GARY LOCKE
Governor

APR 2 5 2000

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March 30, 2000

Mr. Larry Cassidy, Chair
Northwest Power Planning Council
Post Office Box 2187
Vancouver, WA 98668

Mr. Ric Ilgenfritz, Chair
Federal Caucus
c/o Federal Caucus Comment Record
707 W. Main Street, Suite 500
Spokane, WA 99201

Mr. Lonnie Mettler
U.S. Department of the Army
201 North 3rd Avenue
Walla Walla, WA 99362-1876

Dear Mr. Cassidy, Mr. Ilgenfritz, and Mr. Mettler:

Enclosed are Washington's comments to draft federal and Northwest Power Planning Council (NPPC) documents relating to the goal of restoring salmon and steelhead populations to healthy and harvestable levels in the Columbia Basin. The Department of Ecology's comments are specifically on the Draft Environmental Impact Statement (DEIS) and the All-H paper. The Department of Fish and Wildlife's (WDFW) comments are on the DEIS. WDFW will be responding later to the All-H paper, the Biological Assessment and the NPPC's fish and wildlife amendments. The Departments of Transportation and Natural Resources are responding to the DEIS.

There are several common themes in Washington's response to these documents that warrant highlighting. These are:

1

1. An integrated and comprehensive approach to salmon recovery. Two points need to be made in this regard. The DEIS for Snake River dams should not be regarded as a "stand alone" document. Fish recovery is a basin-wide objective and necessarily will involve a package of actions required to recover fish. It makes little sense to take a position on the lower Snake River dams in the absence of how such actions relate to broader actions in the Basin. In fact, this point is stressed extremely well in the All-H paper and we commend the federal caucus for taking a leadership role in looking at fish recovery from a Basin-wide perspective.

The NPPC is developing a sub-basin planning approach for fish and wildlife recovery. Washington needs this effort to complement the Statewide Salmon Recovery Strategy. We cannot emphasize enough that a regional entity must not create its own planning effort within Washington without specifically indicating how it will work with existing watershed processes doing similar work and utilizing well-established watershed boundaries that do not match up with the NPPC's subbasin boundaries. This creates more duplication and confusion and will harm the overall fish and wildlife recovery effort.

2

2. Moving ahead now with early actions. Clearly, implementation of a long-term recovery plan will take many years of sustained effort. But given the condition of fish in the Basin, we cannot support delay. We must move ahead now with several early actions that, by all accounts, need to be done whatever final path is selected. A list of such actions will be forthcoming.

3

3. Compliance with state and federal laws. While we may have differences in interpretation about what this responsibility means in practice, we are troubled by arcane interpretations of the Clean Water Act (CWA) suggesting that federal agencies do not have to abide by the CWA. This line of argument troubles us. Clearly, there are implications about what this means for respective responsibilities and costs, but we need to deal with these straight up and sort though possible solutions without having to first establish that a federal agency must abide by the CWA. Given the level of effort necessary to recover fish, this is not where we should be expending our time or resources.

4

Two federal agencies have responsibilities to administer the federal Endangered Species Act (ESA). However, we have sensed that there is inconsistency in how they interpret what is and what is not permissible under the ESA. This is confusing for state and local government agencies and for various stakeholders impacted by the ESA. We need consistent administration of the ESA by both agencies.

We need a clear standard about what does and does not meet the requirements of the ESA. We should not have and cannot have a situation in which state and local governments and agriculture, private businesses and individuals have to guess what laws and regulations do or do not pass muster under the ESA.

5

4. Clarifying organizational issues. We are overwhelmed by the number of different authorities responsible for Columbia River operations including fish recovery, and the demands on agency staff time. Washington would be very supportive of working with others to streamline management operations to address this situation, and to clarify who is responsible for which issues.

In the enclosed documents, state agencies have provided specific comments indicating where the DEIS on the Snake River dams is inadequate. We hope these comments and the points of emphasis indicated above are helpful. Washington will be working on a more detailed response regarding fish and wildlife management in the Columbia Basin that will be sent to you at a later date.

Sincerely,

Curt Smitch
Special Assistant to the Governor
for Natural Resources

Enclosures

cc: Washington Congressional Delegation
Governor Dirk Kempthorne, Idaho State
Governor John Kitzhaber, Oregon State
Governor Gary Locke, Washington State
Governor Marc Racicot, Montana State
Senator Karen Fraser, Washington State Senate
Senator Ken Jacobsen, Washington State Senate
Representative Jim Buck, Washington State House of Representatives
Representative Gary Chandler, Washington State House of Representatives
Representative Kelli Linville, Washington State House of Representatives
Representative Debbie Regala, Washington State House of Representatives
Judi Johansen, Bonneville Power Administration

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March 14, 2000

Federal Caucus Comment Record
C/O BPA-PL
707 Main Street Suite 500
Spokane, WA 99201

Dear Sir or Madam:

Thank you for the opportunity to comment on the All-H Paper. We recognize the importance of these decisions to the regional environment and economy. We offer these suggestions to ensure that these difficult decisions receive careful and complete consideration.

