NORTHWEST POWER PLANNING COUNCIL

851 S.W. SIXTH AVENUE, SUITE 1100
PORTLAND, OREGON 97204-1348

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Phone: 503-222-5161 1-800-452-5161
Internet: www.nwppc.org

April 11, 2000

To Interested Parties:

On January 12, 2000, the Council released a Notice of Request for Recommendations to amend the Council's *Columbia River Basin Fish and Wildlife Program*. That notice began a comprehensive revision of the Fish and Wildlife Program, to be accomplished in two phases. The recommendations called for in the January 12 notice concern the first phase — restructuring the program around an explicit framework to include a statement of the vision or long-term goal, biological objectives, a scientific foundation, strategies, standards and procedures. The notice stated that these recommendations were due by April 18, 2000. In the second phase, the Council intends to call for recommendations for more specific objectives and action measures, to be adopted into the program as integrated subbasin plans that are consistent with the program framework elements developed in the first phase.

The purpose of this letter is to address questions and concerns we have received about the program amendment process. Specifically, the letter:

- clarifies further the current request for the recommendations that will be the basis for the restructured program framework;
- extends the deadline for submitting these recommendations to May 12, 2000;
- explains how the recommendations for deciding on a package of high priority fish and wildlife actions are within the scope of the current request for recommendations;
- describes how the Council will call for recommendations to initiate the second, subbasin plan phase of the program amendment process; and
- describes in more detail the relationship between the program amendment process and the reorganized project review process (known as the "rolling" or "provincial" review).

Clarifying the request for program framework recommendations and extending the deadline

In the first phase of the program amendment process, the Council intends to restructure the fish and wildlife program around a comprehensive framework that includes a vision (long-term goal), biological objectives, strategies, implementation standards and an explicit scientific foundation. The program would be organized in different geographic levels: the basin as a whole, ecological provinces within the basin, and subbasins within the provinces. In this phase, the Council is focusing on the basin and province levels to provide the context for development of subbasin plans in the second phase. Thus, in this phase, the Council is calling for 1) recommendations for a vision, biological objectives, strategies and implementation standards at the basin and province levels; 2) general scientific and policy standards or principles that will be applied to the measures within the program; 3) the criteria and procedures for subbasin planning and project selection; and 4)

improvements in program management, evaluation and coordination. An outline attached to the request for recommendations displays the possible organization and elements of a restructured program.

One of the elements the Council intends to adopt in this phase is the definition or template for what constitutes a "subbasin plan." In the second phase, subbasin plans will be adopted into the program based on recommendations that are consistent with the program framework. Thus, in developing the recommendations for the first phase, one focus should be on the elements of a subbasin plan and how to make subbasin plans fit with the rest of the program framework.

A form has been developed to assist in formulating these recommendations. The form is based on the proposed outline of the restructured program. People submitting recommendations are *not* required to use the form, but may do so if it is useful. The form is available at the Council's website, www.nwppc.org, under Fish and Wildlife Issues. Alternatively, you may call the Council at 800-452-5161, and request Document 2000-7. To assist in making recommendations, we are attaching to this letter an example of a province-level vision and objectives. This is a supplement to the "Strawman" example of an amended program that the Council released in February after the January 12, 2000, request for recommendations.

For the first phase of the amendment process, the Council is seeking recommendations for a vision, biological objectives, strategies and implementation standards for the Columbia River Basin and the 11 ecological provinces. You may include recommendations for actions in specific subbasins, too, and the Council will use them to inform its basin and province-level deliberations. But subbasin-level action measures will not be amended into the program until the second phase.

By this letter, the date for submitting recommendations for these program framework elements is extended to May 12, 2000. The Council intends to complete the first phase by August 30, 2000.

Recommendations relating to high-priority actions

While the Council will not complete the second phase of the program revision and adopt subbasin plans into the program until at least the latter half of 2001, there is a gathering regional interest in identifying, funding and implementing a package of high priority habitat and other fish and wildlife actions on a faster time scale. It is important that any high-priority actions are decided in a manner that ensures accountability and is consistent with the program. This means they should be decided after the first phase of the amendment process, so they are consistent with the new vision, biological objectives, strategies and implementation standards.

Thus, within the scope of the current request for recommendations people may submit recommendations for the criteria and procedures for deciding on a package of scientifically sound, high priority fish and wildlife projects to be implemented on an expedited basis following completion of the first phase of the amendment process. The Council also will accept recommendations for the proposed high-priority measures or actions themselves. These recommendations should also be submitted by the May 12, 2000 deadline. If warranted by the recommendations and comments, the Council may adopt the "high-priority action" element as part of the program targeted for decision on August 30, 2000. The Council will consider placing this part of the program amendment process on a faster time-track if appropriate, as long as final implementation decisions follow completion of the first phase of the program amendment process.

