribes in the basin. The Council intends to support coordination among the agencies and the tribes throughout the basin. (See program measure 1304(a)(2).)

The Council believes that under the Act, cost effectiveness is not an appropriate criterion for evaluating program measures. Instead the Council believes measures in the program should be the most biologically viable. Among several equally biologically viable alternatives the least costly should be selected.

**3. Allocation of the resource.** Bonneville indicated it does not believe the objective of the measure should be couched in terms of enhancing the fishery for YIN or any other user group.

**Council response:** The original language noted that the facility would be used to enhance fisheries for YIN and other harvesters. There is no intent to allocate harvest benefits.

**4. Hatchery management.** Bonneville stated that reference to hatchery management by the Yakima Indian Nation "implies the preferential investment of ratepayer funds for the benefit of a specific user group rather than the objective of salmon and steelhead enhancement. . . ."

**Council response:** The Council has stated clearly that the Yakima Hatchery will enhance the fishery for "other harvesters" as well as the Yakima Indian Nation. See the original, draft amendment, and final amendment language for Program Section 704(i)(3). The Council has determined that the location of the hatchery facilities on the Indian reservation calls for special consideration by Bonneville of the unique rights and concerns of the Yakima Indian Nation. See new Program Section 1304(e)(4).

#### 704(k)(1).

**1. CRITFC proposed replacing SSAC with the Enhancement Planning Team (created pursuant to the Salmon and Steelhead Enhancement Act) as the consulting body on supplementing naturally spawning stocks with hatchery fish.**

**Council response:** The Council is aware of the need to replace the SSAC reference but is not prepared to identify one at this time. The Council will continue to seek scientific advice from the fish and wildlife agencies and tribes.

**2. Bonneville objected to language used in the draft amendment document requiring it to develop a supplementation plan with the fish and wildlife agencies and tribes. Bonneville considers research identification and plan development to be fish and wildlife agency and tribal responsibility.**

**Council response:** The Council has amended the program to require the agencies and tribes to develop a plan to supplement naturally spawning stocks with hatchery fish.

#### SECTION 800: RESIDENT FISH

**1. 804(d)(1).** Bonneville commented that the Council should modify the wording of measure 804(d)(1) (removal of accumulated materials in the Kootenai River) to clarify the following concerns: 1) The measure only concerns tributaries of the Kootenai River downstream of Libby Dam; 2) The measure only concerns accumulated materials that interfere with the migration of spawning fish; 3) Bonneville should determine who will remove the material; and, 4) Bonneville will work with MDFWP to identify which material is interfering with the migration of spawning fish.

**Council response:** The Council agrees that these changes would clarify the original intent of measure 804(d)(1) and has made the necessary changes.

**2. 804(e)(7).** The Bureau of Reclamation commented that it does not have any long-term authority for operation and maintenance of the barrier net at Banks Lake.

**Council response:** The authority for the long-term operation and maintenance of the barrier net at Banks Lake is set forth in a memorandum between the Regional Director, Bureau of Reclamation and the project manager at Banks Lake. The Council believes that the Bureau of Reclamation can execute a new memorandum and seek appropriations to obtain the necessary funds for the barrier net at Banks Lake.

**3. 804(e)(8).** PNUCC commented that the "basic biology" research proposed for measure 804(e)(8) is a fishery management agency responsibility and, as such, suggested that this language be removed from the measure.

**Council response:** The Council has deleted the reference to "basic biology" research needs in Program Section 804(e)(8). The Council has revised this measure further to show that Bonneville will

not fund additional sturgeon research until research goals have been determined under Section 1100. The timing of this research will be addressed in the action plan (Section 1500). The Council also has revised measure 804(e)(8) to reflect that the research will determine the impacts of hydroelectric power development and operation on sturgeon in the Columbia River Basin.

**4. 804(e)(8).** One individual commented that the reference to "white" sturgeon in Program Section 804(e)(8) should be changed to Columbia River sturgeon. This change would allow for the studies to consider sturgeon which inhabit the upper reaches of the Snake River.

**Council response:** The Council agrees with this comment and has made the change to "Columbia River Basin sturgeon" in measure 804(e)(8).

**5. 804(e)(11).** Bonneville commented that the Council should modify Program Section 804(e)(11) to have FERC order Montana Power Company to fund the Clark Fork fishery research. The measure currently reads that Bonneville shall fund these research activities.

**Council response:** The application proposing amendment of this measure did not address the funding issue. As a result, the Council has insufficient information in the record to support a change in the funding source. The Council has received written comments from the Washington Water Power Company and MDFWP indicating agreement with the contents of this amendment.

**6. Dworshak research.** Bonneville commented that the amendment submitted by the Nez Perce Tribe (NP/800) should be rejected because the project lacks identifiable benefits and is closely associated with Water Budget activities. Bonneville also commented that it is inappropriate for the Council to identify which entity will conduct the study. PNUCC commented that the amendment submitted by the Nez Perce Tribe is a fish and wildlife agency management responsibility and suggested that the research costs be shared between Bonneville and the appropriate entity for conducting the research. PNUCC also commented that it is inappropriate for the Council to state that the Nez Perce Tribe will conduct the research.

**Council response:** The Council believes the Nez Perce Tribe amendment is warranted due to the fact that the construction and operation of the Dworshak hydroelectric facility has altered the nature of the aquatic environment and the fisheries resource. The Council has changed the language in this amendment to reflect that the studies will assess the impacts of the original construction and current operation of Dworshak Dam on the resident fishery and that proposals will be submitted to the Council that outline protection, mitigation, and enhancement opportunities to address these impacts. Section 804(e)(16) requirements indicate that resident fish proposals are not to conflict with anadromous fish or Water Budget operations. The Council has taken the reference to "the Nez Perce Tribe will complete the studies" out of the measure.

**7. Dworshak research.** The Corps commented that the Nez Perce studies at Dworshak Dam should be coordinated with the Corps' regional office in Walla Walla.

**Council response:** The Council has added reference to coordination with the Corps in this amendment.

**7A. Dworshak research.** PNUCC stated that "the Nez Perce [tribe] may be well qualified to conduct this research" but that the Council should not designate the recipients of Bonneville funding because Bonneville should be free to consider the qualifications and cost proposals of other potential contractors.

**Council response:** The Council considers its primary function to be to determine what measures are needed to restore fish and wildlife, not to determine which entity or individual is best suited to receive Bonneville funds to carry out program work. For that reason, the Council generally chooses not to designate the recipients of Bonneville funding. However, the Council wishes to emphasize that Bonneville is expected to respect fully the unique rights and concerns of Indian tribes in carrying out program measures on Indian reservations. It has added new Program Section 1304(e)(4) for that purpose. The Council also notes that Bonneville does not use competitive procurement processes in all aspects of program funding. For example, in appropriate circumstances, Bonneville is able to enter into sole-source contracts and intergovernmental agreements to fund program measures.

**8. Vegetation planting.** The Corps commented that all shoreline planting programs, discussed in amendment applications CB/804-1 and US/804(e)-4, will not be permitted on its project lands without its

prior approval. The Corps also commented that it is currently coordinating the development of management plans with USFWS and ODFW to address overall management concerns at many of its reservoirs. The Corps stated that, at this time, there are no memoranda of understanding with the fish and wildlife agencies to implement vegetation shoreline plantings. The Corps recommended that the Council remove the language in 804(e)(13) which calls for Bonneville to fund 200 acres of shoreline planting at Hills Creek Reservoir.

**PNUCC and Bonneville commented that the Corps should fund the shoreline planting at Hills Creek Reservoir. Their comments also stated that based on the results of those plantings, Bonneville should fund a feasibility study to identify which reservoirs in the basin would benefit from such plantings.**

**Council response:** The Council agrees that shoreline vegetation planting should not take place at Corps facilities unless there is full cooperation of all parties and coordination with the Corps. The Council also agrees that the Corps may be designated as responsible for funding shoreline planting at Hills Creek Reservoir. Based on the comments received for measure 804(e)(13), the Council has modified the language in this measure to state that the Corps will fund additional shoreline plantings at Hills Creek Reservoir, and based on the results of those tests, Bonneville shall fund a feasibility study to identify which other reservoirs in the basin would benefit from such plantings. Furthermore, language has been added that recommendations from this feasibility study may be submitted to the Council.

**9. Overabundant rough fish control.** Bonneville and PNUCC commented that amendment CB/804-2, concerning control of overabundant rough fish populations, should be rejected by the Council for the following reasons: 1) Bonneville has funded over \$800,000 in research since 1982 on studies pertaining to control of overabundant rough fish or predator populations; 2) Further studies should await the results of current ongoing research efforts; 3) There is no documentation that this measure addresses losses attributable to hydroelectric projects; and, 4) There is no documentation that this measure will not conflict with anadromous fish.

**Council response:** The Council agrees with Bonneville and PNUCC that research studies of this nature should await the results of the ongoing efforts Bonneville is funding in relation to anadromous fish measure 404(c)(1). The Council also agrees there is not sufficient information in the record to indicate that this measure would not conflict with anadromous fish. For these reasons, the Council has rejected CB/804-2.

**10. Habitat improvement projects.** Bonneville and PNUCC commented that the Council should reject amendments OF/804-3, US/804(e)-1, and US/804(e)-3 (resident fish habitat improvement projects) because they do not meet the criteria for review of resident fish proposals in Section 804(e)(16) and that the funding obligations for mitigation of these impacts should be the responsibility of the individual private project operators.

**Council response:** The Council believes that further information is needed on whether these habitat improvements are related to hydropower project development and operations and whether they should be funded by the private project operators. For these and other reasons, explained in the rejection portion of this document, the Council has rejected amendments OF/804-3, US/804(e)-1 and US/804(e)-3.

**11. Game fish in mid-Columbia reservoirs.** Bonneville and PNUCC commented that amendment WG/804(e)-1, concerning a study to enhance and manage game fish in mid-Columbia reservoirs, should be rejected by the Council for the following reasons: 1) The responsibility for enhancing and managing game fish is a fish and wildlife agency responsibility; 2) Bonneville is currently funding predator/prey fishery studies in relation to measure 404(c)(1); 3) Mitigation opportunities at mid-Columbia projects owned and operated by non-federal entities are the responsibility of the individual project operator; and, 4) Managing for certain warmwater species may conflict with efforts for anadromous fish.

**Council response:** The Council agrees that research studies of this nature should await the results of the ongoing studies in measure 404(c)(1). The Council also agrees that there is not sufficient information to indicate that this measure would not conflict with anadromous fish. For these reasons, the Council has rejected WG/804(e)-1.

**12. Water releases.** One individual commented that the language in amendments OF/804-1 and OF/804-2 is too restrictive and should be expanded to include: 1) the potential for purchase of water storage

for fish and wildlife in the Columbia River Basin; 2) fish and wildlife agencies, Indian tribes, individuals and organizations and other interested parties in the list of participants in discussions; and, 3) deletion of the irrigators from the list of participants involved in the surplus water discussions.

**Council response:** The Council believes that incorporating these comments would change the intent of the original amendment application. This measure only addresses water releases from Warm Springs, Beulah and Owyhee reservoirs. The list of participants that will be involved in the water release discussions has been taken directly from the amendments and includes the necessary participants for the success of this measure.

**13. Water releases.** PNUCC commented that the amendments OF/804-1 and OF/804-2, should be rejected because they address nonhydroelectric impacts.

**Council response:** The Council is aware of the fact that amendments OF/804-1 and OF/804-2 address impacts at irrigation facilities. However, the Council is concerned about the poor condition of the resident fish resources in these streams and has attempted to develop a solution to address these concerns. The Council has not called for use of ratepayer funds to implement this measure.

**14. Colville Hatchery.** The Bureau of Indian Affairs commented that detailed operation and maintenance agreements must be developed for the Colville hatchery.

**Council response:** The Council fully expects that agreements on operation and maintenance requirements will be developed prior to the initiation of the final design for the Colville hatchery.

**15. Colville Hatchery.** PNUCC suggested that the Council modify the language in 804(e)(19) to clarify that the Colville hatchery will be designed using state-of-the-art technologies and that weight would be given to using low-capital technology currently under review by Bonneville.

**Council response:** The language in measure 804(e)(15) states that state-of-the-art technology will be used in designing the hatchery. The language supplied by PNUCC would seem to indicate that the reference to the Colville Tribe performing the design of the hatchery should be omitted. The Council has deleted that reference. The Council also believes that the low-capital hatchery technology under review by Bonneville is directed at several anadromous fish hatcheries and would not apply to the resident fish hatchery proposed by the Colville Tribe.