Four principles have guided our comments.

6

1. We must all work together to recover threatened and endangered species and to restore and enhance the integrity of the Columbia/Snake eco-system at the lowest overall cost.

2. Species recovery and ecosystem restoration costs should be distributed equitably across the region.

3. We advocate taking early actions using the best available information, not waiting for perfect information.

4. Early actions should be subsidized with avoided costs from delayed actions. For example, if dams are to remain in place, revenues from continued power generation should contribute to habitat enhancement in other areas of the Columbia/Snake watershed.

While we believe the All-H Paper provides a good starting point for applying these principles to significant actions of all jurisdictions in the region, the All-H paper could be strengthened.

Statutory Requirements

The pending decisions must fully consider the requirements of all relevant laws and regulations. These include:

- The Clean Water Act (CWA) and Washington State's water quality standards apply to the Columbia and Snake River system.

- The Coastal Zone Management Act (CZMA) requires that *"Each Federal agency activity within or outside of the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practical with the enforceable policies of the approved State management programs"* (CZMA Section 307(c)(1)(A)). Salmon and steelhead are clearly natural resources of the coastal zone that will be affected differently by the various alternatives. Applicable enforceable policies of the Washington Coastal Program include the State's clean water statutes (Ch. 90.48 RCW) and Shoreline Management Act (Ch. 90.58 RCW).

- Washington is responsible for allocation of water within its boundaries (Ch. 90.03 and 90.54 RCW) and will vigorously represent our interests in future water uses.

6 cont.

- Washington State has been federally delegated to implement the Clean Air Act. State responsibilities include enforcing national and state air quality standards, ensuring human health protection from hazardous and toxic air pollutants, and mitigating effects of windblown dust.

Adequacy of Alternatives

The All-H paper presents multiple alternatives that make it difficult to guide decision making. A smaller, more manageable range of alternatives should be considered so the costs and benefits of the alternatives can be placed in appropriate context. Risk assessments for each alternative that quantify the likelihood of successful salmon recovery will be critical for the multiple decisions facing the region.

- Further explain what measures will be taken in each alternative to meet Washington State water quality standards for 1) supersaturated gas, 2) temperature, 3) turbidity, and 4) dissolved oxygen

- More fully describe any available compliance options under the Clean Water Act and Washington State water quality standards if meeting standards is not achievable under each of the alternatives

Impacts and Costs

6 cont.

Owing to the magnitude of these decisions on the regional economy, a careful evaluation to internalize the financial consequences (cost and benefits) of decisions within and across each "H" is warranted. This is critical to understand and equitably distribute costs across the region.

- The schedule and milestones as well as the cost of actions to meet all regulatory requirements need to be fully described.

- Washington supports some fish spill to pass juvenile salmon downstream even though it generates high levels of dissolved gas. Our dissolved gas standard has been adjusted upward so fish can be passed over the dams instead of through the turbines. However, spilling water in an "uncontrolled" manner (spills not related to fish passage) is a violation of water quality standards. We expect early actions to reduce uncontrolled spill that will improve water quality and make better use of the water resource.

- Alternatives should be evaluated not only for their effects on anadromous fish but, through water quality impacts, how they affect resident fish, benthic organisms, and other aquatic life in the river.

- The pending decisions will affect wetland and riparian resources within the Columbia/Snake watershed. The potential wetland and riparian values associated with a free flowing river should be evaluated.

Thank you again for the opportunity to review the All-H Paper. We strongly support and encourage development of a broad outline guiding the difficult decisions facing the region. This approach shows great promise to address the social, economic and environmental health of the region.

Broad participation will be critical to the success of all our efforts. We believe it is essential for the State to be at the table for this effort to succeed. We look forward to active participation in these decisions along with the Federal Caucus members.

Sincerely,

Tom Fitzsimmons
Director

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March 14, 2000

Mr. Lonnie Mettler
Department of the Army
201 North Third Avenue
Walla Walla, WA 99362-1876

Dear Mr. Mettler:

Thank you for the opportunity to comment on the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (DEIS). We recognize the importance of these decisions to the regional environment and economy. We offer these suggestions to ensure that these difficult decisions receive careful and complete consideration.

Four principles have guided our comments.

1. We must all work together to recover threatened and endangered species and to restore and enhance the integrity of the Columbia Snake eco-system at the lowest overall cost.

7

2. Species recovery and ecosystem restoration costs should be distributed equitably across the region.

3. We advocate taking early actions using the best available information, not waiting for perfect information.

4. Early actions should be subsidized with avoided costs from delayed actions. For example, if dams are to remain in place, revenues from continued power generation should contribute to habitat enhancement in other areas of the Columbia/Snake watershed.

We believe the All-H Paper provides a good starting point for applying these principles to significant actions of all jurisdictions in the region. This includes the United States Army Corps of Engineers' (USCOE) pending decisions relating to operation, modification or removal of Snake River Dams.

