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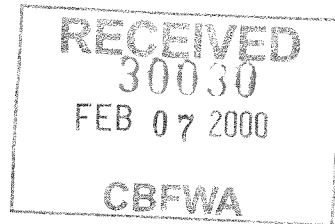
February 3, 2000

**MEMORANDUM**

**TO:** Independent Scientific Review Panel

**FROM:** Mark Fritsch  
Fish Production Coordinator

**SUBJECT:** Additional information regarding the "biological triggers" for the Nez Perce Tribal Hatchery



Please find attached additional information regarding the "biological triggers" for the Nez Perce Tribal Hatchery. As mentioned in the letter dated January 21, 2000, to the ISRP, the Council was anticipating this submittal to provide additional background information to assist in your review and advice on the "biological triggers" proposed by the Nez Perce Tribe.

If you have any questions, please do not hesitate to call.

- cc: (w/o attachments)
- Brian Allee, CBFWA
  - Bob Austin, BPA
  - Jay Hesse, NPT
  - Stacy Horton, NPPC (attachment)
  - Rayola Jacobsen, NPPC (attachment)
  - Dave Johnson, NPT
  - Ken Kirkman, BPA
  - Ed Larson, NPT
  - Bob Lohn, NPPC
  - John Ogan, NPPC
  - Bruce Suzumoto, NPPC
  - Brian Walsh, NPPC (attachment)
  - Karl Weist, NPT (attachment)

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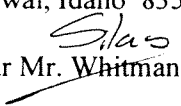
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February 4, 2000

Silas Whitman  
Program Manager  
Fisheries Resources Management  
Nez Perce Tribe  
P.O. Box 365  
Lapwai, Idaho 83540

  
Dear Mr. Whitman:

The purpose of this correspondence is to provide Council's understanding of the status of the proposed production that is associated with your project titled, "Consumptive Sturgeon Fishery - Hells Canyon and Oxbow Reservoirs" (#20135) in light of the Council's Fiscal Year 2000 funding recommendation.

In July 1997, Congress directed the Northwest Power Planning Council (Council) to conduct a review of all federally funded fish hatchery programs in the Columbia River Basin, with the assistance of the Independent Scientific Advisory Board (ISAB). The purpose of the review was to provide recommendations to Congress for a coordinated policy for future operation of hatcheries and recommendations for how to obtain such a policy. As the comprehensive Artificial Production Review (APR) for the Columbia River Basin was being developed, and in response to this direction, the Council approved recommendations for the Fiscal Year 1998 Annual Implementation Work Plan at the September 1997 Council meeting in Helena. In adopting the work plan, the Council called for production facilities to be reviewed at three significant stages in development – conceptual design, preliminary design, and final design. This interim process was developed to respond to the additional concerns of the Independent Scientific Review Panel (ISRP) regarding the sequencing of planning and implementation of artificial production projects and the lack of appropriate independent peer review while the APR was developed. The three-step review process was used to address these and other Council concerns. It is anticipated that the three-step review process will continue to be used as a decision making tool until the Artificial Production Review is completed and adopted as part of the Council's program.

The Council adopted the APR report (document 99-15) at its October 13, 1999, meeting. This report contains a set of policies intended to guide the use of artificial production in the future as well as recommendations for how to implement the policy reform. The Council will continue to utilize the mechanics of the interim three-step process for review of proposed new artificial production programs. However, we believe that the substantive elements of that review process have been improved by the recently adopted APR, and that the APR reflects the best available science on this topic. As such, it is important that new production initiatives such as that for the Consumptive Sturgeon Fishery take into account the contribution of the APR. The Council expects the APR to be an important contribution to the

upcoming program amendment process, and that it, or something functionally similar will be adopted as part of the program within the next year. In addition, the APR will be a yardstick used in year-to-year independent science reviews of projects.

The Council adopted the recommendation included as Section 10.4A.5 in the 1995 program amendments. The findings included in that program related specifically to that program provision include an explanation of modifications the Council made to the recommendation. These findings provide important contextual material for the interpretation of section 10.4A.5. Specifically, the Council called for an evaluation of production and release of sturgeon, rather than immediate implementation. The evaluation should address three points:

- 1) Is it possible to produce a successful sturgeon fishery, given what is known and not known about sturgeon production and the precise environment into which these fish will be [introduced]?
- 2) Can the production and release of these fish occur without significantly reducing the productivity of wild sturgeon populations? [Given ISRP concerns, this evaluation should also address productivity of other resident fish.]
- 3) Whether this project addresses losses caused by the development and operation of the hydropower system, and, if so, are other entities also responsible?"