If the Council adopts a "high priority action" element into the program — criteria, procedures and possible actions — as part of this first phase of the amendment process, the next step is to define, review and recommend for funding the projects that implement the high priority element of the program. Power Act requirements for scientific and public review of projects proposed for funding would apply, but the Council expects that these review and implementation decisions would occur on an expedited basis, by no later than the fall of 2000.

Notice about the second phase of the program amendment process -- subbasin plans

One of the main concerns of tribal representatives, federal representatives and others relates to the Council's second phase of the amendment process. This is the phase that will call for and consider recommendations for specific objectives and action measures to be adopted into the program in the form of integrated subbasin plans that are consistent with the program revisions in the first phase.

With this letter, the Council is giving notice that it intends the second phase of the program amendment process to begin late this fall. In the next month or two, the Council will issue a request for recommendations under Section 4(h)(2) of the Power Act for this second phase of the program amendment process. This notice will request agencies, tribes and others to submit recommendations for objectives and measures at the subbasin level sometime not long after the Council adopts the program framework targeted for late August 2000. The Council will use the program amendment process itself over the following year as the vehicle to work out the subbasin plans, using the recommendations as a starting point and basis for further comment and discussions. The Council expects to work with interested parties over the next few weeks to further define how the subbasin plans will be developed and adopted into the program

Public involvement by local agencies, watershed councils, landowners and others will be critical to the success of the subbasin-planning phase of the program revision. Equally critical will be the development of subbasin assessments to guide development of the subbasin plans, and this work should begin immediately.

Note that this schedule for the subbasin plan phase of the program amendments would lead to Council adoption of the subbasin elements into the program sometime by the fall of 2001. If this schedule turns out to be too aggressive for some of the subbasins, the Council will work with the affected entities to develop a more appropriate schedule for completing the process of adopting those subbasin plans into the program.

To be successful, the Council and others must make the collective effort over the next *month* to begin subbasin assessments. A subbasin assessment is a technical task designed to identify the current and potential biological and physical status of a basin. It provides the technical information on which to base subbasin plans. To develop these assessments within the identified timeframe will require a streamlined effort provided with sufficient resources and commitments for the work. The Council will work with others over the next month to define what additional resources are necessary to complete the assessment work on this schedule, and also when and how to initiate and conduct the subbasin-plan phase of the program amendment.

Relationship to the project selection process (the "rolling" or "provincial" review process)

There has been some confusion about the relationship between the subbasin planning process and what will or should take place as part of the "rolling review" or "provincial review" project selection process. The subbasin assessment and planning effort described in this letter is part of the program amendment process under Sections 4(h)(2) to (8) of the Power Act. The goal is to recommend and adopt subbasin plans into the program. This is distinct and separate from project review and implementation.

The purpose of the project review process under Section 4(h)(10) of the Act is to review projects proposed for funding for their consistency with the Council's existing fish and wildlife program, scientific soundness and priority within existing budget constraints. The "rolling" or "provincial" review is the method by which the Council will, for the foreseeable future, undertake its annual obligation to review projects proposed for implementation. It does not involve developing subbasin assessments or plans. Subbasin considerations are not absent from the project review process, however, primarily because the Independent Scientific Review Panel has made clear that the scientific quality of a specific project is difficult to determine without a clear explanation of how the project fits into a subbasin context and addresses specific biological needs. Thus, part of the project review process for Fiscal Year 2001 for specific areas will include an effort to produce "subbasin summaries" as the context for proposed projects. These subbasin summaries are *not* the subbasin assessments or plans for the program amendment process described above, but instead are an interim arrangement pending development of the new program at the basin, province and subbasin levels. As the Council and its partners complete subbasin assessments and plans, these documents will be used in the ongoing project review as they become available.

We hope this letter clarifies the Council's fish and wildlife program amendment process. Please let the Council members or staff know of any additional concerns or questions.

Sincerely,

Frank L. Cassidy, Jr., Chair

enclosure

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Example - Ecological Province Level

Columbia Plateau Province

a. Description.

The Columbia Plateau Province encompasses the area upstream of The Dalles Dam to Priest Rapids Dam on the Columbia River and the upper end of Lower Granite Reservoir on the Snake River. It is roughly centered on the confluence of the Snake and Columbia Rivers. The Plateau is defined by the extent of the Columbia River Basalt formation. This has produced an area of generally even topography and thin soils. The Plateau lies in the rainshadow of the Cascade Mountains and the climate is arid with harsh winters and warm, dry summers.