8

We are disappointed that the document falls short of providing the information required for these significant decisions. The DEIS should fully identify and evaluate impacts to

8 cont.

the environment and describe mitigation options for all reasonable alternatives. It should also identify and evaluate all costs for each alternative and associated mitigation.

Our review of the document identified the following areas of concern. We will make detailed comments on a later draft of the EIS when these concerns have been addressed.

Statutory Requirements

The pending decisions must more fully consider the requirements of all relevant laws and regulations. Major gaps include:

9, 10

- The Clean Water Act (CWA) and Washington State's water quality standards apply to the Snake River. Washington State regulates projects that exceed or have the potential to exceed water quality standards. The EIS must fully address the CWA including compliance costs.

11

- The DEIS understates the legal standard of review under the Coastal Zone Management Act (CZMA) and erroneously concludes that all alternatives are in compliance with the Act. The CZMA requires that *"Each Federal agency activity within or outside of the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practical with the enforceable policies of the approved State management programs"* (CZMA Section 307(c)(1)(A)). Salmon and steelhead are clearly natural resources of the coastal zone that will be affected differently by the various alternatives. Applicable enforceable policies of the Washington Coastal Program include the State's clean water statutes (Ch. 90.48 RCW) and Shoreline Management Act (Ch. 90.58 RCW).

12

- Some alternatives will result in reduced reservoir surface area and therefore reduced evaporative loss of water. If an alternative selected by the USCOE includes seasonal drawdowns or dam breaching/removal, saved water should be identified and quantified. Washington is responsible for allocation of water within its boundaries (Ch. 90.03 and 90.54 RCW) and will vigorously represent the State and our interests in future uses of any saved water.

13

- Washington State has been federally delegated to implement the Clean Air Act. State responsibilities include enforcing national and state air quality standards, ensuring human health protection from hazardous and toxic air pollutants, and mitigating effects of windblown dust. In the vicinity of the four Snake River dams, the Department of Ecology regulates windblown dust. Therefore, when construction or demolition commences the USCOE and its contractors must comply with all relevant and appropriate air quality regulations.

Adequacy of Alternatives

A more complete range of alternatives including complete dam removal should be considered so the costs and benefits of all alternatives can be placed in appropriate context.

14

- The EIS examines three alternatives with very little difference between them; the fourth alternative discusses breaching without examining the different factors involved with only breaching but not completely removing the dams. We recommend that the USCOE evaluate an alternative that includes complete removal of the embankments and powerhouses.

15

- The EIS states that only breaching of all four dams is considered because that is all that was considered in the NMFS biological opinion. Consideration should be given to other breaching alternatives as well as the alternative of full removal of the dams. For example, would breaching 1, 2, or 3 of the dams provide most of the fish passage benefits while minimizing sediment delivery downstream to the Columbia?

16, 17

- Detail what measures will be taken in each alternative to meet Washington State water quality standards for 1) supersaturated gas, 2) temperature, 3) turbidity, and 4) dissolved oxygen. This should be done in the form of specific operational and structural modifications to the dams and include specific completion dates and costs.

- Fully describe any available compliance options under the Clean Water Act and Washington State water quality standards if meeting standards is not achievable under each of the alternatives. For instance, Washington State water quality standards apply only in cases of human-caused pollution, not natural conditions. Also, the State of Washington may allow for short-term exceedance of water quality standards if the longer-term objective will enhance beneficial uses. This option has been used to spill water for fish and might be used in alternatives where higher sediment load would temporarily exceed the water quality standard for turbidity.

- Describe the adverse effects and the mitigation options for temperature, turbidity, supersaturation, and low dissolved oxygen in more detail.

18, 19

- We recognize the Department of Transportation will comment on transportation issues but we also recognize there may be an increased risk of spills as a result of changes in patterns of moving fuel. The DEIS must adequately evaluate the potential for increased spills under each alternative.

Impacts and Costs

20, 21

Owing to the magnitude of this decision on the regional economy, a better attempt to internalize the financial consequences (cost and benefits) of maintaining, modifying, breaching, or removing the dams is warranted. This is critical to understand and equitably distribute costs across the region.

- The schedule and milestones as well as the cost of actions to meet all regulatory requirements need to be fully described.

22

- Washington supports some fish spill to pass juvenile salmon downstream even though it generates high levels of dissolved gas. Our dissolved gas standard has been adjusted upward so fish can be passed over the dams instead of through the turbines. However, spilling water in an "uncontrolled" manner (spills not related to fish passage) is a violation of water quality standards. We expect early actions to reduce uncontrolled spill that will improve water quality and make better use of the water resource.

23, 24, 25

- Alternatives should be evaluated not only for their effects on anadromous fish but, through water quality impacts, how they affect resident fish, benthic organisms, and other aquatic life in the river.

26

- The EIS emphasizes the losses of wetland and riparian areas associated with breaching but does not adequately identify and evaluate the potential wetland and riparian values associated with a free flowing river.