On January 13, 1999, the Council sent a letter to the Nez Perce Tribe recommending Fiscal Year 1999 funding for the project, and stipulating that future funding be conditioned upon "the development and peer review of a production master plan consistent with the Fish and Wildlife Program," and that "the Council specifically approve the Master Plan for the sturgeon fishery if warranted."

The "production" component of this project is in a preliminary assessment and feasibility stage; therefore, it is currently at the master planning level or Step 1 in the Three-Step Process. The Council is advised that the sponsors have been coordinating and consulting with Oregon Department of Fish & Wildlife (ODFW) and Idaho Department of Fish & Game (IDFG) on a technical level and have also included Idaho Power in their consultations. The Council understands that the sponsors intend to submit the Master Plan and any NEPA documents in March or April 2000. Submission of these documents will initiate the Council review process. To date no step documents have been received.

Until completion and approval of a master plan and support documents as part of the Step 1 review process all activities associated with this project should be funded at a level for the master planning task. Additional funding will not be recommended unless and until the Council receives and approves Step 1 documents that clearly answers the questions as outlined in the Fish and Wildlife Program Findings (16-137 through 139). In addition, the issues raised by the ISRP in the Fiscal Year 2000 Response Review document (ISRP 99-4, October 29, 1999) and the Artificial Production Review Report (document 99-15) policies need to be addressed and made part of the Step 1 review. The Council believes that funding this project at the reduced level for planning activities, and its requirement that the ISRP's criticisms be addressed in the Step 1 review is consistent with, and addresses the ISRP's basis for its recommendation.

Adequate funds remain in the Fiscal Year 1999 contract to complete the master planning task. The Fiscal Year 1999 contract expires February 29, 2000, and a no-cost time extension may provide the necessary funding to complete the task. If necessary, Fiscal Year 2000 funding for three months of the project should provide the necessary funding to complete that task. Based upon the Fiscal Year 2000 budget, this funding level should be \$36,000 (using the figures for project personnel, benefits and overhead).

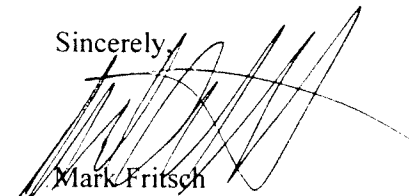
In anticipation of your submittal of the Step 1 (Master Plan) documents as part of the three-step review process, the following is being provided. The review will include technical questions relating to: (1) master planning requirements according to Section 7.4B of the Council's Fish and Wildlife Program (**Attachment 1**); (2) answers to questions identified in the Fiscal Year 1998 Annual Implementation Work Plan (**Attachment 2**); and (3) answers to questions involving the Fish and Wildlife Program language identified by the Independent Scientific Review Panel (**Attachment 3**). Also, please find attached questions relating to the development schedule and estimated cost expenditures and future needs of your proposed project (**Attachment 4**).

As discussed above, the Council recently adopted a final report to Congress recommending a set of policies to guide the future use of artificial production in the Basin. The Council and other participants in the APR are completing set of performance standards to implement these production policies. You will need to address the APR policies (**Attachment 5**). We are looking for a full explanation of how your project is consistent with these purposes and policies, and how your design, protocols, and strategies, including monitoring and evaluation plans, permit the application of the appropriate standards. These policies and standards are consistent with production policies that are already in the current version of the Program, and it is likely in the future these or similar standards will be used as a reflection of the current state of the science with regard to artificial production.

An important part of the Council's Step 1 review will be an independent scientific review of the answers to the technical questions listed above. Depending on the depth of the review it will take between 9 to 18 weeks from the time final documents are submitted until a Council decision is made. Please let me know when you think you will be submitting documents so a schedule can be determined.

I hope that this letter clarifies the status of your project with regard to the Council's FY 2000 decision funding and three-step review process. The Council looks forward to working with you and your staff to ensure this project is successful. If you have any questions, please do not hesitate to contact me.

Sincerely,



Mark Fritsch

Fish Production Coordinator

cc: Brian Allee, CBFWA  
Bob Austin, BPA  
Charlie Craig, BPA  
Nancy Hoefs, NPT  
Stacy Horton, NPPC  
Rayola Jacobsen, NPPC  
Bob Lohn, NPPC  
John Ogan, NPPC  
Rick Orme, NPT  
Dave Statler, NPT  
Brian Walsh, NPPC  
Karl Weist, NPPC

## **Attachment 1: Program Language Regarding Master Planning Requirements**

### 7.4B.1 Master Planning

Because of the need to address potential conflicts among increased production, mixed-stock harvest, gene conservation, consistency with other plans and other objectives, the Council calls for detailed master plans where there is not a National Environmental Policy Act document that provides enough information to evaluate new artificial production projects. Below, the Council provides a suggested list of master plan elements. This list is intended to offer guidance, not to impose requirements. Not all of these elements may be relevant in all projects, and some unlisted elements may be important. In general, however, the following elements should be considered in the course of master planning:

- project goals;
- measurable and time-limited objectives;
- factors limiting production of the target species;
- expected project benefits (e.g., gene conservation, preservation of biological diversity, fishery enhancement and/or new information);
- alternatives for resolving the resource problem;
- rationale for the proposed project;
- how the proposed production project will maintain or sustain increases in production;
- the historical and current status of anadromous and resident fish in the subbasin;
- the current (and planned) management of anadromous and resident fish in the subbasin;
- consistency of proposed project with Council policies, National Marine Fisheries Service recovery plans, other fishery management plans, watershed plans and activities;
- potential impact of other recovery activities on project outcome;
- production objectives, methods and strategies;
- brood stock selection and acquisition strategies;
- rationale for the number and life-history stage of the fish to be stocked, particularly as they relate to the carrying capacity of the target stream and potential impact on other species;
- production profiles and release strategies;

- production policies and procedures;
- production management structure and process;
- related harvest plans;
- constraints and uncertainties, including genetic and ecological risk assessments and cumulative impacts;
- monitoring and evaluation plans, including a genetics monitoring program;
- conceptual design of the proposed production and monitoring facilities, including an assessment of the availability and utility of existing facilities; and
- cost estimates for various components, such as fish culture, facility design and construction, monitoring and evaluation, and operation and maintenance.

**Attachment 2: Questions Identified in the September 1997 Council Policy Document for FY98 Project Funding**

- Has the project been the subject of appropriate independent scientific review in the past? If so, how has the project responded to the results of independent review?
- Have project sponsors demonstrated adequately at earlier stages that the project is consistent with the Council's policies on artificial/natural production in Section 7 (the specific concern of the Panel)? If not, can these points be demonstrated now?
- Is the final design of the project consistent with any master plan and preliminary design?
- If not, do the changes raise any underlying scientific questions for further review?
- Has information about the project or its purposes changed in such a way to raise new scientific concerns?
- Has the underlying science or the way it is understood changed so as to raise new scientific issues?
- How technically appropriate are the monitoring and evaluation elements of the project?
- Are there ways to obtain the same production benefits with facilities that are lower in cost or less permanent, should monitoring and evaluation later indicate that the effort be abandoned?

### **Attachment 3: Program Language Identified by the ISRP**

- Measure 7.0D: Comprehensive environmental analysis assessing the impacts on naturally produced salmon of hatchery produced anadromous fish.

Measure 7.0D of the Council's 1994 Fish and Wildlife Program calls for a comprehensive environmental analysis assessing the impacts on naturally produced salmon of hatchery produced anadromous fish. The primary question we would like to have addressed with regard to the project is, does the environmental assessment and adequately deal with the question of interactions of hatchery-produced salmonids and naturally spawning salmonids and steelhead in the Columbia River Basin? If so, how? If not, what are the potential or posited interactions and impacts?

- Measure 7.1A: Evaluation of carrying capacity and limiting factors that influence salmon survival.

Measure 7.1A of the Council's 1994 Fish and Wildlife Program calls for a basin-wide study on the ecology, carrying capacity, and limiting factors that influence salmon survival. The primary question we would like to have addressed with regard to this measure is how does the project intend to address the issue of carrying capacity within the watershed(s) into which fish will be placed? Do these fish originate from the most appropriate native stock? Specifically, how will the artificial production which is proposed, impact natural production? What are the impacts on mainstem and ocean harvest? How are these impacts addressed?

- Measure 7.1C: Collection of population status, life history and other data on wild and naturally spawning populations of salmon and steelhead.

Measure 7.1C calls for the collection of population status, life history and other data on wild and naturally spawning populations of salmon and steelhead. The primary question we would like to have addressed with regard to this measure, especially with regard to listed species is, what biological baseline information on naturally spawning populations of salmon and steelhead have been collected, and what high priority populations and "provisional population units" have been identified? Does this baseline information include a profile on the genetic and morphological characteristics of wild and naturally spawning populations? What characteristics are to be maintained by management actions? What are the limiting factors for wild and naturally spawning populations? What is the natural carrying capacity for the identified populations? What monitoring of identified populations of salmon and steelhead is identified as part of the project? Are these efforts being coordinated with NMFS? If so, how?

- Measure 7.1F: Systemwide and cumulative impacts of existing and proposed artificial production projects on the ecology, genetics and other important characteristics of the Columbia River Basin anadromous and resident fish.