Predominant natural vegetation is shrub-steppe. Forests appear in the upper elevations and cottonwood communities dominate natural riparian areas. The province contained a number of terrestrial species uniquely associated with the shrub-steppe habitat types. These include sharp-tailed grouse, long-billed curlew, burrowing owl, ferruginous hawk, pygmy rabbit, and Washington ground squirrel as well as significant populations of large carnivores and ungulates in the upper elevation areas. The Plateau includes several major watersheds that originate in the surrounding mountains. These include the Deschutes, John Day, Umatilla and Yakima subbasins. Because of even topography, the Columbia River showed an unusual degree of alluviation on the Plateau and was an important area for spawning of summer/fall chinook salmon. The area contains the Hanford Reach and the Arid Lands Ecological Area that are the only remaining intact mainstem areas in the Columbia River above Bonneville Dam. The mainstem and tributaries of the Plateau are some of the most highly productive native-type habitats in the Columbia Basin.

Human land use on the Plateau is largely agricultural. Extensive areas of irrigated land are present, particularly in the tributary bottomlands. Moderate-sized urban areas are present in the Pendleton, Oregon and the Tri-cities area of Washington. Hydroelectric dams on the Plateau include John Day, McNary, Ice Harbor, Lower Monumental, Little Goose and Lower Granite.

b. Vision.

The Plateau would continue to be an economic and biological center of the Columbia River Basin. The mainstem Columbia and Snake rivers within the Plateau and the lower portions of its major tributaries would form an integrated habitat for ocean-type, upriver bright chinook. This would build out from the currently strong population in the Hanford Reach. It calls for the integration of existing and new artificial production with existing and restored natural habitat in the mainstem and lower tributary areas. This would supply productive tribal commercial fisheries. Hatcheries would be used to mitigate for the permanent loss of mainstem habitat for ocean-type

chinook caused by the continued operation of mainstem dams. These would connect with restored ocean-type chinook populations in the lower reaches of the tributaries of the Plateau. Functionally intact aquatic and terrestrial habitat in the upper and middle portions of the tributaries would be protected, while potentially functional habitats would be rehabilitated through improved land use practices. These integrated fish and wildlife habitats would support native-type aquatic and terrestrial communities characterized by productive populations of stream-type chinook, steelhead and resident fish and key wildlife species. Hydroelectric dams would generally be retained and contribute to regional energy and transportation needs. Agriculture would continue to be an important component of local economies although within the context of changed land use practices. Water conservation and better water management would be emphasized to improve aquatic and riparian habitats and overall water quality.

c. Priorities for the Columbia Plateau.

1. Environmental Qualities**:** The quality of the environment contributes to the social and economic well being of the region and directly affects fulfillment of goals for fish and wildlife. This alternative should increase the overall productivity and resilience of the Columbia River Plateau primarily in regard to native fish, wildlife and plant communities.

   The Columbia River Plateau retains productive spring chinook, steelhead and fall chinook populations. The plateau has fewer populations listed under the ESA than other provinces. It contains some of the few remaining examples of intact shrub-steppe and island habitats. Preservation of populations listed under the ESA will be integrated with efforts to protect existing productive populations and habitats such as the John Day Basin and the Hanford Reach to prevent future listings under the ESA. Actions will also ensure that listed species from adjacent upstream provinces can successfully migrate through the Plateau.

   a) Within the Columbia River Plateau, take action to stop the imminent loss of fish, wildlife and plant species, especially those listed under the federal Endangered Species Act.
   b) As a second priority, protect currently productive fish and wildlife habitats and populations, particularly those threatened with loss or degradation.
   c) Emphasize restoration and enhancement of conditions on the Columbia River Plateau that are compatible with native-type biological communities.
   d) Discourage proliferation of non-native species except in special circumstances.

2. Fish Harvest**:** The harvest of fish provides important cultural, spiritual and commercial benefits to the region. The Columbia River Plateau includes many tribal usual and accustom fishing sites on the mainstem and tributaries. The program should provide an ecosystem that can provide productive regional and local fisheries.
   a) Enhance tribal commercial fisheries by expansion and restoration of ocean-type chinook. Enhanced stream-type chinook and lamprey should contribute to tribal ceremonial and subsistence fisheries.
   b) Tribal fisheries should continue at existing usual and accustomed sites between Bonneville and McNary dams.
   c) Encourage development of new harvest methods such as fish wheels and traps that can focus on specific fish populations and take advantage of restored mainstem riverine conditions.
   d) Emphasize sport harvest over non-Indian commercial harvest.