27

- The EIS describes losses in recreational and other human use opportunities associated with breaching of the dams but not does provide adequate consideration of recreational and other human use values associated with a free flowing river system.

Thank you again for the opportunity to review this Draft EIS. We hope you find our comments useful and look forward to your consideration and response to our comments. We would be happy to provide additional information at your request.

Sincerely,

Tom Fitzsimmons
Director

State of Washington
DEPARTMENT OF FISH AND WILDLIFE

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March 30, 2000

U.S. Army Corps of Engineers
Walla Walla District
Attention: Lower Snake River Study
201 North Third Avenue
Walla Walla, Washington 99362-1876

To Whom It May Concern:

28

The Washington Department of Fish and Wildlife (WDFW) has reviewed the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (FR/DEIS). The Corps of Engineers has made a considerable effort in coordinating such an extensive study and preparing the report. We appreciate the opportunity to provide comments on the biological issue of how to reduce juvenile salmon migration mortalities in the lower Snake River. At the same time, it is unfortunate that the lengthy time frame (beginning in 1995) necessary to prepare the FR/DEIS prevents the opportunity to include in the alternatives more recent insights created in regional discussions. As a result, the alternatives in this FR/DEIS now appear to offer only narrow and simplistic solutions to very complex problems. Both the Federal Caucus "All-H" process and the renewal of the Northwest Power Planning Council's (NPPC) Fish and Wildlife Program offer regional decision makers ranges of alternatives that better reflect the inter-relatedness of the "All-H" mortality factors and the array of options for reducing those mortalities. Accordingly, we expect the results of those processes will provide more meaningful guidance to recover Snake River salmon than the decision made as part of this EIS process.

29

The alternatives presented in the DEIS are options to substantially reduce the mortalities due to the hydro system currently allowed by NMFS (1995 FCRPS Incidental Take Permit). For juvenile Snake River spring/summer chinook, the allowable mortalities passing the four lower Snake dams and the four Columbia mainstem dams range from 24% to 86%, and for adults the allowable mortalities are 21%. The same allowable mortalities for Snake River fall chinook are 62% to 100% for juveniles, and 39% for adults. Reduction of those passage mortalities is only one of many aspects of recovering Snake River salmon populations. Yet the high juvenile dam passage mortality, when coupled with the mortality suffered by the upstream migrating adults, makes salmon recovery very problematic.

For the purposes of public record comment on the FR/DEIS, our biologically-based review of the four Alternatives in the FR/DEIS is focused on the configuration and operation of the four lower Snake River dams in relation to reduction of juvenile salmon migration mortalities. We expect to address the broader issue of recovery options for Snake River stocks and other listed stocks in the upper, middle and lower Columbia River in the regional discussions that are central to the recent renewal of the NPPC's Fish and Wildlife Program. In addition, consideration of the "All H" paper, as well as the long-term Biological Opinion for the operation of the Federal Columbia River power system (FCRPS) is essential.

WDFW supports the implementation of coordinated measures in the Snake River that will result in the reasonable opportunity to recover ESA listed stocks and that will promote healthy, diverse fish and wildlife populations. This is consistent with our agency's legislative mandate and the policies of this state's Fish and Wildlife Commission. In that context, WDFW considers recovery to be when a stock has rebuilt to levels that allow sustainable harvest and other uses, not just to the point where recovery is precluded under the strictest constructions of the Endangered Species Act.

The goal of Washington's Statewide Strategy to Recover Salmon (1999) is to:

> **"Restore salmon, steelhead and trout populations to healthy and harvestable levels and improve habitats on which fish rely."**

30

Our criteria for judging the efficacy of the proposed alternatives is whether the reduction in juvenile mortalities offers a reasonable portion of the overall "probability of recovery" as viewed from both a scientific and a pragmatic perspective. This is the same standard that we use for judging all our actions relative to salmon recovery. For example, the harvest restrictions that have consistently been implemented for over two decades for upper Columbia and Snake spring and summer chinook and for a decade for Snake River fall chinook, have been substantial. The scientific evidence clearly demonstrated that harvest mortality needed to be reduced to avoid extinction and also to contribute to recovery. However, since the same scientific information also indicated that a complete reduction in harvest mortality alone would not be sufficient to recover the stocks, a balanced approach between reduction of harvest mortality on listed stocks and continued harvest of abundant hatchery fish is warranted.

In specific regard to the alternatives in the FR/DEIS dealing with juvenile salmon migration mortalities in the lower Snake River, we offer the following biological assessments.