**16. General.** The Davenport Chamber of Commerce and two individuals submitted comments stating that the Council should include Lake Roosevelt in its study of mitigation for resident fish, since rebuilding of anadromous fish may not be feasible above Grand Coulee Dam. They stated that 10,000 rainbow trout were planted on May 24, 1984, and have shown substantial growth within 60 days. The Chamber also commented that recreation is a big business in the state of Washington.

**Council response:** During the public comment period, the Council asked all interested parties involved with the Lake Roosevelt hatchery amendment to submit information on whether or not a resident fish hatchery would provide significant biological results at Lake Roosevelt. These comments do not provide enough biological evidence to support a resident fish hatchery at Lake Roosevelt at this time.

**17. General.** The National Park Service recommended that the Council re-evaluate its rationale for objecting to various proposals proposed for rejection in the draft amendment document that called for enhancing resident fish to mitigate for losses of anadromous fish.

**Council response:** In the case of all resident fish amendments, the Council has and will continue to evaluate resident fish proposals on their individual merit and in relation to the criteria developed in Section 804(e)(16).

**18. 804(b)(9).** The Coeur d'Alene Tribe submitted extensive comments on the proposed rejection of its amendment application (CI/804(b)(9)) in the draft amendment document and suggested that the Council consider a one-year, one-person study to collect, analyze and interpret what information can be found as to the impacts of the construction and operation/maintenance of Post Falls Dam on the fishery resources of Coeur d'Alene Lake and the Spokane River. The Washington Water Power Company submitted lengthy documentation on the reasons for rejecting the Coeur d'Alene Tribe amendment

(CI/804(b)(9)). Washington Water Power Company provided the Council with additional rejection language for consideration on this amendment.

**Council response:** The Council is concerned about the apparent lack of coordination and communication by the parties on the past and ongoing research activities at Lake Coeur d'Alene, as well as the need for further research activities encompassing the impacts at Post Falls Dam on the fishery resources of Lake Coeur d'Alene and the Spokane River. In some cases, the comments suggest lack of effort by the parties to communicate with each other.

The Council believes there is merit to both sides of the arguments raised by the Coeur d'Alene Tribe and Washington Water Power Company on amendment CI/804(b)(9). First, it is apparent that the existing measure in the fish and wildlife program (804(b)(9)) does not meet the Coeur d'Alene Tribe's concerns with respect to analysis of the impacts of the construction and operation of Post Falls Dam on the fishery resources of Lake Coeur d'Alene and the Spokane River. It is also apparent that there are unresolved disputes between the Coeur d'Alene Tribe and Washington Water Power as to the productivity of past and ongoing research efforts pertaining to Lake Coeur d'Alene and its tributaries.

The Council believes it is in the best interest of all parties to develop a workable solution to these issues. Therefore, the Council has taken the initiative to develop additional language for measure 804(b)(9) which states that the Council expects Washington Water Power Company to consult with the Coeur d'Alene Tribe and other affected parties to develop and initiate an evaluation of the effects of hydroelectric operations at Post Falls Dam on fish resources in Lake Coeur d'Alene and the Spokane River. The Council also stated that proposals for further action may be made on the basis of this evaluation. Any proposals submitted as a result of this evaluation would have to be consistent with the criteria in Program Section 804(e)(16).

**19. Painted Rocks.** PNUCC and Bonneville favored the proposed repeal of existing Program Sections 804(e)(1) and 804(e)(2). The reasons advanced were that those measures should be funded by the operators of three non-federal hydroelectric projects which cause the problems to be remedied by the measures and that the measures would violate the prohibition in Section 4(h)(10)(A) of the Northwest Power Act against using Bonneville funds in lieu of other authorized or required expenditures.

**Council response:** The Council has carefully reviewed the factual situation relating to the existing measures and the proposed water purchase and has taken the PNUCC and Bonneville comments into account. The facts show that a long and difficult FERC proceeding will be necessary to obtain funding from the project operators of the three dams on the Clark Fork River. Moreover, the Council believes that the fisheries problems on the Bitterroot and Clark Fork rivers and the benefits of the proposed measure in ameliorating those problems would be, in part, the responsibility of the Columbia River hydroelectric system as a whole. This belief is based on the fact that the dams operate as part of that system and would benefit the region as a whole as offsite enhancement for other impacts of the system and because fishermen throughout the region use the Bitterroot fishery. In addition, no appropriations exist at this time which would provide immediate alternate sources of funding to the two years of, now expired, temporary funding provided by Montana. The Council does, however, believe that the existing measure is at least contrary to the spirit of Section 4(h)(10)(A) of the Northwest Power Act in that the operators of the three projects should not escape, at the expense of Bonneville's ratepayers, their responsibility for funding mitigation efforts. The existing measure has been modified to reflect this conclusion.

**20. CRITFC, the League of Women Voters of Ravalli County, the Bitterroot Conservation District, Ravalli County Fish and Wildlife Association, Trout Unlimited, and MDFWP opposed the proposed deletion of the existing measure for the reasons summarized in the Council response above.**

**Council response:** The Council has taken these comments into account and agrees that the water purchase is important and should be funded temporarily by Bonneville. Ultimate responsibility for the measure should rest, however, with the project operators. The existing measure has been modified to reflect this conclusion.

## SECTION 900: YAKIMA RIVER BASIN ENHANCEMENT

**1. Passage restoration measures.** PNUCC, the Yakima Tribe, CBFWC, and Bonneville all support passage restoration measures on

the Yakima River. CBFWC believes the date for completion of passage restoration at Wapatox Power Project should be April 1, 1986.

**Council response:** Construction on Wapatox diversion dam is not scheduled until October 1986. Pacific Power and Light (PP&L), the project owner, has not yet determined a technical need to replace the screens. Council staff will work with PP&L and others to initiate restoration of fish passage facilities at the earliest date possible.

## SECTION 1000: WILDLIFE

**1. 1004(b)(2).** The fish and wildlife agencies and CBFWC commented that the Council's Wildlife Coordinator should participate with Bonneville when reviewing the need to complete wildlife loss statements in 1004(b)(2).

**Council response:** The Council agrees that Bonneville should not be the only authority deciding whether or not wildlife loss statements should be prepared. The Council has reworded the section accordingly.

**2. 1004(b)(2) and (3).** PNUCC commented that the references to the Wildlife Coordinator's role in 1004(b)(2) and (3) activities may not be necessary. PNUCC submitted new language for those measures which would have the Wildlife Coordinator "monitor" the progress of 1004(b)(2) and participate "to the extent practicable and necessary" in 1004(b)(3).

**Council response:** The Council believes it is important that the Wildlife Coordinator act as an independent party in 1004(b)(2) and (3) when discussing the need to develop wildlife loss estimates and mitigation plans.

**3. 1004(b)(2), (3), (4), and (5).** The Audubon Society of Portland commented that nongame species, as well as game species, should be given consideration in Section 1004(b)(2), (3), (4), and (5).

**Council response:** The Council has included nongame species in the definition of wildlife as it is used in the entire Fish and Wildlife Program.

**4. 1004(b)(3) and (4).** The Audubon Society of Portland stated that it believes wildlife loss statements and mitigation plans should be developed for all projects in Table 4.

**Council response:** In accordance with the original wildlife program, if negotiated wildlife settlements can be agreed upon by all parties prior to 1004(b)(2), wildlife loss estimates and mitigation plans will not be needed.

**5. 1004(b)(4).** Bonneville recommended that the Council change the language in 1004(b)(4) to include a statement that the Council should adopt the mitigation plans developed in 1004(b)(3) into the program. Bonneville also commented that the Council should add language to 1004(b)(4) that would reflect the ability of Bonneville, or the appropriate project operator, to fund the wildlife options developed in 1004(b)(5).

**Council response:** As stated in the Program, the Council has not used the term "upon approval by the Council" to indicate that a program amendment will be required before it will approve Bonneville funding of a measure. Such measures are adopted as part of the program. The Council will review these measures prior to Bonneville funding in order to ensure that all aspects of implementation have been thoroughly considered. Therefore, Bonneville's concern has been met with the existing language.

The Council agrees with Bonneville that the language referring to Bonneville (or the appropriate project operator funding the options developed in 1004(b)(5)) accurately describes the intent of 1004(b)(4). The Council has reworded the section accordingly.

**6. 1004(b)(5).** Bonneville recommended that the Council change the language in 1004(b)(5) to include a statement about other wildlife options for mitigation and enhancement that may be developed during the planning process.

**Council response:** The Council agrees with Bonneville that these changes reflect the intent of 1004(b)(5). The Council has reworded the section accordingly.

**7. 1004(b)(5).** The Corps commented that the Council should consider a change in 1004(b)(5) to reflect the Corps position of having existing state, federal and tribal wildlife programs identified in the program.

**Council response:** The Council agrees that existing wildlife programs should be identified throughout the entire wildlife planning

and implementation process. The Council has added language to the background description at the end of 1004(b)(5) to reflect this comment.

**8. 1004(c)(1).** Bonneville commented that the Council should delete Section 1004(c)(1) (transmission lines) from the wildlife program.

**Council response:** The Council addressed the Bonneville position on transmission line measures when it adopted the original program. Bonneville has submitted no information which adequately supports deletion of this measure.

**9. 1004(d)(1) and (2).** PNUCC commented that the Council should consider adding language to 1004(d)(1) that would show the need to identify pertinent laws and regulations that may need to be recognized during land acquisition proposals. PNUCC also commented that the reference to Tables 4 and 5 in 1004(d)(2) should be deleted.

**Council response:** The Council agrees with the language that PNUCC has submitted for 1004(d). The Council feels that it strengthens the land acquisition criteria, and the section has been changed accordingly. However, the Council feels that the references to Tables 4 and 5 are important links to the entire 1004 process. The tables tie the entire 1004(b) and (d) process together and add certain concerns the Council wishes to see the interested parties address.

**10. 1004(d)(1) and (2).** Bonneville recommended several minor language changes to 1004(d)(1) and commented that, where Bonneville funding would be required for land acquisition, any schedule for implementation would depend upon availability of funds and Congressional approval for major expenditures. Bonneville also commented that land acquisition recommendations need to be amended into the program by the Council.

**Council response:** The Council believes that the language changes for 1004(d)(1)(A), (B), and (C) strengthen the program, and the sections have been changed accordingly. However, the Council does not believe that land acquisition proposals need to be amended into the program. (Also see response number 5 in the wildlife section, above.)

**11. 1004(d).** One individual commented that he opposed the funding to obtain wildlife habitat (land acquisition) once it had been destroyed and suggested the Council solicit the Nature Conservancy for this role.

**Council response:** Acquisition of wildlife habitat may be one of a number of mitigation or enhancement options for any given hydroelectric facility in the wildlife program. Any land acquisition proposal must conform to the criteria established in Section 1004(d)(1) and (2). The Nature Conservancy may be one of many funding sources available for acquiring wildlife habitat.

**12. 1004(d)(1).** The Bureau of Reclamation commented that an assured and continuing source of operations, maintenance, and replacement funds should be a prerequisite to Bonneville funding in 1004(d)(1)(D).

**Council response:** The Council agrees with this comment that all operation and maintenance funding arrangements should be agreed to by all parties involved in land acquisition projects.

**13. Table 4.** ODFW commented that several Oregon hydroelectric facilities should be added to Table 4 and that the North Grove facility referred to in Table 4 is actually called North Fork.

**Council response:** The Council has added the following hydroelectric facilities to Table 4: Sullivan, Smith, Walterville, Bond, Cline Falls, Wallowa Falls, Rock Creek and Baker. The Council has also changed "North Grove" to "North Fork" in Table 7.

**14. Table 4.** The fish and wildlife agencies and CBFWC commented that all hydroelectric facilities that were included in the mitigation status reports (1004(b)(1)) should be added to Table 4.

**Council response:** The Council has added all pertinent hydroelectric facilities to Table 4. Nonhydroelectric (irrigation/flood control) facilities that were submitted as amendments have been deleted. Proposals to add hydroelectric capacity at new or existing facilities should be analyzed under the appropriate measure in section 1200.

**15. Table 4.** WDG commented that it supports the adoption of the amendment on the Columbia River Gorge (US/1004(b)(2)-1) but would like to see USFWS added as a party in the survey.

**Council response:** The Council did modify amendment US/1004(b)(2)-1 in the Draft Amendment Document to add that the onsite survey be completed on both sides of the river in the Columbia Gorge. In doing so, the Council added WDG to the list of participants in the survey. This was done so that a coordinated effort of wildlife mitigation planning could take place in the Columbia Gorge. All agencies listed in this amendment should comply with the coordination requirements of section 1300. USFWS could be added as a project participant in the measure under the scope of work "proposal" when it is submitted to Bonneville for funding.