3. Mitigation: The Columbia River ecosystem has been significantly changed as a result of human activities. While this alternative seeks to relax human constraints on the system and reverse the direction of biological change, many human constraints will remain and permanent change to the

system will continue. Anadromous fish provided important social benefits as they migrated through areas now above and below the blockage. They also provided key ecological functions for biological communities above the blockages. This alternative should provide mitigation for production capacity for certain species as well as ecological function lost as a result of human activities.

a) For areas below artificial barriers to anadromous fish passage, mitigate for the loss of capacity for specific fish species using species and races that closely match those lost.

b) For areas above artificial barriers to anadromous fish passage, restore and enhance conditions to provide viable native-type fish and wildlife communities and ecosystems.

i. Discourage proliferation of non-native species, recognizing that in many cases, non-native species have been introduced and will be part of biological system.

ii. Provide mitigation in the form of actions to develop and enhance viable and productive native-type habitats, ecological functions and biological communities.

c) Acquire and develop terrestrial habitats to mitigate for wildlife lost to hydropower development.

d) Prioritize acquisition and protection of shrub-steppe, island and native floodplain habitat on the Columbia River Plateau to mitigate for terrestrial habitats permanently lost to development and operation of the mainstem dams

d. Biological Objectives for the Columbia Plateau

1. Increase energy and nutrient connections within the ecological system to increase productivity and expand normative[1] biological communities.

a) Increase the biological connectivity between the mainstem and tributaries on the Columbia River Plateau by fostering development of an integrated ocean-type chinook population in the mainstem and lower tributaries.

Performance standard: Fall chinook redds in the tributary mainstem that represent fish genetically related to the Hanford fall chinook population.

b) Increase the delivery of marine nutrients to the Columbia River Plateau by increasing the abundance of ocean-type chinook as well as other anadromous species.

Performance standard: 100,000 fall chinook spawners in the Columbia/Snake mainstem, hatcheries and lower mainstem areas of the Plateau (40,000 Hanford; 35,000 John Day; 15,000 lower Snake; 10,000 lower tributaries).

c) Increase the abundance of adfluvial and migratory resident fish to distribute energy and nutrients within freshwater areas, especially above anadromous blockages.

Performance standard: ___abundance of bull trout, kokanee

d) Increase connections within freshwater areas to facilitate wide distribution of energy and nutrients within the system.

Performance standard: Continuum of aquatic habitat with year-round temperature < 68 degrees, sediment < ___ and water quality within current EPA standards throughout range of salmonid communities.

e) Establish riparian conditions that allow energy and nutrient transfer between terrestrial and aquatic areas via predation, carcass scavenging or plant production and wildlife grazing.

Performance standard: Develop native type riparian areas over __ percent of tributaries to an extent of ___ feet (or ___ times streamwidth) in all perennial (fish bearing or other designation).

[1] **Definition of normative:** Normative conditions are defined by the species, communities and ecological functions necessary to support development and persistence of diverse and productive native-type biological communities. Non-native species will be present but will not define ecological endpoints except in very limited circumstances.

2. Increase genetic connections within the ecological system to facilitate normative evolutionary processes.
   a) Increase the abundance and range of existing populations and habitats.
   b) Expand and connect existing habitat pockets to facilitate development of normative population structures for aquatic communities.
   Performance standard: Demonstrate temperature, sediment and water quality continuum for native species communities within the Plateau.
   c) Connect wildlife preserves and habitats with suitable connecting habitats.
   Performance standard: Demonstrate degree of connectivity between riparian areas (objective 1d) and terrestrial habitat reserves.
3. Allow biological diversity to develop between populations to increase ecological resilience to environmental variability.
   a) Expand the complexity and range of normative habitats.
   Performance standard: See Objective 1d, 1e, 5a, 5b and 5d..
   b) Manage human activities to avoid artificial selection of life history traits.
4. Increase capacity and life-cycle survival of species within the normative biological community to increase resilience and allow expansion of biological diversity.
5. Encourage development of ecological connectivity between major habitat types including aquatic areas, riparian zones, floodplains and uplands.
   a) Manage riparian areas to protect the aquatic system and form a transition to floodplain terrestrial areas.
   Performance standard: See Objective 1e.
   b) Establish habitat connections between protected terrestrial and aquatic areas.
   Performance standard: See Objective 2c.
   c) Acquire and protect shrub-steppe, island and floodplain areas on the Columbia River Plateau to strengthen aquatic-terrestrial ecological linkages.
   Performance standard: ___acreage of habitat protected.
   d) Establish riparian conditions that allow energy and nutrient transfer between terrestrial and aquatic areas via predation, carcass scavenging or plant production and grazing.
   Performance standard: See Objective 1e.
6. Increase connectivity within the ecological system to facilitate gene flow and recolonization of historical habitats.
   a) Promote development of population structure within ocean-type chinook of the Columbia River Plateau that includes maintenance of separate metapopulations in the Snake and Columbia rivers.
   Performance standard: Genetic distance between Columbia and Snake populations of ____.
   b) Reconnect isolated stream-type chinook and steelhead populations by reducing temperature and other habitat limitations.
   Performance standard: Objectives 1a, 2b.
7. Promote development of a diversity of local populations to increase ecological resilience to environmental variability.
   a) Increase capacity and life-cycle survival of species within the normative biological community to increase resilience and allow expansion of biological diversity.
   Performance standard: Average smolt to adult survival over 2.0.
   b) Expand the present range of anadromous fish on the Columbia River Plateau by re-establishing anadromous passage at artificial barriers.
   Performance standard: Demonstrated passage at existing barriers.

c) Manage the mainstem hydroelectric projects on the Columbia River Plateau to promote development of a natural range of biological diversity.
Performance standard: Dates of operation, use of multiple passage routes, normative engineering.