31, 32

Alternative 1, Existing Conditions, doesn't merit further consideration as a recovery measure. All modeling efforts to date indicate that salmon numbers will continue to fail to meet recovery objectives under existing operational conditions for the dams as set forth in the 1995 Biological Opinion and the 1998 and 1999 Supplemental Biological Opinions. These modeling efforts

31, 32 cont.

include the Process for Analyzing and Testing Hypothesis (PATH) conducted by state, tribal and USFWS staff; Cumulative Risk Initiative (CRI) conducted by NMFS; and Ecosystem Diagnostics and Treatment (EDT) conducted by NPPC. These same analyses have shown that there is no biological reason to consider continuing these measures alone for the purposes of recovering the listed Snake River stocks since they allow the unacceptably high dam passage-related juvenile salmon mortality rates described in a previous paragraph. This Alternative closely approximates continued delay in deciding on a course of action. The risks presented in the FR/DEIS for this alternative provide clear evidence that it could not sufficiently reduce juvenile salmon mortalities.

33, 34

Alternative 2, Maximized Transportation, does not appear to provide the necessary level of improvement in juvenile migration survival. A significant percentage of Snake River stocks are already being transported, and yet adult salmon returns continue to decline. Thus, slight increases in numbers of juvenile salmon transported will not be sufficient for consideration as the principal measure in a recovery plan. If coupled with major system improvements not considered under Alternative 3, however, this alternative may help reduce mortalities. Certainly, transportation has been valuable as a means of avoiding extinction so far with the dams in place, but it cannot result in recovery without a dramatic improvement in the operational performance of the dams, an improvement that currently remains unattainable even after more than 20 years of research and refinement.

Alternative 3, Major System Improvements, is too narrowly defined in this document. As crafted, it primarily relies on unproven technology for surface collector systems, which theoretically should improve conditions for juvenile migrants. If such technology can be developed, it is still problematic if it will provide the necessary level of improvement in support of juvenile migrants. Further, if no other actions are taken while it is being researched and developed, valuable time is being lost. However, if coupled with other early action measures, this alternative may contribute in the near-term to the reduction of juvenile salmon migration mortalities.

35, 36

Alternative 4, Dam Breaching, is identified here as providing the clearest benefit to fish but suffers from practibility and results from only evaluating the four narrowly-drawn alternatives presented in the FR/DEIS for reducing juvenile migration mortalities. This alternative only provides for a long-term focus (decades) for addressing juvenile salmon migration mortalities. Biologically, over the long-term, it can provide for a reduction in not only juvenile but also adult migration mortalities for the listed Snake River salmon and steelhead. In addition, it provides a number of water quality, resident fish and wildlife benefits that Alternatives 2 and 3 do not. However, WDFW has strong reservations with this alternative given current regional discussions of Snake River salmon recovery that include potentially viable alternatives that are not considered in the current FR/DEIS. We are prepared to consider other alternatives that provide

35, 36 cont.

strong probabilities of reducing juvenile migration mortalities that are similar to those provided by Alternative 4. Consideration of new alternatives that have not, as of yet, been subjected to the same level of scientific scrutiny that the narrow FR/DEIS alternatives have received, will have to commence immediately to be effective in reducing juvenile migration mortalities. Ironically, even the assessment of Alternative 4 as providing the clearest benefit to fish of the four alternatives also represents a choice to delay. The most optimistic projections are that the process of breaching the four lower Snake dams would take decades before benefits for juvenile fish survival would materialize. During that time, further erosion of listed stocks, if not extinction, may occur.

Regardless of the outcome of the alternatives in this FR/DEIS, we have reached the conclusion that we must undertake action soon in order to prevent further erosion and possible extinction of the listed stocks in the Snake River drainage. Our conclusion is reinforced by our review of the long history of delay and avoidance in addressing the needs of fish in the construction and operation of the FCRPS.

37

Following passage of the 1945 Rivers and Harbors Act, which authorized 10 additional Federal dams in the Columbia Basin, the U. S. Fish and Wildlife Service and the Bureau of Indian Affairs proposed a 10-year moratorium in beginning of construction of these new dams in order to study the cumulative effects these 10 additional projects might have on anadromous fish. Bowing to political pressure in early 1947, the USFWS and BIA conceded that development was inevitable and should proceed without further delay even if it meant losing some of the salmon stocks in the Columbia. The last Federal hydropower project was completed in 1975 when Lower Granite Dam went into service. In 1978, consideration was given to listing some Snake River salmon stocks under the Endangered Species Act, but this was set aside in 1980 when Congress passed the Northwest Electrical Power Planning and Conservation Act, which set up the NPPC. It was hoped that the Council would make significant changes in how the FCRPS operated and thereby rescue these stocks. The Council passed its first version of its Fish and Wildlife Program in 1982. In 1990, the first petition for listing of Snake River sockeye was filed, followed by a similar petition for Snake River chinook in 1991. Listings of these fish followed in 1991 and 1992, respectively.