**16. Table 4.** IDFG commented that the Clear Lakes, Upper Malad and Lower Malad hydroelectric facilities should be added to Table 4. They also commented that reference to the "Malad" facility should be deleted from Table 4 and replaced with "Upper" and "Lower" Malad.

**Council response:** The Council has added Clear Lakes, Upper Malad and Lower Malad hydroelectric facilities to Table 4. The Council has deleted the reference to "Malad" in Table 4.

**17. Table 4.** The Nez Perce Tribe commented that it should be the lead agency on the mitigation plan development for the Dworshak facility listed in Table 4.

**Council response:** The Council has taken out the reference that any one agency, tribe or group be the "lead" on the overall mitigation planning for the Dworshak facility. The overall planning, delineating responsibilities and future mitigation decisions, should be discussed and agreed upon by all the parties at the consultation meeting in 1004(b)(2) for the Dworshak facility.

**18. Table 4.** Idaho Power Company commented that it will work with the fish and wildlife agencies in preparing the mitigation status reports on the Hells Canyon Complex, C.J. Strike, Lower and Upper Salmon Falls, Thousand Springs, Shoshone Falls and Bliss.

**Council response:** The Council is very encouraged that Idaho Power Company will participate with the agencies in developing mitigation status reports for the projects mentioned.

**19. Table 4.** Idaho Power Company commented that it would be improper to use ratepayer monies to prepare mitigation status reports for the following facilities: 1) Swan Falls (recently licensed); 2) Cascade (irrigation facility); 3) Twin Falls (recently relicensed); 4) American Falls (irrigation facility); and, 5) Upper and Lower Malad (recently licensed).

**Council response:** Deletion of the Cascade and American Falls facilities from Table 4 is not in question during the amendment proceedings. The mitigation status reports for these facilities have been completed in draft form by the fish and wildlife agencies, and final reports should be available for comment early next year. The propriety of ratepayer funding of mitigation for those projects should be considered in that context. The other sites will be reviewed prior to the 1004(b)(2) process in the consultation meeting.

**20. Table 4.** The Friends of the Columbia Gorge and the Audubon Society of Portland both commented that the Council should extend the boundaries of the study area on the Columbia River Gorge measure in Table 4. Both commentators would extend the boundaries to conform with state and pending federal law descriptions of the Columbia Gorge.

**Council response:** While changing the boundaries on the Columbia River Gorge measure in Table 4 may give a more accurate description of the gorge, the application in question addressed the Mt. Hood National Forest and only encompasses Mt. Hood National Forest lands. The Council did modify this application to include the Washington side of the Gorge for coordination purposes. Mitigation plans developed for Bonneville and The Dalles dams will take into account the other boundaries of the Columbia River Gorge.

**21. Table 4.** The Bureau of Reclamation commented that the Colville Tribe amendment (CT/1000) for Lake Roosevelt would be inappropriate, since it would not reveal the number of animals and habitat that were lost.

**Council response:** The Colville Tribe amendment (CT/1000) will address the losses sustained by the tribe (number of animals and habitat) as a direct result of inundation caused by the construction of the Grand Coulee project. This study will be coordinated with the overall loss estimates (1004(b)(2)) for the Grand Coulee project.

**22. Table 4.** The Bureau of Reclamation commented that the Naches power facility added to Table 4 needs to be clearly identified.

The Bureau of Reclamation also stated that it believes that mitigation status reports are not warranted for the Chandler and Roza facilities because the wildlife losses were extremely small.

**Council response:** The Naches facility has been taken off Table 4 because it is an irrigation facility. If hydroelectric capacity is proposed for the Naches facility in the future, wildlife mitigation will be considered under section 1204. The Council has added the Roza and Chandler facilities to Table 4. Their size does not preclude them from having impacts on wildlife. A complete review will be made of these projects in 1004(b)(1).

**23. Table 4.** The Corps commented that the Lower Snake projects (Ice Harbor, Lower Monumental, Little Goose and Lower Granite) and Dworshak all received due wildlife consideration within the intent of the Fish and Wildlife Coordination Act. The Corps believes that, because of this consideration, these projects should be deleted from Table 4.

**Council response:** Whether the Lower Snake Project and Dworshak received due wildlife consideration will be determined in the mitigation status reports (1004(b)(1)). All affected parties will review these reports, and a consultation meeting will be held prior to 1004(b)(2) to determine whether further wildlife mitigation is needed. All recommendations for future wildlife activities at these projects will be coordinated with the Corps.

**24. Table 4.** The Corps commented that the amendment on the Columbia River Gorge (US/1004(b)(2)-1) needs to be rewritten entirely. The Corps feels that clarification is needed on the exact study boundaries and on Corps involvement, and that recognition of several existing reports and activities needs to be taken into account.

**Council response:** The Council did modify amendment US/1004(b)(2)-1 to include the Washington side of the Gorge for coordination purposes. The boundaries of this study have been set forth in Table 4 of the program. The parties involved with this amendment will be required to consult with the Corps pursuant to section 1300. All past work in the Gorge area will be considered when developing the statement of work for this project.

**25. General.** The Corps commented that it encouraged the Council to develop a wildlife measure that contains goals and objectives based upon existing state and federal plans developed by the wildlife agencies and tribes for species of special concern. The Corps further commented that until species are identified and goals and objectives are established, loss estimates or mitigation plans cannot be pursued.

**Council response:** Wildlife goals and objectives are an integral part of the Council's wildlife program. The Council's program calls for establishing these goals and objectives in Sections 1004(b)(2), (3), (4), and (5) of the program. The loss estimates developed pursuant to 1004(b)(2) will develop the list of species of importance for a particular facility and will set forth the goals. The mitigation plans developed pursuant to 1004(b)(3) will describe the objectives for attaining those goals. All existing state and federal plans and programs will be taken into account when developing the goals and objectives pursuant to 1004(b)(2) and (3).

**26. General.** The Corps commented that it does not agree with the Council on the concept of incorporating specific details of the wildlife program into the "statements of work" that are developed by Bonneville for funding particular aspects of the program.

**Council response:** The specific details for accomplishing 1) loss estimates (1004(b)(2)); 2) mitigation plans (1004(b)(3)) and 3) implementing wildlife recommendations will be contained in the statements of work developed by Bonneville. All statements of work are reviewed by the Council staff prior to final contracting.

**27. General.** The Corps commented that its recommendations for consultation and use of existing information on 1004(b) planning should be footnoted in the particular sections of the program.

**Council response:** The language in 1004(b)(2), (3) and (5) that addresses consultation and "utilizing existing information" is a combination of several amendments. The Corps amendment (CE/1004) was one of the amendments used in drafting language.

## SECTION 1100: ESTABLISHMENT OF FISH AND WILDLIFE COMMITTEE

None.

## SECTION 1200: FUTURE DEVELOPMENT

**1. CB/1204(a) and CB/1204(c).** CRITFC, the Idaho Conservation League, PNUCC, and several individuals commented that they support the Council's rejection of CB/1204(a) and CB/1204(c).

**Council response:** The Council took these comments into account in reaching its decision.

**2. Hydro assessment study.** Several commentors (including NMFS, PNUCC, and WDG) included statements on issues related to the Council's hydro assessment study (such as interim site ranking and designation of protected areas) in their amendment comments.

**Council response:** The Council's hydro assessment study is not at issue in these amendment proceedings and is outside the limited scope of amendment applications CB/1204(a), CB/1204(c), and PB/1204(c)(1). However, the Council has taken these comments into account in developing its work plan for the Hydro Assessment Study.

## SECTION 1300: COORDINATION OF RIVER OPERATIONS

**1. Section 1304(e)(2).** The Corps generally commented that it is governed by many laws, including the Northwest Power Act, which impose different obligations upon it. The Corps stated that it must operate its projects consistently with all appropriate and applicable federal laws and that it will be the decision maker regarding funding of Fish and Wildlife Program measures which involve Corps' projects.

**Council response:** The Council believes that the Corps must follow the dictates of Congress. In Section 4(h) of the Northwest Power Act, Congress imposed new procedural and substantive obligations on the Corps. Especially important to the Corps' activities are the provisions of Section 4(h)(11)(A)(ii) which require the Corps to take the Fish and Wildlife Program into account to the fullest extent practicable at each relevant stage of its decision making processes. Consistent with this requirement is the requirement of Northwest Power Act Section 4(h)(11)(A)(i) which requires the Corps to operate its facilities in a manner that provides equitable treatment for fish and wildlife with the other purposes for which those facilities are managed and operated. The Council recognizes that federal project operators are subject to many laws, and the Fish and Wildlife Program reflects this recognition. See, e.g., Program Section 104.

## SECTION 1400: AMENDMENTS/CHAPTER 11 OF THE POWER PLAN

**1. PNUCC** was generally supportive of the proposed change in Chapter 11. PNUCC considered the draft schedule extension to be the minimum acceptable. PNUCC believes that more time for experience in implementation is necessary between recommendation processes. PNUCC suggested that when recommendations are solicited, the Council should provide very strict requirements which would have the effect of severely limiting the number of recommendations it will accept. Bonneville endorsed the proposed amendment. It also suggested that the subjects of future recommendations should be limited to priority measures so that all parties could focus on the program implementation.

**Council response:** The Council believes that its proposal is the maximum permissible under the requirements of the Northwest Power Planning Act. The Council will review, prior to soliciting the next set of recommendations, the advantages and disadvantages of increasing the requirements for recommendations.

## GENERAL COMMENTS

**1. Bonneville funding.** Bonneville commented as follows on its funding of program measures:

[T]he Council should refrain from identifying the agency, Indian tribe, or other entity it expects to carry out BPA-funded Program measures. The entity BPA funds is a decision the U.S. Government must make. In most cases, BPA makes this decision within the framework of BPA procurement policies and procedures. In some cases, notably major capital improvements such as the proposed artificial production facilities for the Yakima River Basin, BPA must examine Federal authorities established outside BPA. Identifying the implementing entity in the Program creates false expectations and confusion and interferes with the discharge of BPA's funding responsibilities. It also fosters

the perception of the Fish and Wildlife Program as an instrument for awarding Federal largesse rather than as a systematic plan for fish and wildlife protection, mitigation, and enhancement. Although BPA relies heavily on the region's fish and wildlife agencies and Indian tribes to implement measures which BPA funds, identification of the implementing entity in the Program is inappropriate.

**Council response:** The Council recognizes that Bonneville must carry out its funding responsibilities under the terms of federal law. Among pertinent federal laws are the Constitutional provisions, treaties, executive orders, legislation, regulations, and court decisions which define the unique rights and concerns of Indian tribes. New Program Section 1304(e)(4) emphasizes the Council's expectation that Bonneville will fund program measures on Indian reservations in full recognition of those unique rights and concerns.

**2. Funding positions.** CBFWC stated that the fish and wildlife agencies need funding for 10 staff positions, at a cost of \$35,000-\$40,000 each, to provide "full and meaningful participation" in the Council's program. It further claimed that the Council has used its "discretionary funds" to fund full-time equivalent positions for fish and wildlife agencies in some of the states in the region. The Shoshone-Bannock Tribes also noted funding problems.

**Council response:** The proposal for funding of agency staff positions was not raised in an amendment application or in the draft amendment document at issue in these proceedings. CBFWC did not indicate what positions it considers to be necessary, where they would be housed, what services would be provided, who should fund them, or how such funding would qualify under the standards of the Northwest Power Act as program measures. The tribe similarly made no specific request. As a result, the Council has no basis for supporting the requests. It further notes that the Council budget includes no "discretionary" funds and no funding of state agencies. The fiscal year 1985 Council budget for its Oregon and Montana offices does include funding for contracts to provide Council members in those states with technical support related to the Fish and Wildlife Program.

**3. Explanations.** Two individuals (Jim Albrecht on behalf of the Coeur d'Alene Tribe and Professor Michael Blumm) asked the Council to explain more fully the basis for its rejections of amendment applications.

**Council response:** The Council has explained its rationale for rejections more fully. The Council invites review of those rejections as guidance in preparing any future applications for amendment.

**4. Comprehensive enhancement plans.** WDF noted that the Enhancement Planning Team, established pursuant to the Salmon and Steelhead Conservation and Enhancement Act of 1980, is developing comprehensive enhancement plans which should be incorporated into the program.

**Council response:** The Council looks forward to reviewing the team's final products as potential means for improving this program.

**5. Water rights.** The Washington Farm Bureau said it supports projects to restore fish passage, if those projects do not jeopardize water rights. The Washington Department of Ecology stated that the Council should recognize WDOE's authority and responsibilities and avoid *de facto* appropriations of water. The Montana Department of Natural Resources urged the Council to include state water agencies in its power planning activities.