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FORM FOR RECOMMENDATIONS TO AMEND THE FISH AND WILDLIFE PROGRAM

April 11, 2000

This form is intended to assist persons interested in providing recommendations for amendments to the Northwest Power Planning Council's Fish and Wildlife Program by May 12. In a notice dated January 12, 2000, the Council requested recommendations for what will be the first phase of a planned comprehensive revision of the Fish and Wildlife Program. The recommendations called for are for the purpose of restructuring the program around an explicit framework and declaring the program's vision, biological objectives, strategies and implementation standards, and scientific foundation. For a further explanation of what the Council is requesting as recommendations in this phase, please see the January 12, 2000, Notice of Request for Recommendations and the Council's letter clarifying the request, dated April 10, 2000. See also the Council's staff draft "Strawman," dated February 16, 2000, which illustrates the framework concept, structure and elements. All of these documents are posted on the Council's website, www.nwppc.org, and are available from the Council by calling 503-222-5161 or 800-452-5161.

You do *not* have to use this form to provide your recommendations. You may submit recommendations in any form that you choose, as long as you provide the basic information indicated on the form: name of recommending person or entity; name of contact person and contact information; recommended language for the Fish and Wildlife Program; and a statement of what information and data support the recommended language. The purpose of the form is to assist you in organizing your recommendations along the lines of the framework structure suggested in the request for recommendations and illustrated in the staff "Strawman."

The form is based on the proposed outline for the revised Fish and Wildlife Program attached to January 12 request for recommendations and on the revised outline around which the "Strawman" was organized. This does not mean that program when actually revised will have exactly this structure, organization and elements. What the Council is interested is in this phase are recommendations that (a) either agree that this is the appropriate organization and elements for the program framework *or* recommend a different organization, and (b) more important, recommend what should be the substantive content for these framework elements. You need not supply a recommendation for every element, only for those that are of interest to you.

Those interested in submitting recommendations for this first phase of the program amendment process should *not* consider themselves limited or constrained in the way they give us

recommendations, even if that means including measures or actions in the recommendations. The Council will use recommendations that go beyond the vision, biological objectives, strategies and implementation standards to help derive the basin- and province-level structure, vision, objectives and so on. The Council will hold the recommendations for specific subbasin objectives or actions for the second phase of the program amendment process, when the Council calls for recommendations and adopts into the program the subbasin plans.

On the other hand, do not submit proposed measures in this phase of the amendment process simply out of a concern for being left behind. The Council still intends in this first phase to adopt only the basic program framework elements at the basin and province levels. There will be ample opportunity in the future to submit recommendations for measures.

Recommendations for amendments must be submitted by 5:00 p.m. Pacific time on May 12, 2000, to Mark Walker, Director of Public Affairs, Northwest Power Planning Council, 851 SW Sixth Avenue, Suite 1100, Portland, Oregon 97204. Please submit recommendations for amendments as follows: Please submit one hard copy. In addition, please also submit an electronic copy in either Microsoft Word version 97 (or earlier) or Rich Text Format (RTF) on an IBM PC formatted floppy diskette or via e-mail to recommendations@nwppc.org.

FORM FOR RECOMMENDATIONS
TO AMEND THE FISH AND WILDLIFE PROGRAM

[date]

I. INFORMATION ABOUT RECOMMENDING PERSON OR ENTITY

Name of recommending person or entity: _____

Contact person

Name:_____

Title:_____

Organization:_____

Address:_____

Phone number:_____

Fax number:_____

e-mail address:_____

II. RECOMMENDED LANGUAGE FOR FISH AND WILDLIFE PROGRAM

Introduction -- Description of framework concept, structure and elements/outline of program organized as a framework

As described in the Council's request for recommendations and staff draft "Strawman":

The Council desires to amend the Fish and Wildlife Program organized around a scientific and policy framework of goals and objectives. The revised program will state explicitly what the program is trying to accomplish with the program, link this vision to a specific set of objective, and describe the strategies to be employed, all on an explicit scientific basis. The program will both guide decisions on what actions to take and provide a reference point for evaluating the success of the program.