In 1992, the NMFS issued its first Biological Opinion on the FCRPS, bestowing a "No Jeopardy" ruling on measures that represented little significant change from *status quo* operations. A similar opinion was issued in 1993, followed by a 5-year opinion in 1994. Idaho Fish and Game Department and others sued NMFS over the adequacy of the 1993 Opinion and prevailed in court when Federal District Court Judge Malcom Marsh ruled that NMFS had been "arbitrary and capricious" in its use of available information on the effects of the FCRPS and that the situation cried out for significant changes in the way the FCRPS was configured and

37 cont.

operated. NMFS agreed that the 1994-98 Opinion was also inadequate and consulted with the fishery agencies and tribes to develop a new 5-year opinion in 1995 that was not intended as a recovery plan, but an interim opinion to allow further study to address the critical uncertainties regarding certain issues. That long history culminated in a decision point in 1999 on the long-term configuration and operation of the FCRPS. However, the WDFW feels this FR/DEIS does not adequately address the long-term operation of the FCRPS.

Thus, it becomes imperative that the Federal Agencies implement the following actions to benefit listed Snake River salmon and steelhead immediately, while the regional decision-making process continues. Most, if not all, of these actions should be included in any systemwide response to salmon recovery. It would be imprudent to delay these actions further.

1. Continue the flow augmentation measures contained in the 1995 and 1998 Biological Opinions. Implement additional measures for flow augmentation in the tributaries and mainstem, including additional measures to protect chum and lower river fall chinook below Bonneville.
2. Continue the controlled spill program to improve survival of in-river juvenile migrants.
3. Implement "fast track" dissolved gas abatement measures, especially at Grand Coulee, Chief Joseph and Bonneville. Continue efforts to meet state water quality standards for dissolved gas and temperature throughout the system.

38, 39

4. Reduce power peaking and load following to reduce flow fluctuations during critical periods in juvenile incubation, rearing and migration and adult migration and spawning.
5. Implement energy conservation programs to reduce regional power needs.
6. Implement a comprehensive estuary habitat improvement program, as well as a critical fish monitoring and evaluation program to ensure that the habitat improvement goals are being met. This should at least satisfy the commitments made during the regional discussions of the navigation channel deepening project. The deepening EIS project has highlighted the need for improved conditions in the estuary and lower Columbia River as an essential component of salmon recovery. These projects and the subsequent commitments should be implemented as soon as possible.
7. Eliminate trucking of transported smolts. Provide additional barges to reduce holding of smolts during peak passage periods.
8. Conduct a realistic study of flood control operations in the basin. Look at ways to implement revised flood control rule curves that will reduce flood control drafts and provide higher spring and summer flows.
9. Fully fund fish passage facility operation and maintenance programs.
10. Implement measures to control predation on smolts and adults in the lower river by both birds and marine mammals.
11. Fully fund state and tribal enforcement programs on the Columbia, to ensure that harvest restrictions and habitat measures are meeting their intent.

38, 39 cont.

12. Provide funding to operating entities for implementation of the recommendations contained in the *Artificial Production Review* (NPPC 1999).
13. Provide full funding of enhancement and monitoring projects for salmon recovery that have state and tribal agreement, and have received favorable review by independent science panels.
14. Assist the states and tribes with the development of selective fisheries technologies.
15. Support mass marking program for chinook and coho, and provide full funding for marking of fish from federal hatcheries and within the Mitchell Act budget.
16. Develop a realistic recovery plan encompassing all of the "All-H's" by 2003.

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To reiterate, given the narrow range of alternatives to reduce juvenile salmon mortalities under consideration in the FR/DEIS, we have reached the following biologically-based assessment. Unfortunately, Alternatives 2 and 3 in the FR/DEIS only offered very limited technological approaches that alone do not offer a reliable certainty to reduce juvenile salmon mortalities. Alternative 4 (considered equivalent to Natural River Drawdown) appears to offer the highest probability, over the long-term, of the four alternatives for reducing juvenile salmon mortalities. However, we believe it is not an adequate alternative because of the length of time necessary to achieve its benefits, and that it could never be a "stand alone" measure to actually achieve recovery of listed Snake River stocks. The FR/DEIS excludes the full scope of alternatives that may offer viable operational alternatives to dam breaching to reduce juvenile salmon mortalities as part of a broader implementation plan to recover Snake River salmon.

In contrast, other options, not considered in this narrow FR/DEIS, but now being considered under new regional decision making approaches by the NMFS and NPPC, may offer viable options to Alternative 4 to reduce juvenile salmon migration mortalities in the near-term. In addition, these regional approaches offer the best hope of crafting pragmatic, balanced and coordinated actions (rather than the narrow alternatives under the FR/DEIS) necessary to recover listed salmon stocks, if they are immediately deliberated. If so, WDFW will support the comprehensive decision making process, over the alternatives in the DEIS, that would bring together the full scope of actions (e.g. aggressive operational changes to the Snake River dams) necessary in "All-H's" to actually recover listed salmon.

Thank you for the opportunity to comment on this important issue.