**Council response:** The Council has indicated, in existing Program Sections 107, 304(a)(9), and 1500, that it expects all program measures to be carried out consistently with applicable federal, state, and Indian water laws. The Council welcomes specific comments from water managers on water rights which need to be considered in program implementation. In Program Section 107, the Council also expresses the hope that the states will consider the effects on fish of water diversions in the Columbia and Snake river systems and will develop their water resource management programs in full consideration of those effects and this program.

**6. Rates allocation.** The Washington Farm Bureau noted that the Council has called for Bonneville funding of certain projects in section 704, but has not indicated how Bonneville should allocate those costs.

**Council response:** Questions related to allocation of Bonneville costs among its ratepayers are addressed in the Bonneville rate proceedings. They are not at issue in these amendment proceedings.

Section 7 of the Northwest Power Act and various other provisions of law indicate that it is the Bonneville Administrator's responsibility to establish rates.

**7. Sandy River.** The Sandy River Chapter, Association of Northwest Steelheaders, commented on minimum flow problems, Roslyn Lake screens, Bull Run headworks, and other issues related to its concerns.

**Council response:** Since these issues were not raised by the draft amendment document, the Council lacks sufficient information to respond to such comments at this time.

**8. Intertie access.** Several commenters (Professor Michael Blumm, CBFWC and CRITFC) addressed the relation between the Council's Fish and Wildlife Program and Bonneville's proposed policy on intertie access.

**Council response:** Bonneville's intertie access policy was not addressed by the draft amendment document. The Council has commented on that policy outside these amendment proceedings.

**9. Spill.** Several commenters (Professor Michael Blumm, Corps, CRITFC) suggested that the Council treat Bonneville's recent spill proposal as a proposal for a program amendment.

**Council response:** The Council has indicated to Bonneville in writing that any spill proposal developed by Bonneville must be consistent with the Council's program or submitted to the Council as an application for amendment to the program.

**10. Late comments.** The Council received comments on the draft amendment document from several entities after August 10, 1984. The draft amendment document and notices on that document stated that comments received in the Council's central office after 5 p.m. on that date would not be considered by the Council in making its final amendment decisions. As a result, the Council did not consider and is not responding to those comments in this document.

**11. Adoption process.** Bonneville and PNUCC commented on the Council process for adoption of the final amendments to the program. They said that if information is submitted during the comment period which causes the Council to adopt an amendment previously proposed for rejection, other parties should be given the chance to respond to this change. Bonneville suggested the Council convene a special consultation session for all parties to review and comment on the newly proposed acceptances. PNUCC suggested that the amendments initially rejected, along with the newly supporting information, be carried over to the next amendment process for public scrutiny.

**Council responses:** The Council is designated in the Northwest Power Act as the final decision-maker on program measures. In this role, the Council has considerable leeway in making changes in the proposed amendments after the comment period has ended, without opening a new round of comments. The purpose of the comment period is to receive information concerning all proposed amendments and to give interested persons the opportunity to suggest improvements to the initial decisions. The Council must set a termination of the comment period and make the decision upon information in the record. Section 4(h)(5) of the Northwest Power Act requires the Council to develop a program based upon recommendations, information, and comments. If comments raised constitute wholly new amendment proposals or different subjects, the Council will not consider those comments. However, the Council will make a final decision on proposed amendments, considering the record established in the amendment process. The Council will take all concerns expressed into account, with the understanding there is no continuing right to rebut every decision made by the Council.

**12. Federal lands.** Pacific Northwest Generating Company (PNGC) generally commented that it opposed Bonneville funding of habitat restoration projects on lands controlled by other federal agencies, as such funding would be prohibited by the Northwest Power Act prohibition against "in lieu" funding. This comment was not addressed to any specific amendment proposal or to any set of facts which PNGC contested.

**Council response:** The Northwest Power Act envisions Bonneville funding of program measures to protect, mitigate and enhance fish and wildlife affected by the development and operation of any hydroelectric project. 16 U.S.C. 839b(h)(10)(A), (11)(A). The "in lieu" provision of Section 4(h)(10)(A) speaks only to expenditures authorized or required from other entities under other provisions of law. Taken in full context, it requires expenditures to be "in addition to, not in lieu of," other expenditures (emphasis added).



It is apparent from the Northwest Power Act and its legislative history that the "in lieu" prohibition was designed to prevent Bonneville from assuming the funding of an ongoing project being conducted or funded by other federal agencies. The Northwest Power Act gave specific Congressional direction for the use of Bonneville funds and mandated that expenditures be made to protect, mitigate, and enhance fish and wildlife. Congress designated this use of Bonneville funds as a specific direction for the general Bonneville spending authority. Bonneville expenditures are to complement the activities of other federal agencies, hence the requirement that those expenditures be *in addition* to other authorized expenditures. Whether this "in lieu" question exists has to be addressed on a case-by-case basis, with full consideration of all applicable law. The "in lieu" provision does not absolutely prohibit Bonneville expenditures on federal lands.

**13. FERC licenses.** Idaho Power Company commented that it would be legally improper for Bonneville to fund the preparation of wildlife mitigation status reports on five Idaho Power facilities based on two different arguments. The first argument is that some of those facilities were recently licensed or are currently going through the licensing process by FERC and that the FERC proceeding is the proper forum for fish and wildlife issues. The second argument is that certain of those projects were initially constructed as either irrigation or flood control projects and therefore are not subject to the Council's Fish and Wildlife Program.

**Council response:** The Idaho Power projects are subject to the Program measures to mitigate the effects of those projects on wildlife. Section 4(h)(10)(A) of the Northwest Power Act requires the use of the Bonneville Fund to protect, mitigate, and enhance fish and wildlife to the extent affected by the development and operation of any hydroelectric project. Some projects had hydroelectric facilities added after the projects' initial construction and are subject to the program. Therefore, the effect of the program is not limited to federal dams, and any hydroelectric project in the Columbia River Basin is potentially within the scope of the Fish and Wildlife Program. Section 4(h)(8)(B) of the Northwest Power Act amplifies this point by providing that the effects of hydroelectric development and operation associated with any project in the Columbia River Basin are subject to appropriate program activities.

Section 4(h)(11)(A) of the Northwest Power Act imposes specific responsibilities on FERC, including the requirement it take the Fish and Wildlife Program into account "to the fullest extent practicable" during its decision making processes. FERC is further required, in Section 4(h)(11)(A)(i) of the Northwest Power Act, to exercise its responsibilities as a regulator of hydroelectric projects to ensure that fish and wildlife receive equitable treatment with the other purposes of a project. Therefore, if Idaho Power hydroelectric facilities affect fish or wildlife and program measures are directed to those facilities, FERC must use its responsibility to carry out the program as required by the Northwest Power Act.

The purpose of the mitigation status reports is to investigate whether action should be taken to mitigate, for wildlife purposes, the effect of hydroelectric projects. The decision as to whether wildlife mitigation projects are necessary will be made after status reports have been prepared, with full consideration of legal funding responsibility.

## **I. ACTION PLAN (Sections 1501, 1502, 1503)**

### **A. General.**

**1. There was general support for the inclusion of an action plan in the program. Only the Corps suggested that this effort could prove to be "counterproductive." It suggested that the Council prioritize all measures and that this effort would provide enough guidance to the implementing agencies without creating a "mini program."**

**Council response:** Because of the overwhelming support for the concept of the action plan, the Council chose to adopt it as part of the program as a useful form for directing, planning and scheduling action.

**2. Numerous commentors suggested changes of wording in the introductory language to section 1500.**

**Council response:** This section has been rewritten, and the comments have been incorporated as appropriate. Significant comments have been separated and are explained below.

### **B. Status of unincorporated measures.**

**1. There were several comments and questions on the status of measures that were not included in the action plan. The Corps noted that by leaving measures out, it creates an undue burden on proponents and implementing agencies to demonstrate their need. Oregon Trout, the American Fisheries Society, and the Seattle Audubon Society expressed concern that items left out of the action plan would not be implemented.**

**Council response:** The Council has clarified the language to ensure the commentors that measures not in the action plan will not be forgotten. They will be implemented but not in the next five years, unless the Council amends the action plan. The Council feels there is sufficient flexibility to add or remove measures from the action plan in the next five years, if there is a clearly demonstrated reason. The Council does not expect to see every measure in the Fish and Wildlife Program implemented in the next five years.

### **C. Action parties.**

**1. Bonneville suggested that the fish and wildlife agencies and tribes be added into the action plan as action parties, to encourage their participation and to convey the importance of completion of their tasks. Bonneville feels that there are actions that cannot proceed without the agreement of the agencies and tribes. WDG also was concerned about its role in implementation.**

**Council response:** The Council intends to utilize the fish and wildlife agencies and tribes in all planning for implementation of the action plan. They have been assigned several specific tasks. However, they are not one of the four federal agencies given specific responsibilities under the Northwest Power Act and therefore are not listed. Bonneville is expected to include actions needed from the agencies and tribes as part of its annual work plans.

**2. The U.S. Forest Service suggested that land management agencies be included as implementing agencies. It stated that it controls the lands on which 60 percent of the habitat improvements will take place.**

**Council response:** The Council acknowledges that the land management agencies have a special role in implementation but believes they do not need to be identified as action parties at this time.

**3. The Bureau of Indian Affairs noted numerous places in the action plan where coordination and consultation with its staff is necessary. It is primarily concerned that it be included in discussions of terms of construction, operation and maintenance of projects on tribal land.**

**Council response:** Coordination and consultation with BIA is included in Program Section 1304(c). (See Program Section 108 definitions.) The Council encourages Bonneville to set up a formal mechanism to coordinate operations on tribal land. Also see new Program Section 1304(e)(4).

**4. During action plan consultations there was some misunderstanding of the Council's role in implementing the action plan. Although no specific comments addressed this, clarification seems necessary.**

**Council response:** The Council's role, as spelled out in the Northwest Power Act, is that of a planning and oversight agency. The role of the Council also is specified in a number of instances in the action plan. These action items, as well as related program measures, indicate that the Council will play an oversight role to ensure that the program is implemented according to schedule. The Council also will take an active role in evaluation. As indicated in section 1503, each major area of implementation is scheduled for review by the Council in a different month beginning in 1985. The requirement for evaluations and reports from federal implementing agencies further indicates the Council's intent to become more completely involved in program implementation at the program planning and budgeting level.

### **D. Specificity and flexibility.**

**1. During consultations on the action plan and in the written comments, CBFWC requested an annual review of the action plan, with amendments as needed. PNUCC noted the need for a "dynamic action plan" and added that the ability to amend the program in a timely manner could meet this need.**

**Council response:** The Council has stated previously that the Fish and Wildlife Program can be amended in less than 60 days if the need arises. The Council remains willing to consider proposed amendments at any time a need can be proved.

2. CBFWC and the American Fisheries Society suggested that enough detail be included in the action plan to make it "self-implementing" so that the Council is not continually acting as referee. Numerous other commentors proposed additional details to specific parts of the action plan.

**Council response:** The Council acknowledges the need for additional detail in the form of tasks and projects designed to implement program objectives or action items. The Council has attempted to develop a program that allows affected parties to develop tasks and projects within the scope of the program objectives and measures. The Council does not feel there is any way to make the action plan "self-implementing" because of the need for consultation and coordination in many areas.

#### E. Incentives.

1. In response to a request from the Council, two groups suggested ways to incorporate incentives into the action plan. WDG noted that "incentives beyond the legal requirements of the Power Act already exist in the agencies." It suggested that the purposes, policies, and plans of the fish and wildlife agencies contain sufficient direction to protect fish and wildlife. CBFWC noted that the best incentive was the use of the Bonneville Fund. Incentives would be created by designating exclusive funding areas. CBFWC also proposed the denial of the Southwest Intertie access and changes to the language in Public Utilities Regulatory Policy Act as ways to create incentives.

**Council response:** The Council has considered the use of incentives and has incorporated them where appropriate.

#### F. Changes in goals.

1. Most commentors approved of the interim goals as set out in the action plan introduction. However, there were some suggested additions and changes, particularly to the goal of protecting the ratepayer investment.

**Council response:** The Council has considered these suggestions in the rewritten introduction to the action plan. The interim goals reflect decisions the Council made on individual elements and function of the action plan as part of the program. The action plan should be considered one part of the program; the goals of the program have not been changed.

## II. SECTIONS

### A. Section 32 - Mainstem Passage.

1. "Most appropriate technology." PNUCC stated that it is opposed to specifying any single numerical reference either to passage efficiency or to survival rate. PNUCC asserted that the best available scientific information does not support the 85 percent passage efficiency number because it does not believe that 85 percent bypass efficiencies have been measured for all species and that a species-combined passage efficiency would be less than 85 percent. PNUCC recommended that the Council adopt a policy requiring each individual project to provide an interim passage efficiency that is at least equal to the "most appropriate technology." It stated that the term "most appropriate technology" should be defined using three criteria: 1) Project applicability, 2) Biological effectiveness, and 3) Cost effectiveness. As an alternative position, PNUCC recommended that a 90 percent survival objective for each project be adopted.