*The fundamental elements of the framework are: the **vision**, which describes what the program is trying to accomplish with regard to fish and wildlife and other desired benefits from the river; **biological objectives**, which describe the types of ecological conditions needed to achieve the vision; and **strategies and implementation standards**, which guide or describe broadly the kinds of actions that will maintain or move the system from its existing conditions to the needed conditions. The vision implies biological objectives, which set the strategies. In turn, the strategies address biological objectives and fulfill the vision.*

*An explicit statement of a **scientific foundation** links the components of the framework explaining why the Council believes certain kinds of management actions will result in particular physical habitat or ecosystem conditions of the basin, or why the ecosystem conditions will affect fish and wildlife populations or communities*

*The Council intends to develop and implement the program at three geographic levels -- the **basin** as a whole; smaller geographic divisions of the basin called **ecological provinces**; and **subbasins** that are components of each province. Framework elements, especially biological objectives and implementation standards, at the basin and province levels will guide a subbasin planning process to complete the program framework and provide the vehicle for implementation of actions intended to achieve the objectives and for evaluating the actions taken.*

If you differ with the framework concept, structure and elements of the program as described above, explain how you recommend organizing the revised Fish and Wildlife Program:

Part 1 -- Program at the Basin Level

A. Vision for the Columbia River Basin
   1. Overall vision
   2. Specific planning assumptions

B. Biological Objectives
   1. Environmental characteristics
   2. Biological performance

C. Strategies
   1. Implementation standards
      (a) Standards for artificial production
      (b) Standards for mainstem passage
      (c) Standards for water and hydrosystem management (including flow augmentation, spill, dissolved gas management, reservoir elevations, and optimizing power and non-power objectives)
      (d) Standards to guide the consideration of ocean and estuary conditions
      (e) Standards concerning the relationship of this program to harvest management
      (f) Standards relating to implementation of resident fish substitution projects
      (g) Standards relating to implementation of wildlife projects
      (h) Standards relating to future hydroelectric development/Protected Areas
      (i) Standards for research, monitoring and evaluation
      (j) Standards for data management and analysis

A. Vision for the Columbia River Basin

As described in the Council's request for recommendations and staff draft "Strawman":

The vision should describe a future state for the Columbia River Basin. We use the word vision rather than goals to stress the need for long-term considerations. The vision might be expressed in terms of fish and wildlife, environmental amenities, social-economic contributions, and/or natural resource management or development goals. It can include quantifiable goals for fish and wildlife or specifically described ecosystem characteristics, as well as less easily measured qualitative and aesthetic goals. The vision indicates the choice of biological objectives and, in turn, the selection of strategies. The vision in a statement of intent that drives the rest of the program.

Recommend a long-term vision for the Columbia River Basin, describing your desired future state for the entire basin, at least in terms of fish and wildlife:

Specific planning assumptions

The staff draft "Strawman" includes policy statements planning assumptions for the revised program, consistent with the proposed vision, biological objectives, the scientific foundation and other information.

Recommend any planning assumptions relevant to the revision of the Fish and Wildlife Program.

B. Biological objectives for the Columbia River Basin

As described in the Council's request for recommendations and staff draft "Strawman":

The biological objectives are the characteristics that we need to reach the vision based on the information we have. They are intended to be measurable, and will be reached through the strategies. Objectives at the basin level are necessarily relatively general. (The province and subbasin levels will contain objectives that are consistent with the basin level objectives but much more specific to the unique circumstances of the particular province or subbasin.) Biological objectives have two components: (1) environmental characteristics (e.g. measures of flow, water quality, sediment, vegetation, land use, ecological functions. etc.) that describe physical and biological habitat characteristics and their functions in the ecosystem; and (2) biological performance objectives (e.g. measures of species capacity, productivity, populations structure, life-history diversity, etc.) that describe the expected response of specific species to the ecological condition.

Recommend biological objectives at the basin level:

C. Strategies and implementation standards for the Columbia River Basin

As described in the Council's request for recommendations and staff draft "Strawman":

Strategies are broad classes of actions to accomplish biological objectives and thereby fulfill the vision. Most of the strategies will be described at the subbasin level. However, it is important that the strategies at the provincial and subbasin levels be consistent with basin-wide implementation standards, guiding actions toward the biological objectives and vision and the scientific foundation. Thus, at the basin level there are overarching standards for implementation, as well as strategies or standards that transcend one or more of the provinces, such as data management, research, monitoring and evaluation.

Categories of implementation standards suggested in the request for recommendations and the staff draft Strawman include:

Standards for artificial production (from Artificial Production Review)
Standards for implementation of tributary habitat projects
Standards for mainstem passage (from Council's report on Corps of Engineers' juvenile and adult fish migration capital program)
Standards for water and hydrosystem management (including flow augmentation, spill, dissolved gas management, reservoir elevations, and optimizing power and non-power objectives)
Standards to guide the consideration of ocean and estuary conditions
Standards concerning the relationship of this program to harvest management
Standards relating to implementation of resident fish substitution projects
Standards relating to implementation of wildlife projects
Standards relating to future hydroelectric development/Protected Areas (directly from Section 12 of current program)
Standards for research, monitoring and evaluation
Standards for data management and analysis

Recommend strategies for the basin as a whole:

Recommend implementation standards, for the suggested categories or other categories:

Standards for artificial production (from Artificial Production Review):