Sincerely,

Jeff P. Koenings, Ph.D.
Director

Washington State Department of Transportation
Sid Morrison
Secretary of Transportation

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P.O. Box 47300
Olympia, WA 98504-7300

March 30, 2000

U.S. Army Corps of Engineers
Walla Walla District
201 North Third Avenue
Walla Walla, Washington 99362-1876

Attn: Lower Snake River Study

Dear Ladies and Gentlemen:

The Washington State Department of Transportation (WSDOT) is pleased to comment on the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/ Environmental Impact Statement (Draft FR/EIS) released by the U.S. Army Corps of Engineers (Corps) in December 1999. This letter and the accompanying attachment comprise WSDOT's comments on the Draft FR/EIS. WSDOT provides these comments for the Corps' preparation of the Revised Draft FR/EIS that will document a preferred alternative and be issued later in the year 2000.

The Draft FR/EIS results from a Corps study that was initiated in 1995 in response to the National Marine Fisheries Service's (NMFS) 1995 Biological Opinion. The Draft FR/EIS examines the effects of the four lower Snake River dams on juvenile salmon migrating downriver and also considers adult fish returning to spawn. The Draft FR/EIS addresses only the four Snake River salmon stocks listed under the Endangered Species Act (ESA) and the ways for improving their survival as they migrate through the lower Snake River hydropower system. Although true to its charter, the Draft FR/EIS represents one part of a larger range of issues confronting the Pacific Northwest —the recovery of ESA-listed salmon and steelhead stocks.

Salmon and steelhead are an important part of Washington State's history, culture and economy. These fish are strongly associated with the Pacific Northwest way of life and with the natural environment of our region. At one time, up to 16 million salmon and steelhead returned each year to spawn in the Columbia River system. Today, less than one million return, and many of these are hatchery-bred rather than wild fish. The decline of wild salmon and steelhead is an issue that Washington State government is addressing, and will continue to address, through an integrated and comprehensive approach.

WSDOT and Salmon Recovery

The Washington State Department of Transportation is committed to working with other state agencies through the Washington State Salmon Recovery Strategy to save and recover salmon. This statewide strategy is designed to address the full range of factors that affect salmon recovery—habitat, harvest, hatcheries and hydropower—as well as the unique characteristics of individual species, watersheds and local environments. WSDOT is an active participant in the state's Joint Natural Resource Cabinet (JNRC) and Joint Cabinet Agency Group (JCAG) forums for salmon recovery planning and coordination, and the Department serves on the state's Salmon Recovery Funding Board. In these capacities, WSDOT provides technical expertise as well as agency program coordination.

WSDOT co-manages a fish passage barrier removal program with the Washington Department of Fish and Wildlife (WDFW). Since 1991, this effort has inventoried and established priorities for hundreds of fish passage barriers and has restored fish access to hundreds of miles of stream habitat throughout the state. Culvert replacement is one activity that can have short-term positive impacts on salmon recovery when it is implemented through a systematic approach, as WSDOT is doing with WDFW. As a result, WSDOT has a plan in place to replace fish-barriers on state right-of-ways over the next 20 years.

Other WSDOT actions to save and recover salmon along with other ESA-listed species include: implementing provisions of the Highway Runoff Manual in ESA-designated areas; controlling erosion and sediment through written Temporary Erosion and Sediment Control plans on construction projects; controlling spills and releases of construction-related materials through written Spill Prevention Control and Countermeasure plans; and treating and controlling highway runoff to protect fish and wildlife habitat.

WSDOT Perspective

Under Washington State statutes, codified in Chapter 47 RCW, WSDOT is responsible for developing and maintaining a comprehensive and balanced statewide transportation system that meets the needs of the people of the state for safe and efficient transportation services, and to do so in an environmentally responsible manner. WSDOT is the responsible state agency for designing, building, operating and maintaining the state's 7,000-mile highway system, and for coordinating the connections of that system with local government roadways. The Department's freight rail program is chartered to address branch and light-density lines, mainline capacity, access to ports and preservation of rail infrastructure. WSDOT also is responsible for

developing a statewide multimodal transportation plan to ensure the continued mobility of people and goods within regions and across the state in a safe and cost-effective manner. Required components of that plan include state highways and freight rail as well as marine ports and navigation. It is noteworthy that there is a statutory state-interest in Washington's marine and river ports and in the navigation system that connects them with domestic and international markets.

As the state agency responsible for transportation, WSDOT has reviewed the Draft FR/EIS from the perspective of transportation impacts that will be caused by federal action. The Department also has commented on environmental impacts that will result from addressing or mitigating the transportation impacts caused by federal action. When appropriate, WSDOT has noted general omissions that should be included in the Revised Draft FR/EIS consistent with standard environmental documentation practice. WSDOT's comments focus entirely on the impacts of Alternative #4—Dam Breaching.

Transportation Impacts

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The Draft FR/EIS acknowledges that Alternative #4—Dam Breaching will have significant transportation impacts because barge transportation will no longer be available through the lower Snake River. Additional truck and rail transportation will be needed to move products downriver to Columbia River elevators or directly to export facilities. The movement of products once carried by barge to upriver locations will also require changes in truck and rail transportation. Overall transportation costs will increase because barge transport is low cost and sometimes more direct than other transportation modes. Major improvements in highway and rail capacity will be needed to meet the required modal transportation shifts for moving products, goods and commodities.