**Council response:** The Council has determined that available fish passage studies indicate that fish guidance efficiencies of over 85 percent have been measured at McNary Dam (with raised operating gates) in 1982 for both spring chinook and steelhead. The Council has concluded that use of "most appropriate technology" language to define passage efficiency: 1) May delay the need for timely modification or installation of juvenile bypass systems if no specific objective is established; and, 2) Provides no established measure or objective concerning "most appropriate technology" for adequate smolt passage. The Council has determined that use of 90 percent guidance efficiency as a design criterion does not preclude a project operator from applying PNUCC's three criteria to achieve this objective. The Council also has taken the 90 percent project survival standard recommendation into account in addressing interim annual juvenile passage plans for mainstem projects.

2. **System survival goals.** The Corps has stated that it is opposed to use of a passage efficiency number. Instead, the Corps recommended development of system survival goals for the downstream migrating fish. The Corps based its position on the view that the Northwest Power Act directs it to improve fish survival passing federal hydroelectric facilities using the most biologically and economically effective means possible. That position also is based on its belief that juvenile survival through the Columbia River system defines adult production. The Corps recommended that an initial system survival target should be 62 percent for juvenile fish entering the system at Lower Granite Dam to below Bonneville Dam and 66 percent for juveniles entering the system at McNary Dam to below Bonneville Dam. These target levels would incorporate survival credit for transported juvenile fish collected at Lower Granite, Little Goose and McNary dams.

**Council response:** The Council has determined that adoption of 90 percent fish guidance efficiency as a design criterion and an interim 90 percent project smolt survival standard are the most effective methods for promoting timely passage improvements at the Corps' mainstem hydroelectric projects. Powerhouse collection and bypass system improvements designed to achieve 90 percent fish guidance efficiency are expected to improve overall smolt survival. The Council has not adopted systemwide smolt survival goals because they imply that the Council would condone low survival at some projects as long as high survival at other projects averaged to meet the system goal. For example, adoption of systemwide goals could result in high survival at an upriver project and low survival at a lower river project, with continuing adverse impacts on large numbers of migrating fish. The Council has concluded that it wants to improve juvenile fish passage at all federal mainstem projects resulting in at least 90 percent survival at each project within the next five years.

3. **85 percent passage efficiency goal.** CRITFC recommended adoption of the 85 percent fish passage efficiency goal, because it represents a reasonable interim measure of bypass success at mainstem dams. CRITFC believes this standard is preferable to survival measures for the following biological reasons: 1) The passage efficiency measure readily permits identification of project-specific passage problems; 2) It requires fewer test fish than survival studies; 3) The time needed to conduct passage efficiency studies is often two or three months, while long-term survival studies require two or three years; and, 4) Fewer uncontrolled variables are present in passage efficiency studies, ensuring greater reliability and comparability of results between projects than survival estimates. CRITFC also stated that the 85 percent passage objective is presently attainable using state-of-the-art bypass technology.

CBFWC also recommended the adoption of the 85 percent fish passage efficiency goal to guide decisions and actions related to mitigation of downstream passage problems at mainstem hydroelectric projects. CBFWC believes adoption of a passage efficiency goal is the only way to address the specific question of project passage of migrants via nonturbine routes. To substantiate this goal, CBFWC stated that: 1) Past research has shown that there is substantial benefit to the smolts to project passage by nonturbine routes, including spillway passage; and, 2) Adequately operating bypass systems should not cause injuries or losses to smolts. Passage efficiency was selected as a goal rather than survival or other factors because: 1) It is comparable between projects; 2) It is equally applicable at all project sites; 3) It accounts for any combination of mechanical and operational bypass; and, 4) It can be measured and monitored easily with good reliability. Tests of the best available technology represented by present mechanical bypass devices have shown that the best that can be expected is for approximately 85 percent of the juveniles approaching a project to be deflected from the turbine intakes. CBFWC has indicated that some mainstem projects may not be able to attain 85 percent fish passage efficiency utilizing only a mechanical bypass system, but that this standard does appear to be achievable for all projects using spill in conjunction with mechanical bypass systems.

Both the Idaho Wildlife Federation and Professor Michael Blumm of Lewis and Clark Law School supported adoption of the 85 percent fish passage efficiency objective at both federal and nonfederal mainstem projects. Professor Blumm also asserted that an 85 percent juvenile bypass efficiency has been achieved at McNary Dam which has a state-of-the-art mechanical bypass system. He stated that an 85 percent bypass efficiency should produce survival rates in excess of 90 percent, since not all 15 percent of the juvenile fish passing through the turbines perish. Professor Blumm contended that a performance objective based on bypass efficiency is superior to one based on a smolt survival rate, because the former is much easier

to monitor and control than the latter rate which is based on numerous unverified assumptions.

**Council response:** The Council has taken these comments into account in its final decision on this measure. It has designated a 90 percent project survival standard as an interim goal to be met over the next five years or until powerhouse collection and bypass systems are installed at Corps mainstem dams. This interim survival standard for federal projects will achieve a level of smolt survival comparable to that of the interim spill program required by measure 404(a)(10) for the mid-Columbia PUD projects. As a long-term goal, the Council is adopting 90 percent fish guidance efficiency as a design criterion. The Council expects all new federal collection and bypass facilities to be designed to this design criterion. The Council recognizes that it may not be feasible to achieve this standard at each project under all conditions for all species. However, it expects federal project operators to design their systems to this standard. Within the next five years, the Council will evaluate the actual fish guidance efficiencies for each project and will consider establishing fish passage efficiency standards.

**4. New screens designs.** Bonneville commented that generic juvenile fish screen research should be included under section 35, Protection from New Hydroelectric Development, in the action plan.

**Council response:** The Council has taken this comment into account in adopting this measure and has shifted this action item to section 35.

**Note:** A number of comments were resubmitted for items in the action plan pertaining directly to Program Sections 400 and 600 amendments. Council response to these comments can be found under the specific program measures. Response to action plan comments generally address only substantive recommendations concerning specific action items or scheduling changes.

#### 5. 32.2 All Corps projects.

**a. General comments.** PNUCC, the Corps, and the fish and wildlife agencies each supported the development of coordinated systemwide annual juvenile bypass plans including interim annual passage plans. The Oregon Farm Bureau supported mainstem project fish bypass system improvements as opposed to shutting down turbines to achieve greater fish protection. PNUCC also supported the development of a comprehensive juvenile transportation report to be submitted by January 1985, including evaluations and recommendations for further actions. The Corps indicated its willingness to prepare such a report, but not until May 1985.

**Council response:** The Council has taken these comments into account in its decision on this action item. The Council has determined that to receive a more comprehensive smolt transportation evaluation, it will allow the Corps to submit a draft report by March 1985, for Council review and comment, with the final report, including recommendations for future actions incorporating Council comments, due by May 1985.

**b. Transportation report.** PNUCC proposed that the Council expand on this item to include a recommendation by the Corps for further actions needed to be taken relative to the evaluation of transportation of juvenile fish.

**Council response:** The Council has taken this comment into account in adopting this measure.

#### 6. Bonneville Dam.

**a. General comment.** PNUCC, the Corps and CBFWC each supported continuing evaluation of the effectiveness of the bypass facilities at both powerhouses as well as development of a work plan, including schedules, costs and evaluation of alternatives, to increase juvenile passage efficiencies at the second powerhouse. CBFWC also recommended development of a coordinated interim passage plan to be implemented by April 1 of each year until problems with juvenile passage efficiency at the second powerhouse are resolved.

**b. Additional evaluations.** CBFWC also recommended additional evaluations and studies to be implemented after Bonneville Dam bypass improvements are accomplished, such as: 1) The comparative survival of smolts to adult returns; 2) Use of either powerhouse's juvenile sampling system as a smolt index site for Water Budget monitoring; and, 3) An evaluation of forebay flow-net and project operations affecting smolt passage behavior and efficiency.

**Council response:** The Council has taken these comments into account in its decision on this action item. The Council has determined that the additional evaluations recommended by CBFWC

are either implicitly included in the juvenile passage plan item for this project or the ongoing evaluation of the fish passage facilities, or are more appropriately and adequately addressed in measure 304(d), smolt monitoring and research for the Water Budget.

#### 7. The Dalles Dam.

**a. Interim juvenile passage plan.** The Corps recommended changing the reporting date for the interim passage plan from March 1, 1985, to April 1, 1985, and the implementation date from April 1, 1985, to April 15, 1985. The Corps claimed it needed additional time for negotiation and preparation of the interim passage plan.

**Council response:** The Council has determined that development of interim juvenile passage plans is a high priority item and that the Corps should begin consultations as soon as possible with the fish and wildlife agencies and tribes to complete this coordinated effort by February 15, 1985, and implement the plan by April 1, 1985. The Council has concluded that this schedule is necessary to have the interim passage plan in effect by April 1 of each year to protect early hatchery-released smolts and wild outmigrants, as well as time to alert and train project personnel.

**b. Prototype testing.** The Corps and CBFWC both state that biological and prototype deflection device testing should be completed by fall 1985, and the Corps recommended a reporting date of December 31, 1985, to allow for analysis of test data and report preparation.

**Council response:** The Council has taken this information into account in its decision on this item and has determined that the Corps may submit its test results for this project as part of its annual fish passage report to the Council in January of each year (see action plan item 32.2).

**c. Permanent passage plan.** The Corps recommended that the submittal of its permanent passage plan for this project be changed from January 1986 to July 31, 1986.

**Council response:** The Council has determined that the July 1986 reporting date will allow biological and prototype testing during both the 1985 and 1986 spring outmigration with time to incorporate this information into the permanent passage plan submittal.

**d. Juvenile bypass system.** CBFWC claimed that the Corps' proposed schedule from initiation of design memorandum to completion of construction is overly conservative and that it believed that the proposed construction time of three years and cost is 50 percent greater than necessary. This is based on the bypass work being done currently at John Day Dam which is more extensive than what will be required at The Dalles Dam. The Corps stated that it could complete installation of a juvenile bypass system by April 1990.

**Council response:** The Council has taken this information into account in its decision on this item and has indicated its intention to support the necessary Corps appropriations to complete installation of a juvenile bypass system by the end of FY 1989.

**e. North shore fishway.** CBFWC recommended that a vertical slot counter for The Dalles Dam north fishway be installed by November 1986.

**Council response:** The Council has determined that this item is a relatively low priority action item that can be completed before the end of FY 1989.

#### 8. John Day Dam.

**a. Delay completion.** The Corps stated that it will proceed with plans to install and operate a smolt bypass system and turbine intake traveling screens at John Day Dam by March 30, 1987, thus delaying completion by one year from what was called for in the Council's Fish and Wildlife Program. The Corps commented that the 1987 completion date is more realistic given its FY 1985 appropriations and expected FY 1986 funding for this project. Given this delay, the Corps maintained that evaluation of these smolt passage facilities should be completed by December 31, 1988.

**Council response:** The suggestion to delay completion of John Day Dam juvenile bypass system until 1987 was rejected since it is the Council's intention to keep the program action oriented and to support necessary appropriations in FY 1986 to complete the project by March 30, 1986. Similar efforts led to increasing Congressional funding for this construction work at John Day Dam by \$5 million for FY 1985, resulting in \$10.7 million total funding. Since the Council expects bypass work to be completed by 1986, it also expects initial evaluation of these bypass facilities to be completed by December 31, 1987.

**b. Evaluate juvenile bypass system.** CBFWC recommended three additional action items for John Day Dam to evaluate the effectiveness of the juvenile bypass system as it is completed and becomes operational. CBFWC also recommended that gatewell dipping and spill should continue in the interim to salvage and protect juvenile fish during bypass system construction.

**Council response:** The Council has taken these comments into account in its decision on these action items and has determined that the fish and wildlife agencies can include gatewell dipping of smolts and spill for fish passage in the coordinated interim passage plan.

**9. McNary Dam.** CBFWC recommended two additional action items for McNary Dam. The first is to evaluate and improve the low fall chinook guidance efficiency of the submersible traveling screens. The second is a need for a complete evaluation of juvenile fish passage at McNary, including comparative survival studies of spring chinook passed through spill, bypass or transportation.

**Council response:** The Council has determined that CBFWC participation and input on the Corps' Fish Research Scientific Review Subcommittee can influence or result in recommendations for particular Corps-funded fish passage/survival research to meet these research objectives. Furthermore, there is already provision for annual Council review and input into Corps research at this project submitted as part of the Corps' annual report in action item 32.2.