Measure 7.1F calls for a study to address the system wide and cumulative impacts of existing and proposed artificial production activities on the ecology, genetics and other important characteristics of Columbia River Basin anadromous and resident fish. This study is to be coordinated with the genetic impact assessment of Columbia River Basin hatcheries called for in measure 7.2A.2 of the Council's program. How does the projects environmental assessment address the direct, indirect and cumulative effects of the proposed production activities on anadromous and resident fish? Have those effects commonly associated with cumulative hatchery releases -- density dependent, competition, predation, disease transmission and genetic effects on other fish in the mainstem and oceanic environments been addressed? If so how? Have the genetic effects of the project on fish within and outside the Columbia River Basin been specifically addressed?

**Attachment 4: Fiscal Questions Relating to the Step 3 Review**

1. What are the final cost estimates for Fiscal Year 1999 through 2008 for construction, operation and maintenance, and monitoring and evaluation for the project? (see below)
2. Are these cost estimates different from preliminary design estimates? If so, please explain.
3. Has a value engineering review been performed by BPA to ensure that cost-effective alternate measures are not overlooked? What are the results of the review?

**(name) Project**  
(Version – date)

**Schedule for Development**

<u>Facility</u>	<u>Step 1 Com- pleted</u>	<u>Step 2 Com- pleted</u>	<u>Step 3 Com- pleted</u>	<u>Final Design Completed</u>	<u>Construction Initiated</u>	<u>Construction Completed</u>	<u>Operation Begins</u>
Element 1							
Element 2							
Element ...							

**Estimated Cost Expenditures and Future Needs**

**Planning so far has cost (insert amount). Construction of the (name) is estimated to cost (insert amount). Annual operation and maintenance costs after all facilities are fully developed would cost about (insert amount). Monitoring and evaluation is estimated to cost about (insert amount) annually. These cost figures are based on estimates from (insert basis). Cost of (final or preliminary) design for the (name) is estimated to be about (insert amount).**

Costs to Date:

<b>FY</b>	<b>82</b>	<b>83</b>	<b>84</b>	<b>85</b>	<b>86</b>	<b>87</b>	<b>88</b>	<b>89</b>
<b>Planning</b>								
<b>Land Purchase</b>								
<b>Con- struction</b>								
<b>O&amp;M</b>								
<b>M&amp;E</b>								

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1 Costs are in millions of dollars.

<b>FY</b>	<b>90</b>	<b>91</b>	<b>92</b>	<b>93</b>	<b>94</b>	<b>95</b>	<b>96</b>	<b>97</b>	<b>98</b>	<b>99</b>
<b>Planning</b>										
<b>Land Purchase</b>										
<b>Construction</b>										
<b>O&amp;M</b>										
<b>M&amp;E</b>										

Future Costs<sup>2</sup>

<b>FY</b>	<b>00</b>	<b>01</b>	<b>02</b>	<b>03</b>	<b>04</b>	<b>05</b>	<b>06</b>	<b>07</b>	<b>08</b>	<b>09</b>
<b>Planning</b>										
<b>Land Purchase</b>										
<b>Construction</b>										
<b>O&amp;M</b>										
<b>M&amp;E</b>										

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<sup>2</sup> Costs are in millions of dollars.

**Attachment 5: Policies of the Artificial Production Review, Report and Recommendations**  
**(Document 99-15)**

1. The manner of use and the value of artificial production must be considered in the context of the environment in which it will be used.
2. Artificial production must be implemented within an experimental, adaptive management design that includes an aggressive program to evaluate benefits and address scientific uncertainties.
3. Hatcheries must be operated in a manner that recognizes that they exist within ecological systems whose behavior is constrained by larger-scale basin, regional and global factors.
4. A diversity of life history types and species needs to be maintained in order to sustain a system of populations in the face of environmental variation.
5. Naturally selected populations should provide the model for successful artificially reared populations, in regard to population structure, mating protocol, behavior, growth, morphology, nutrient cycling, and other biological characteristics.
6. The entities authorizing or managing a artificial production facility or program should explicitly identify whether the artificial propagation product is intended for the purpose of augmentation, mitigation, restoration, preservation, research, or some combination of those purposes for each population of fish addressed.
7. Decisions on the use of the artificial production tool need to be made in the context of deciding on fish and wildlife goals, objectives and strategies at the subbasin and province levels.
8. Appropriate risk management needs to be maintained in using the tool of artificial propagation.
9. Production for harvest is a legitimate management objective of artificial production, but to minimize adverse impacts on natural populations associated with harvest management of artificially produced populations, harvest rates and practices must be dictated by the requirements to sustain naturally spawning populations.
10. Federal and other legal mandates and obligations for fish protection, mitigation, and enhancement must be fully addressed.