Standards for implementation of tributary habitat projects:

Standards for mainstem passage (from Council's report on Corps of Engineers' juvenile and adult fish migration capital program):

Standards for water and hydrosystem management (including flow augmentation, spill, dissolved gas management, reservoir elevations, and optimizing power and non-power objectives):

Standards to guide the consideration of ocean and estuary conditions:

Standards concerning the relationship of this program to harvest management:

Standards relating to implementation of resident fish substitution projects

Standards relating to implementation of wildlife projects

Standards relating to future hydroelectric development/Protected Areas (directly from Section 12 of current program):

Standards for research, monitoring and evaluation:

Standards for data management and analysis:

Other standards:

Part 2 -- Ecological Province Level

A. Ecological structure: provinces and subbasin
B. Province-level visions
C. Province-level biological objectives
D. Province-level strategies

A. Ecological structure: provinces and subbasin

As described in the Council's request for recommendations and staff draft "Strawman":

The Columbia River may be an integrated biophysical system, but the basin is too large and complex for us to understand or manage as a single entity. At the same time, managing each piece as an independent entity risks losing appreciation for the interaction between components and their collective performance as a system. For this reason, the Council is adopting an ecologically based structure for the Columbia River ecosystem that emphasizes the interrelationships of the many parts.

Within the Columbia River ecosystem, the scientific foundation defined areas with distinct ecological character termed ecological provinces. Ecological provinces are distinct subdivisions of the landscape containing ecologically related subbasins. Each province consists of a set of geographically related watersheds that are connected to larger hydrologic units. The provinces are distinguished primarily on patterns related to climate and regional geology. Our classification of provinces is similar to, but not identical to, ecological areas defined by others, usually based on vegetational patterns.

The Council accepts as a hypothesis that these physical patterns relate to biological population patterns as well. Populations within a province are more likely to be related to other populations within that province than to populations in other provinces. Life history and other characteristics should group into patterns that reflect physical habitat structure. Populations within a province may be organized into any of several possible metapopulation structures. Populations within a province likely exchange genetic information to a greater degree than they do with populations outside the province. To the extent that these considerations are valid, provinces are thus appropriate units around which to organize recovery objectives and efforts.

For our purposes, a subbasin can only be in one province; boundaries do not cut across subbasins (an exception was made for the Spokane River, split between two provinces at Lake Coeur d'Alene). Based on patterns of terrestrial vegetation, the headwaters of a subbasin are often distinct from the lower reaches and have been put into separate areas in other schemes. However, for purposes of planning it makes little sense to split subbasins. Instead, we treat each subbasin as an integral component of a set of related subbasins forming a province. Hydroelectric dams, including the major dams on the Columbia and Snake Rivers, are also considered to be within provinces.

The 11 provinces defined by the Council are the Columbia River Estuary, Lower Columbia, Columbia Gorge, Columbia Plateau, Columbia Cascade, Inter Mountain, Mountain Columbia, Blue Mountain, Mountain Snake, Middle Snake, Upper Snake. (Figure 1 and Table 1 of the staff draft Strawman display the provinces and subbasins of the Columbia River Basin.)

If you differ with the way the Council has described the ecological structure and identified the ecological provinces, explain how you recommend organizing the geographical structure of the revised Fish and Wildlife Program:

A. "Vision" for the _____ Province

The vision for any single province should be consistent with the Basin-level vision, but may provide a more specific statement of the future desired condition for that specific portion of the Columbia Basin.

Recommend a long-term vision for one or more ecological provinces:

B. Biological objectives for the _____ Province

Biological objectives at the ecological province level address attributes of the ecosystem at a smaller scale and take into account the climatic, geologic, biotic attributes of the particular province. Just as at the basin level, these objectives may describe environmental characteristics (e.g. measures of flow, water quality, vegetation, land use, etc.) and/or biological performance (e.g. measures of species capacity, productivity, life-history diversity, etc.). The biological objectives you propose should describe the conditions needed to achieve the vision you proposed for this province.

Recommend biological objectives for one or more ecological provinces:

C. "Strategies" for the _____ Province

Strategies are broad classes of actions designed to change or maintain environmental attributes. Strategies that you propose would guide or describe actions that lead to the ecological conditions described in the biological objectives you proposed for this province.

Part 3 -- Subbasin Plans

A. Elements of a subbasin plan
B. Participation criteria for subbasin planning
C. Review of subbasin plans

A. Elements of a subbasin plan/B. Participation criteria for subbasin planning

The Council is not planning to adopt the subbasin level elements as part of this first phase of the amendment process. In the second phase of the program amendment process, the Council will call for recommendations for the subbasin plan elements -- vision, objectives and actions -- and conclude the process by adopting subbasin plans into the program. Critical to the first phase will be adopting into the program a description of what the elements of a subbasin plan will need to be for adoption into the program, including technical requirements and participation criteria.