#### **10. Ice Harbor Dam.**

**a. Interim passage.** The Corps recommended changing the reporting date for the interim passage plan from March 1, 1985, to April 1, 1985, and the implementation date from April 1, 1985, to April 15, 1985. The Corps claimed it needed additional time for negotiation and preparation of the interim passage plan.

**Council response:** The Council has determined that development of interim juvenile passage plans is a high priority item and that the Corps should begin consultations as soon as possible with the fish and wildlife agencies and tribes to complete this coordinated effort by February 15, 1985, and implement the plan by April 1, 1985. The Council has concluded that this schedule is necessary to have the interim passage plan in effect by April 1 of each year to protect early hatchery-released smolts and wild outmigrants, as well as time to notify and train project personnel.

**b. Prototype testing.** The Corps stated that horizontal and vertical fish distribution studies and prototype testing of turbine intake screens should be completed by September 30, 1985, but recommended a reporting date of December 31, 1985, to allow for analysis of test data and report preparation. CBFWC recommended that evaluation of alternative bypass strategies to supplement sluiceway operation, including prototype testing of turbine intake screens, be completed by September 30, 1986.

**Council response:** The Council has taken this information into account in its decision on this item and has determined that to keep the Corps on its proposed schedule at this project, the Corps may submit its test results for this project as part of its annual fish passage report to the Council in January of each year (see action plan item 32.2).

**c. Permanent passage.** The Corps recommended that the submittal of its permanent passage plan for this project be changed from January 1986 to July 31, 1986. CBFWC recommended a January 1987 submittal date for a permanent passage plan.

**Council response:** The Council has determined that the July 31, 1986, reporting date will allow biological and prototype testing during both the 1985 and 1986 spring outmigration with time to incorporate this information into the permanent passage plan submittal.

**d. Bypass installation.** CBFWC recommended an April 1988 completion date for structural modifications to the Ice Harbor Dam bypass system.

**Council response:** The Council has indicated that, due to the two-year lead time required to plan for Corps budget requests, it will support the necessary Corps appropriations to complete structural bypass modifications at Ice Harbor Dam by the end of FY 1989.

**e. Additional evaluations.** CBFWC also recommended re-evaluation of the sluiceway fish passage efficiency, an evaluation of alterations to the sluiceway or juvenile outfall to reduce smolt injury or mortality, and adult fish passage studies at Ice Harbor Dam.

**Council response:** The Council has determined that CBFWC has or will have several forums available to recommend project-specific fish passage evaluations. First, it is a member of the Corps' Fish Research Scientific Review Subcommittee and the Fish Counting Subcommittee of the Columbia Basin Fisheries Technical Committee, where it can influence or recommend particular Corps-funded fish passage or survival studies to accomplish these research objectives. Furthermore, there is also a provision for annual Council review and input into Corps fish passage studies at each project in response to the Corps' annual report called for by action plan item 32.2. CBFWC recommendations for future studies to evaluate both adult and juvenile fish passage facilities can be made to the Council after reviewing the Corps' annual report.

#### **11. Lower Monumental Dam.**

**a. Interim passage.** The Corps recommended changing the reporting date for the interim passage plan from March 1, 1985, to April 1, 1985, and the implementation date from April 1, 1985, to April 15, 1985. The Corps claimed it needed additional time for negotiation and preparation of the interim passage plan.

**Council response:** The Council has determined that development of interim juvenile passage plans is a high priority item and that the Corps should begin consultations as soon as possible with the fish and wildlife agencies and tribes to complete this coordinated effort by February 15, 1985, and implement the plan by April 1, 1985. The Council has concluded that this schedule is necessary to have the interim passage plan in effect by April 1 of each year to protect early hatchery-released smolts and wild outmigrants, as well as time to notify and train project personnel.

**b. Work plan.** The Corps recommended that its submittal of a permanent juvenile fish bypass plan for this project be changed from May 1, 1985, to July 31, 1986. CBFWC supported the May 1, 1985, reporting date due to the high priority of juvenile fish passage at this project.

**Council response:** The Council has determined that the July 31, 1986, reporting date for this item will allow the necessary biological and prototype testing to be conducted during the 1985 and 1986 spring outmigrations. The Council has also determined that these biological and engineering studies should precede design work and provide justification for budgeting needs and the proposed schedule to complete construction of juvenile bypass facilities.

**c. Bypass installation.** CBFWC claimed that the Corps' proposed schedule from initiation of design memorandum to completion of bypass construction is overly conservative, and that every attempt should be made to expedite bypass activities due to the priority of this project. CBFWC indicated that horizontal and vertical fish distribution studies and prototype screen testing would not be necessary at this project since the turbine intake configuration is similar to that of Little Goose Dam which already has a collection and bypass system. Therefore, the Corps' proposed schedule could be shortened by at least one year. The Corps stated that it could complete installation of a juvenile fish bypass system by April 1990.

**Council response:** The Council has taken this information into account in its decision on this item. The Council has determined from the Corps' proposed schedule for studying, designing and installing a mechanical bypass system at Lower Monumental Dam that fish distribution studies and prototype screen testing would be conducted all in one year. The Council has determined that this project-specific test information is needed to detect and avoid possible juvenile fish passage problems at Lower Monumental Dam such as those encountered at Bonneville second powerhouse subsequent to installation of a powerhouse collection and bypass system at that project. The Council has indicated its intention to support the necessary Corps appropriations to complete installation of a juvenile bypass system at Lower Monumental Dam by the end of FY 1989.

**d. Adult passage studies.** CBFWC recommended an item be added to the action plan that would require adult fish passage studies at this project in 1986 to resolve fish count discrepancies.

**Council response:** The Council has determined that since CBFWC is a member of the Corps' Fish Research Scientific Review Subcommittee and the Fish Counting Subcommittee of the Columbia Basin Fisheries Technical Committee, it can influence or recommend particular Corps-funded fish passage studies at this project to resolve any fish count discrepancies. Furthermore, there is also a provision for annual Council review and input into Corps fish passage studies at each project in response to the Corps' annual report required by

action plan item 32.2. CBFWC recommendations for future studies to evaluate either adult or juvenile fish passage facilities can be made to the Council after reviewing the Corps' annual report.

## 12. Little Goose Dam.

a. **Additional studies.** CBFWC recommended three additional action items and evaluations for Little Goose Dam. The first is an evaluation in an open flume design to transport juveniles safely through the bypass system to the tailwaters. The second is to evaluate the modified juvenile bypass system. The third is to conduct adult fish passage studies at this project.

**Council response:** The Council has taken these comments into account in its decision on these action items and has determined that since CBFWC is a member of the Corps' Fish Research Scientific Review Subcommittee and the Fish Counting Subcommittee of the Columbia Basin Fisheries Technical Committee, it can influence or recommend particular Corps-funded fish passage studies at this project to resolve any fish count discrepancies. Furthermore, there is also a provision for annual Council review and input into Corps fish passage studies at each project in response to the Corps' annual report required by action plan item 32.2. CBFWC recommendations for future studies to evaluate either adult or juvenile fish passage facilities can be made to the Council after reviewing the Corps' annual report.

b. **Bypass modifications.** CBFWC stated that the Corps' present schedule calls for completion of bypass improvements in FY 1987. The Corps has indicated that as a result of the fisheries agencies' request for prototype evaluation of an alternative conduit design in 1985, completion of bypass improvements could be delayed up to two years to accommodate the necessary design changes, process bids, and perform the modifications. CBFWC indicated that the potential benefits of this evaluation justify the potential delay and urged that every attempt be made to minimize delay in completing bypass improvements at this project.

**Council response:** The Council has taken this information into account in its decision on this action item. The Council has determined that, since the results of the prototype evaluation of an alternative conduit design will not be available until the end of 1985, the Corps shall continue on its present schedule of completing bypass improvements at Little Goose Dam by 1987.

## 13. Lower Granite Dam.

a. **Additional studies.** CBFWC recommended additional action items for Lower Granite Dam. The first is an evaluation of spill versus bypass system efficiencies and a determination of injury and survival at Little Goose Dam of fish passed through the bypass system, the turbines, or the spillways at Lower Granite Dam. The second is to conduct adult fish passage studies at this project.

**Council response:** The Council has determined that since CBFWC is a member of the Corps' Fish Research Scientific Review Subcommittee and the Fish Counting Subcommittee of the Columbia Basin Fisheries Technical Committee, it can influence or recommend particular Corps-funded fish passage studies at this project to resolve any fish count discrepancies. Furthermore, there is also a provision for annual Council review and input to Corps fish passage studies at each project in response to the Corps' annual report required by action plan item 32.2. CBFWC recommendations for future studies to evaluate either adult or juvenile fish passage facilities can be made to the Council after reviewing the Corps' annual report.

## 14. Priest Rapids/Wanapum Dams.

a. **Prototype intake deflection device testing.** Grant County PUD recommended that the schedule for testing of a prototype intake deflection device at Priest Rapids Dam be changed from 1985 to 1986 and 1987 in order to gather data from at least two outmigration seasons. Grant County also proposed to report its prototype test results to the Council by January of 1987 and 1988. CBFWC has concurred with the slippage of the prototype screen testing at Priest Rapids from 1985 to 1986 only. CBFWC recommends that the prototype test result be submitted to the Council by July 15, 1986.

**Council response:** The Council has taken this information into account in its decision on this item. The Council has determined that one year's worth of prototype intake screen testing data should be sufficient as long as adequate data from horizontal and vertical fish distribution studies in the powerhouse intakes are available from 1985 and earlier biological studies. To keep the program action-oriented,

and to allow Grant County adequate time to analyze the biological and prototype test results, the Council has established the prototype test reporting date to the Council of January 1987.

b. **Permanent bypass.** Grant County PUD recommended that, upon completion of prototype screen testing, it would evaluate cost and biological effectiveness of prototype tests for Priest Rapids Dam and develop and submit a permanent bypass plan and implementation schedule by July 1988. CBFWC stated that it believed a January 15, 1985, date for submittal of a permanent passage plan for this project is appropriate.

**Council response:** The Council has determined that it is most appropriate to develop a permanent passage plan and implementation schedule for this project after the project operator has had an opportunity to conduct and evaluate biological and prototype test results. The Council has concluded that January 1987 is a reasonable date to develop a permanent passage plan and implementation schedule for this project. The schedule should represent the PUD's best effort and should be a commitment to proceed with implementation of the plan and schedule.

c. **Permanent bypass.** CBFWC recommended that Grant County install a permanent juvenile bypass system at Priest Rapids Dam by March 20, 1987. Grant County recommended that this action item be deleted.

**Council response:** The Council has determined that it would establish March 20, 1988, as a reasonable date for complete installation of a juvenile bypass system at Priest Rapids Dam in order: 1) to keep the program action-oriented; 2) to make the installation date for a powerhouse bypass system at this project realistic; and 3) to keep the implementation schedule similar to that of Chelan County — Rocky Reach Dam.

d. **Wanapum Dam.** Grant County PUD recommended that, based on hydraulic modeling studies of Wanapum Dam, it develop and test prototype spill enhancement devices in 1985, 1986 and 1987, plus develop a long-term passage plan and implementation schedule by July 1988. It also proposed no prototype intake deflection device testing for Wanapum Dam. CBFWC asserted that a prototype intake deflection device successfully tested at Priest Rapids Dam could also be implemented at Wanapum Dam with no further prototype tests, due to the similarity of these projects. Thus, CBFWC recommended that Wanapum Dam have reporting and implementation schedules similar to those of Priest Rapids Dam, with a complete powerhouse bypass system installed at Wanapum Dam by March 20, 1988.

**Council response:** The Council has taken these comments into account in its final decision on this item. The Council has concluded that Wanapum Dam should have reporting and implementation schedules for installation of a permanent bypass system similar to those of Priest Rapids Dam.

## 15. Rocky Reach/Rock Island Dams.

a. **Rocky Reach Dam schedule.** Chelan County PUD recommended that the reporting date to the Council for the prototype test results should be changed from July 15, 1985, to October or November 1985 to allow adequate time to evaluate the biological and prototype test results for Rocky Reach Dam. Chelan County PUD also indicated that the March 20, 1987, date for complete installation of a permanent juvenile bypass system at Rocky Reach Dam was acceptable. CBFWC supported the action items and schedule as outlined in the draft action plan for Rocky Reach Dam.

**Council response:** The Council has taken this information into account in its decision on the action items for this project. It has concluded that Chelan County shall provide the results of its biological and prototype tests at Rocky Reach Dam by October 15, 1985.

b. **Rock Island Dam study schedule.** Both Chelan County PUD and CBFWC indicated that the draft action plan schedule addressing prototype testing and bypass system installation is unrealistic at present because hydraulic modeling studies at Rock Island Dam have not provided sufficient information on which to base development of a prototype intake screen. Neither entity proposed a specific schedule for proceeding with bypass work at Rock Island. CBFWC recommended that Chelan County PUD continue modeling studies to evaluate alternatives to solve the bypass problems and that it cooperatively develop a work plan and schedule for this project with the fish and wildlife agencies and tribes by January 15, 1985.

**Council response:** The Council has concluded that Chelan County shall continue modeling studies to evaluate alternatives to solve the bypass problems at Rock Island Dam in cooperation with the fish and wildlife agencies and tribes. The Council has also determined that Chelan County PUD shall cooperatively develop a complete analysis of juvenile bypass alternatives and a schedule for implementation of a permanent smolt bypass system for this project by January 1986. This schedule would allow a full year of research, modeling studies, and evaluation of bypass alternatives by the interested entities.

#### 16. Wells Dam.

**Wells Dam schedule.** Douglas County PUD supported the prototype juvenile bypass test by January 1985, the development of a coordinated interim juvenile passage plan by March 1, 1985, and the continuing evaluation of alternative means of collection and bypass systems at Wells Dam. Douglas County did not submit a schedule recommendation concerning installation of a permanent juvenile bypass system. CBFWC supported the action items and schedule outlined in this section of the action plan with only minor word changes to clarify items.

**Council response:** The Council has taken these comments into account in its final decision on these action items for Wells Dam.

#### 17. All Mid-Columbia Projects.

**a. Annual spill plans.** Both the mid-Columbia PUDs and CBFWC supported the action items contained in this section, except for the development of annual spill plans for these projects. The mid-Columbia PUDs recommended that annual "spill" plans be changed to annual "bypass" plans. CBFWC recommended that annual "spill" plans be changed to "interim annual passage plans."

**Council response:** The Council has taken these comments into account in its decision on this action item and has determined that the wording "interim annual passage plans" is more descriptive since it can include either mechanical bypass systems or the use of spill at all mid-Columbia projects. Until permanent powerhouse screening and bypass systems are completed, the Council expects that spill will be the primary means of juvenile bypass to achieve at least 90 percent smolt survival at each mid-Columbia PUD project.

**b. Natural upriver runs.** CRITFC recommended that the mid-Columbia PUDs work cooperatively with the fish and wildlife agencies and tribes to use PUD-funded hatchery facilities to assist in rebuilding natural runs of salmon and steelhead in the mid-Columbia River system.

**Council response:** The Council has determined that this comment is inappropriate for the mainstem passage section of the action plan. Furthermore, the Council has concluded that the CRITFC concern for rebuilding upriver runs of salmon and steelhead as well as hatchery management to complement natural propagation is adequately addressed in program measures 106, 703, 704(g)(1) and (g)(2), and 704(k)(1).

#### B. Section 33 - Water Budget and Other Mainstem Flows.

**1. Water Budget managers' actions.** Both the Oregon and Washington State Farm Bureaus and PNUCC commented that the Council should include under Bonneville and Water Budget managers' actions a specific requirement to determine the biological benefits associated with implementation of Water Budget flows on the Columbia and Snake rivers. The commentators indicated that since annual Water Budget costs are estimated to be \$60 million in secondary sales lost and could be as much as \$150 to \$200 million in future years, the Council should ensure that the Water Budget managers develop sound biological data over the next five years to provide a cost-effectiveness analysis for various increments of Water Budget flows and associated biological benefits.

**Council response:** The Council has taken this information into account in its decision on this action plan item. The Council has determined that one of the objectives for the next five years is for the Water Budget managers to continue to gather sound biological information as a basis for long-term evaluation of Water Budget effectiveness. Annual evaluation and monitoring of smolt migration and travel time also will continue per Sections 304(c) and 304(d). This information is included in the annual Water Budget Center report already required by action item 33.3. Bonneville is also required to continue to fund Water Budget research and the smolt monitoring program and report to the Council on progress per action item 33.2. Therefore, the Council has concluded that additional action items in section 33 are not necessary.

**2. Improve fishery flows.** CBFWC stated that some measures in sections 300 and 700 of the program provide for increasing the amount of water available or increasing operational flexibility to reduce the effect of the Water Budget on firm power generation and also to increase potential allocation of water to the Water Budget. Specifically, CBFWC mentioned 304(a)(6) which requires the Corps to re-examine its flood control requirements, and 704(b)(14)(A) which requires all federal project operators and regulators to do the same.

CBFWC supported action item 33.5 and recommended that a similar item be included for the Bureau of Reclamation to evaluate and report on the feasibility of modifying flood control rule curves. CBFWC further recommended that the additional provisions of measure 704(b)(14), which requires evaluations of the feasibility of constructing new storage reservoirs and using uncontracted stored water, be included as action items for both the Corps and the Bureau. CBFWC indicated that providing adequate Water Budget flows to improve the survival of migrating anadromous fish is a very high priority and will assist in preserving upriver runs of salmon and steelhead.

**Council response:** The Council has taken this information into account in its final decision on the action plan, and it concurs that implementation of the Water Budget is important to improve the survival of migrating anadromous fish. The Council has determined that during years of extremely low runoff, there may not be enough water in the Snake River Basin both to meet the Water Budget flows and to ensure the system's reservoirs refill enough to meet future power and fish flow needs. The Council has concluded that efforts to evaluate the feasibility of: 1) constructing new storage reservoirs; and 2) using uncontracted water stored in existing reservoirs, especially in the Snake River Basin, to assist in implementing Water Budget flows is a high priority. The Council also has determined that the Corps, which has the responsibility for managing and operating the Federal Columbia River Power System projects to ensure a proper balance among its multiple purposes, should be the entity responsible for providing the report on the feasibility of modifying existing federal project flood control requirements. The Council expects that the Corps will work cooperatively with the other federal project operators and regulators in evaluating project flood control requirements.

#### C. Section 34 - Production Capability

**1. 34 Habitat and passage restoration.** CBFWC and ODFW proposed specific action plan references to several passage projects, including Three-mile Dam, Tumwater and Dryden dams, and the falls on White, Hood and Collowash rivers.

**Council response:** The Council has considered these suggestions in developing and revising the action plan. The passage projects listed are included in existing program measures. A component of amended measure 704(d)(1) is a requirement that Bonneville consult with the fish and wildlife agencies and tribes in the development of the annual work plan. The agencies and tribes should use this forum to emphasize and justify implementation scheduling of these passage projects.

**2. 34 Production capability.** CRITFC proposed additional language to the action item on reprogramming. The addition identifies immediate reprogramming as a prerequisite to rebuilding upriver natural runs and protecting ratepayer investments in mitigation and enhancement projects.

**Council response:** The Fish and Wildlife Program is clear regarding emphasis on restoration of upper river fish stocks (sections 106 and 703). Section 105 specifies the steps the Council is following to ensure program costs are reasonable and effective. The Council has rejected the proposed language additions.

**3. Artificial production.** CBFWC called for the specific mention of operation and maintenance of Bonifer and Minthorn release and collection facilities (Umatilla Reservation) in action plan item 34.10.

**Council response:** Program Section 704(i)(1) does not identify any specific locations for the Umatilla Reservation release and collection facilities. The Council rejects the proposal to add these references in the associated action plan item, since the action is intended to reflect the program measures.

**4. Umatilla facilities.** The Bureau of Indian Affairs commented on activities to be conducted on reservation property. The agency suggested a BIA review prior to implementation of activities on reservations within the agency jurisdiction.

**Council response:** The Council has rejected this suggestion as an unnecessary duplication of program language which requires the fish and wildlife agencies, tribes, and the project operators and regulators to consult to the "fullest extent possible" in the implementation of the program (1304(c)(2)).

**5. Artificial production.** The agencies (CBFWC) justified recommended modifications to the action plan item by stating that siting, feasibility, and design of the Umatilla steelhead hatchery is in progress and should be completed by July 1985. This date is one year earlier than the Council-proposed date. CBFWC further indicated that until study completion, the need to expand the intended facility will be unknown.

**Council response:** The Council has adopted the necessary language modifications.

**6. Artificial production.** The Pacific Northwest Fish Health Protection Committee requested that the Council modify the statement on committee development of a comprehensive program on fish health protection. CBFWC submitted comments supporting the committee's views. The modification suggested by the committee would commit the committee to develop a draft program by November 1985. The committee said it was unable to commit to a complete, comprehensive program development and consensus by the date proposed in the draft amendment document.

**Council response:** The Council modified action item 34.18 accordingly.

**7. Artificial production.** CBFWC suggested that the habitat study to be conducted on the lower Clearwater River also should address the availability of suitable hatchery fish for supplementing the naturally spawning stocks.

**Council response:** This proposal appears to duplicate the new Program Section 704(e)(1).

**8. Artificial production.** Oregon Trout commented that gene conservation aspects of the program will require firm technical direction. The group suggested that the Council establish a staff position specifically to monitor the genetic matters of program measures.

**Council response:** The Northwest Power Act requires the best available scientific knowledge as a basis for development and implementation of the fish and wildlife program 4(h)(6)(B). To obtain this guidance, the Council has provided staff support and budgeted for contracting as necessary. Also related to this need, the Council has amended measure 704(a)(1) to require Council exploration of alternatives to developing the best technical base for impartial Council decisions. The Council does not consider it appropriate at this time to create a staff geneticist position.

**9. Hatchery effectiveness, known-stock fisheries and reprogramming work plans.** CBFWC proposed additional language requiring cooperative work among the fish and wildlife agencies, tribes and Bonneville in developing Bonneville work plans.

**Council response:** The Council has considered this proposal but believes that Section 1304(c)(2), which requires consultation with the fish and wildlife agencies, tribes, and project operators and regulators to the fullest extent possible, adequately spells out consultation requirements.

**10. Cooperative reprogramming.** CRITFC and CBFWC observed a need for action plan language which provides for Bonneville funding for transportation and acclimation of fish as required in reprogramming. CRITFC also proposed a new action item to fund evaluation studies of reprogrammed hatchery releases.

**Council response:** The Council has considered the proposals of CBFWC and CRITFC in modifying the action plan in this area.

**11. Habitat and passage restoration.** USFS suggested that the 704(d)(1) amended language reflect land management agency involvement in developing the work plans for offsite enhancement work.

**Council response:** The Council has adopted this suggestion. The measure language has been modified to include land management agencies in the consultation process among Bonneville, agencies and tribes in the development of the annual Bonneville work plan.

**12. Habitat and passage restoration.** CBFWC identified a need to strengthen Bonneville consultation with the fish and wildlife agencies and tribes regarding implementation of measure 704(d)(1). The comment also asked for further definition of the agencies' role in setting project priority.

**Council response:** The Council has included requirements for consultation in amended Section 704(d)(1). A component of the work plan outline also requires that Bonneville provide an indication of whether the fish and wildlife agencies and tribes concur in the Bonneville work plan.

**13. Habitat and passage restoration.** The Washington Department of Ecology suggested that specific reference to consultation with the department be made in establishing the Yakima River minimum flows.

**Council response:** Program Section 904(c)(3) states that "before supporting any flows for fish in the Yakima Basin, the Council will consult with the . . . Washington Department of Ecology. . . ." among others.

**14. Harvest controls.** Bonneville indicated concern for language addressing ongoing stock assessment studies (704(h)(3)) and the applicability of results to program amended Section 504(c)(2).

**Council response:** The 704(h)(3) reference in the draft amendment document was a typographical error. The intended evaluations were to be related to program measure 704(k)(3), known-stock fisheries.

**15. Evaluation and reporting.** CBFWC commented that the yearly reporting schedule required modification. The agency suggested that February was impractical for reporting on harvest control; that ocean regulations should be reported in March; and that river, commercial and tribal regulations should be discussed on a season-to-season basis.

**Council response:** Appropriate modifications to the reporting schedule have been made in the action plan. The report on harvest controls is scheduled for April.

**16. Evaluation and reporting.** CBFWC suggested an addition to the action plan language to provide the Council with immediate development of a mechanism for objective scientific judgment.

**Council response:** Amended program language 704(a)(1) requires the Council to explore alternative means of determining the best available scientific knowledge.

#### **D. Section 35 — New Hydroelectric Development.**

**1. The Corps proposed a language change to evaluate the dedication of water on the basis of monetary and nonmonetary benefits. The Corps further commented on the Council's authority with respect to hydroelectric development within the region and questioned whether the Council has any authority to review or control Corps activities involving protected areas and hydroelectric development.**

**Council response:** The Corps is required to follow the mandate of the Northwest Power Act by providing equitable treatment for fish and wildlife and by taking the Fish and Wildlife Program into account at each relevant stage of its decision making processes to the fullest extent practicable. Hydroelectric development in the region is governed by the Northwest Power Act to the extent it is addressed by the Northwest Conservation and Electric Power Plan and the Columbia River Basin Fish and Wildlife Program within the terms of the Act.