Recommend the criteria or elements that a subbasin plan must have to be adopted into the program, including technical requirements and participation criteria:

Part 4 -- Fish and Wildlife Project Review Process

As described in the Council's request for recommendations and staff draft "Strawman":

This section of the revised Fish and Wildlife Program will describe the procedures, criteria and priorities to govern the process for reviewing projects to implement the program and recommending those projects for funding, consistent with Section 4(h)(10) of the Power Act. (This section of the Act calls for scientific review by the Independent Scientific Review Panel and a public review by the Council followed by Council funding recommendations.) The project review process should include not just the Bonneville direct program projects, but also the reimbursables, including the Corps' fish mitigation capital program and the reimbursable hatchery expenses incurred by the federal agencies. This part should also describe the relationship between the program and the size and allocation of the Bonneville fish and wildlife budget, as well as what we expect of Bonneville and others concerning implementation, budget and contract management.

Recommend procedures, criteria and priorities for the fish and wildlife project review process:

Part 5 -- High-Priority Actions

As described in the Council's April 10 letter clarifying the request for recommendations:

Within the scope of the current request for recommendations people may submit recommendations for the criteria and procedures for deciding on a package of scientifically sound, high-priority fish and wildlife actions to be implemented on an expedited basis. The Council will also accept recommendations for the proposed high priority measures or actions themselves. If warranted by the recommendations and comments, the Council would adopt the "high priority action" element as part of the program framework targeted for decision on August 30, 2000.

If the Council adopts a "high priority action" element into the program -- criteria, procedures and possible actions -- as part of this first phase of the amendment process, the next step will be to define, review and recommend for funding the projects that implement the high priority element of the program. Power Act requirements for scientific and public review of projects proposed for funding would apply, but the Council expects that these review and implementation decisions would occur on an expedited basis, by no later than the fall of 2000.

Recommend criteria and procedures (and if you desire, possible actions) for deciding on a package of high-priority fish and wildlife actions.

Part 6 -- Scientific Foundation

Basic scientific principles

As described in the Council's request for recommendations and staff draft "Strawman":

The scientific foundation for the Fish and Wildlife Program will provide an explicit scientific basis for developing and understanding the role of biological objectives, and for linking visions, objectives and strategies at the basin, province and subbasin levels. One part of the scientific foundation is a set of basic scientific principles that constitute the most basic technical elements of the Council's Fish and Wildlife Program. Identified by staff and reviewed by the Independent Scientific Advisory Board and others as part of the Multi-Species Framework project and described in detail in other Council documents, the eight foundation principles are:

Principle 1: Biological abundance, productivity and diversity reflect ecosystem structure and conditions.
Principle 2. Ecosystems are dynamic, evolutionary and resilient.
Principle 3. Ecosystems are structured hierarchically.
Principle 4. Ecological structure and performance are defined with respect to specific biological communities and questions.
Principle 5. Biological diversity accommodates environmental variation.
Principle 6. Ecosystem conditions develop primarily through natural processes.
Principle 7. Ecological management is adaptive and experimental.
Principle 8. Human actions modify ecosystem function and biological performance.

The Council believes these eight principles represent fundamental points of consensus mined from the large body of scientific work related to fish, wildlife, and ecological restoration that has been produced over the last several years in the Columbia basin (e.g., Return to the River; Upstream; Wy-Kan-Ush-Mi Wa-Kish-Wit). While these principles are themselves general in scope, the relationships in the rest of the program are based in these principles. The program as amended will include a technical section that describes the scientific principles in detail, as well as the more specific scientific relationships that flow from these principles, that explain, for example, how particular actions are expected to yield the biological objectives. An explicit statement of the scientific basis for the relationships in the framework will provide a more precise and disciplined approach to planning and implementation, and it should provide the long-needed framework for evaluating the biological results of actions taken to implement the Fish and Wildlife Program.

The scientific foundation is not based in policy concerns, nor does it dictate the course of fish and wildlife mitigation and recovery in the Columbia River Basin. Policy makers set policies and goals, determine the nature of mitigation and recovery programs and how to finance them. The foundation informs these judgments by depicting the scientific principles and ecological setting for mitigation and recovery efforts.

To the extent you believe the scientific principles described above do not adequately represent the best available scientific knowledge for basic understanding of the functions of ecosystems and the relationship between ecosystem functions and human actions, recommend how you

would add to or revise the principles. Please reference the scientific literature supporting your recommendation:

Other recommendations regarding the scientific foundation:

III. INFORMATION AND DATA IN SUPPORT OF RECOMMENDATIONS

Section 4(h)(3) of the Power Act requires that all recommendations for the Fish and Wildlife Program be accompanied by detailed information and data in support of the recommendations. Either in this section, or integrated with your specific recommendations, please provide an explanation of the information and data that supports your recommendation.