**2. Storage allocation.** The Bureau of Reclamation commented that Section 704(b)(16), read in conjunction with action item 35.2 which requires storage allocations for fish and wildlife, must be consistent with evaluation and policy criteria which govern federal water projects.

**Council response:** The Northwest Power Act requires the Council to adopt a fish and wildlife program designed to deal with the Columbia River and its tributaries as a system. An important component of this systemwide planning is the cooperation of individual federal project operators, including the Bureau of Reclamation, in construction of additional storage reservoirs. The legal requirements for Bureau compliance with the Fish and Wildlife Program are spelled out in the Northwest Power Act, which complements and supplements other federal laws. The Council expects the Bureau to implement the Fish and Wildlife Program as governed by all laws, including the Northwest Power Act.

**3. Action Items 35.3 and 35.4.** Bonneville commented that it is proceeding with development of a work statement for cumulative impact assessment methods and expects to fund this effort in FY 1984. It recommended a completion date of August 1986.

**Council response:** The Council has taken this comment into account in adopting this action item. The completion date adopted by the Council was based on the final Bonneville work plan for this study.

**4. Action Item 35.7.** The Bureau of Indian Affairs commented that it should be contacted about FERC assessment of new hydroelectric projects.

**Council response:** The Council agrees that FERC should contact the Bureau of Indian Affairs regarding assessment of new hydro projects under the jurisdiction of FERC. The purpose of this action item is to ensure that FERC takes the Fish and Wildlife Program into account at each relevant stage of its decision making to the fullest extent practicable.

#### **E. Section 36 — Goals.**

No comments received.

#### **F. Section 37 — Limit Action Prior to Goals.**

No comments received.

#### **G. Section 38 — Improve Harvest Controls.**

**1. Reporting and consultations.** CBFWC believes it is critical for the Council to obtain objective scientific judgment regarding the harvest controls and recommends that the Council consider using the Technical Advisory Committee to the Columbia River Compact as a source of information on fish runs and harvest management. It suggests that a staff member be assigned to monitor harvest regulation development. It recommends that the reporting date be changed to April.

**Council response:** The Council has designated a staff member to monitor harvest management issues. The staff member will ensure that the Council receives objective scientific judgment on harvest controls, including information from the Technical Advisory Committee to the Columbia River Compact.

**2. Evaluation of known-stock fisheries.** Bonneville commented that action item 38.2 is a duplication of 34.19.

**Council response:** The item has been rewritten to reflect the original purpose of 704(k)(3). The amended program now includes research and known-stock fisheries demonstration programs in Sections 504(c)(1), 504(c)(2), and 504(c)(3).

#### **H. Section 39 — Evaluation and Reporting.**

**1. Adaptive management.** In early July, the Council staff circulated an issue paper on "adaptive management," a concept and tool recognizing the need for action in the face of biological uncertainty and focusing on "learning by doing." The issue paper evoked considerable comment, most of it cautiously supportive. Several groups (including Bonneville, CBFWC, Corps, and PNUCC) recommended further discussion and clarification before the Council adopts adaptive management as a working policy or incorporates it into specific program measures. Several (including ALCOA, the Corps, PNUCC, and Pacific Northwest Generating Company) also stated that adaptive management may work well in measures which are less costly or more susceptible to quick adjustment (e.g., harvest regulation, spill, Water Budget) than in those which call for major capital investments. Other suggestions for application of adaptive management principles were aimed at 201 goals, outplanting of hatchery fish, and offsite enhancement (WDF), the Colville Hatchery (Colville Tribe), and review of future proposals for program amendment (Shoshone-Bannock Tribes).

The Corps stated that adaptive management should not be used as an excuse for "crash" programs or to "shrug off multimillion dollar efforts as 'errors.'" NMFS encouraged the Council to keep in mind that the amount of "generic" (generally applicable) information obtainable from a particular effort may be minimal, given the site-specific nature of many resource problems. PNUCC said an adaptive management policy must incorporate analyses of risks and of incremental benefits; that learning should not be considered more important than biological gain; and that adaptive management planning must take into account the time needed for evaluation, given fishery life cycles. WDG said identification of critical data gaps and collection of baseline information is crucial to successful evaluation in an adaptive management strategy. It also noted that adaptive management principles could increase the costs of program implementation. Garry D. Brewer, professor at the Yale School of Organization and Management, supported adaptive management and provided additional information on the concept.

**Council response:** The Council has introduced the adaptive management concept in the Section 1500 (action plan) portion of the program. It has included evaluation components in many program measures and amendments already. See, e.g., Program Sections 304(d), 604(a), 704(b), 704(d)(1), 704(i)(2), 704(i)(3), 804(a)(4), 804(a)(6), 804(e)(2), 1204(a)(2)(Q), section 1504, Action Item 39. The Council also plans to sponsor a workshop in fiscal year 1985 to further explore integration of adaptive management into planning, implementation, monitoring, and amendment of program measures. The Council will not use adaptive management to excuse costly errors; it does believe that adaptive management, in the long run, will save money by providing for early identification and correction of errors or problems in mitigation techniques.

#### **I. Section 40 — Wildlife.**

**1. Negotiated mitigation settlements.** PNUCC strongly encouraged the Council to urge all parties involved in the 1004(b) process to develop consultations and negotiated mitigation plans as opposed to controversial loss statement studies.

**Council response:** The Council agrees with this statement and will work with the affected parties to develop negotiated wildlife mitigation plans, where appropriate and feasible.

**2. Consultation meetings.** Bonneville commented that all action items regarding consultation meetings should be removed from Bonneville actions and placed under Council action items.

**Council response:** As stated in Sections 1004(b)(2) and (3), the Council's Wildlife Coordinator will participate in all consultations. However, these consultations are designed to discuss implementation of further wildlife activities and further procurement needs. Therefore, the Council believes that initiation of the consultation sessions is a Bonneville activity.

**3. Nonfederal projects.** Bonneville commented that action items about loss statements and mitigation plans also should be included under FERC actions, as Bonneville will not fund loss estimates/mitigation plans for nonfederal projects.

**Council response:** The Council has included an action item which states that the federal project operators and regulators will implement mitigation plans, where appropriate, under Section 1004(b)(3) and 1004(d)(1) and (2). Funding responsibility will be discussed during the consultation meetings. Bonneville currently is funding loss statements for nonfederal projects. The Council believes this topic also should be discussed in consultations following 1004(b)(1) activities.

**4. General.** Bonneville commented that the Council should make mitigation plans and land acquisition recommendations part of the program document.

**Council response:** The Council will review mitigation plans and land acquisition proposals prior to Bonneville funding in order to ensure that all aspects of implementation have been thoroughly considered. Therefore, Bonneville's concern has been met with the existing language.

**5. General.** IDFG commented that action item 40 should be strengthened to provide assurances that implementation of mitigation plans will be initiated during the five-year period.

**Council response:** The Council has expanded action item 40.1 to include a provision that the fish and wildlife agencies and tribes submit a prioritized list of projects (work plan) for the five-year period in question.

**6. General.** The Corps commented that the introductory language on resident fish and wildlife in Section 1503 should be expanded to include a statement requesting the fish and wildlife agencies and tribes to submit a list of wildlife species and programs that are of special interest to them in their planning.

**Council response:** The language in Section 1503 merely summarizes the planning process for resident fish and wildlife. The Corps' comment deals with specific program language that has been addressed in Section 1004(b).

**7. Tables 4 and 5.** The Corps suggested several language changes in the tables to clarify its concern for wildlife species, management plans, and good stewardship.

**Council response:** The Council realized that Tables 4 and 5 were general and did not address all concerns.



8. **Wildlife species list and related programs.** The Corps suggested that the Council expand the introductory language in item 40 to include a statement requesting the fish and wildlife agencies and tribes to submit a list of wildlife species and programs that are of special interest to them in their planning.

**Council response:** The Corps' comment deals with a specific program concern that has already been addressed in Section 1004(b).

9. **Federal project actions.** The Corps suggested the Council add a new action to item 40.6 which would provide the project operators a vehicle to implement management plans, when and where feasible, to protect wildlife species identified in the Fish and Wildlife Program.

**Council response:** The Council agrees with this concern and has added the appropriate language to item 40.6.

#### J. Section 41 — Resident Fish.

1. **Colville hatchery.** PNUCC commented that it strongly supports the Council's position in action item 41.2 with respect to the Colville resident fish hatchery.

**Council response:** No response is needed.

2. **White sturgeon evaluation.** PNUCC commented that it opposes the white sturgeon studies because this is a basic fishery research need and is not associated with the impacts of hydroelectric projects. PNUCC suggests that the Council delete the last sentence in action item 41.3, which calls for a work plan to be submitted to the Council by May 1985.

**Council response:** Action plan item 41.3 calls for Bonneville to evaluate current ongoing activities on white sturgeon and to develop a work plan for future action. This plan is to be submitted to the Council by May 1985. This action item does not call for future studies. Rather it calls for Bonneville to develop a work plan to evaluate the ongoing activities on white sturgeon and recommend further action. The work plan submitted by Bonneville will assist the Council in evaluating research and study needs discussed in action item 39.3.

3. **Libby Reservoir operations.** The Corps comments that it continues to have serious reservations about minimum flow and drawdown requirements proposed for Libby Dam in Section 804. The Corps comments that it will continue to study cooperatively the merits of these measures and suggests that the Council change the wording from "Develop and implement operating procedures. . ." to "Continue to study the merits of revising operating procedures. . ."

**Council response:** The Council is encouraged by the Corps comments to continue in the efforts to study cooperatively the minimum flow and drawdown requirements for Libby Dam. However, changing the language in action item 41.6 to "Continue to study the merits. . ." would amend the language in measures 804(a) and 804(b). Should the Corps wish to amend this language it should pursue that change during the next amendment process.

4. **Hungry Horse operations.** The Bureau of Reclamation commented that it has worked with MDFWP since 1979 to define a program for conservation and enhancement of the Hungry Horse Dam kokanee fishery. It stated that it is committed to providing the recommended flows through November 1985 to enable MDFWP to continue its study of kokanee spawning in the mainstem Flathead River. However, it also stated it has concerns about the impacts that

could occur at the Hungry Horse project if flows are implemented on a long-term basis. . . specifically, losses in dependable generating capacity, reduction in peaking capability, refill, and flood control.

**Council response:** All of these concerns have been discussed with the Council in previous meetings with the Bureau.

5. **General.** The National Park Service commented that the Council should change the opening sentence to include a statement that the Council will consider resident fish enhancement measures that are designed specifically to mitigate for anadromous losses.

**Council response:** The Council will evaluate resident fish amendments on a case-by-case basis. The Council has found in the Colville tribe hatchery amendment that mitigating for some anadromous fish losses with resident fish, where rebuilding anadromous stocks is not feasible technically, may be the only way to address losses. The Council will use the criteria in new Section 802(e) to evaluate resident fish amendments and projects.

6. **Additional action items.** CBFWC recommended that draft resident fish measures 804(e)(13)-(16) be included in the action plan.

**Council response:** Draft resident fish measures 804(e)(14)-(16) in DAD (referring to amendment applications CB/804-2, OF/804-3, US/804(e)-1 and WB/804(e)-1 respectively) have been rejected by the Council. Detailed explanations for these rejections can be found in the rejection language of Section 800.

Resident fish measure 804(e)(13) was approved under a modified approach by the Council, but has not been added to the action plan. The Council determined that it would be impossible to add all measures in the Fish and Wildlife Program to the action plan. Therefore, only high priority measures have been added to the action plan at this time.

7. **Bill Bakke, representing Oregon Trout, commented that draft Section 804(e)(15) should be added to the action plan.**

**Council response:** See Council response to item 6 above.

8. **FERC actions.** MDFWP commented that resident fish measures 804(a)(4), 804(a)(5), and 804(b)(8) should be included in the action plan. These measures all deal with FERC actions.

**Council response:** The Council realizes the importance of these measures, particularly 804(b)(8) which concerns studies at Milltown Dam. These studies will follow the planning activities being developed by Montana Power Company within the next year. The Council will add these measures to the action plan under a FERC action heading.

#### K. Section 42 — Coordination.

**Montana work plan.** CBFWC commented that action item 42.1 concerning continued consultation activities needs to be strengthened. It states that consultations with Bonneville have been inadequate and that Bonneville has been slow in implementing the program in FY 1984.

**Council response:** The Council has stated in action item 42.1 that the federal project operators and regulators will continue to coordinate and consult pursuant to Section 1304 of the program. The Council believes this language is quite specific and hopes as the program moves further along in implementation that coordination efforts will continue to improve.