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The Draft FR/EIS estimates that almost 5 million tons of annual waterborne commerce will be diverted from barges on the lower Snake River to truck and rail transportation following dam breaching. For grain, which accounts for three-quarters of this volume, the Corps estimates that 1.1 million tons or 29 percent would likely be diverted to rail transport. The Draft FR/EIS indicates that required improvements to mainline and light-density railroads, additional rail car capacity and rail-related improvements at local elevators are estimated to cost between $69 million and $106 million. These estimates do not include geo-technical stabilization costs for roadbeds, embankments, bridges and track, nor do they include needed rail improvements at some ports and railheads. Acknowledging that there is uncertainty about how much waterborne traffic will be diverted to rail and where that diversion will occur, WSDOT nonetheless requests that the Corps identify specific rail improvement projects and costs in the Revised Draft FR/EIS.

45, 46 cont.

The Corps estimates that about 71 percent or 2.7 million tons of grain will be moved by truck to river elevators on the McNary pool for subsequent barging downriver. This will be accompanied by an increase of nearly 2.6 million truck miles in Washington as truck shipments re-route from ports on the lower Snake River to ports in the Tri-Cities area. The capital improvement costs necessary to maintain adequate highway performance, improve intersections and replace or upgrade pavement are drawn from the Phase I HDR Engineering study funded by the Washington State Legislative Transportation Committee (WSLTC). The Draft FR/EIS states that highway capital costs are estimated between $84 million and $101 million, and then characterizes this range as the minimum and maximum for highway improvement costs under the dam breaching alternative.

WSDOT takes exception with Draft FR/EIS characterization of HDR's highway cost estimates. This Department participated in the HDR study conducted for WSLTC. WSDOT is comfortable with HDR's estimates for the particular state routes that HDR examined in the WSLTC study. The routes are the ones that will experience major impacts and require important capital improvements. However, time and resource constraints prevented HDR from examining the full range of state highway impacts and the full range of needed capital improvements to the state highway and local roadway systems. The Revised Draft FR/EIS should address the full range of state highway impacts and capital improvement costs. The Revised Draft FR/EIS should also address the transportation impacts to the county road and city street systems, including their connections with and access to the state highway system. As noted below, a second, or Phase II, WSLTC study is underway that should prove helpful to the Corps in addressing both of these issues.

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Breaching the lower Snake River dams is a federal government action that will have significant and adverse transportation impacts; and it is a federal government responsibility to address and/or mitigate the adverse transportation impacts. This includes identifying required transportation projects and transportation-related activities, as well as the environmental impacts of those required projects and activities. The Draft FR/EIS does not identify nor quantify the indirect impacts to the environment that will result from projects required to address direct transportation impacts. Furthermore, the mitigation costs for environmental impacts from required transportation projects have not been identified.

WSDOT prepares environmental documentation as part of its state transportation responsibility. The Department expects environmental and mitigation costs associated with required transportation projects to be documented by the Corps in the Revised

47, 48 cont.

Draft FR/EIS. When the Corps issues the Revised Draft FR/EIS, that document should identify the following for each of the alternatives considered: specific transportation impacts and the specific projects required to respond to those impacts; environmental impacts that will result from those transportation projects; the cost of specific transportation projects, including their environmental costs; mitigation that will be required as a result of transportation projects; and the cost of that mitigation.

Other Issues for Revised Draft FR/DEIS

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WSDOT was unable to identify in the Draft FR/EIS the explicit consideration of possible railway/roadway at-grade crossing improvements that could result from Alternative #4—Dam Breaching. When sudden increases in rail traffic occur, existing railroad crossing protection may be inadequate and require upgrading to a higher standard. In some cases, as evidenced by the recent railroad mergers, the construction of grade separations is necessary to assure the safety of the traveling public. Given the increase in rail transportation that will occur under the dam breaching alternative, the Corps should examine this issue in the Revised Draft FR/EIS.

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The Draft FR/EIS should provide additional consideration of the possible transportation impacts of increased sediment in Lake Wallula behind McNary Dam. The Corps estimates that some 50 to 75 million cubic yards of existing sediment would move downstream, and half of this would be deposited in Lake Wallula within the first two years following dam breaching. For comparison, the Corps' lower Columbia River deepening project is expected to remove about 20 million cubic yards of sediment from Portland to the Columbia River bar. Further, with the Snake dams breached, the Corps estimates that 3 to 4 million cubic yards of sediment will be carried downstream to Lake Wallula each year. Again, by comparison, annual dredging on the deep-water navigation channel between Portland and the Columbia River bar removes about 4 to 5 million cubic yards. The possibility of dredging to assure barge access to port and terminal facilities upstream of McNary Dam needs to be addressed in more detail by the Corps.

Current Studies For Revised Draft FR/EIS

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WSDOT requests that the Corps review and incorporate findings from three current studies, as appropriate, in the Revised Draft FR/EIS. First, the Washington State Legislative Transportation Committee (WSLTC) is conducting a second Lower Snake River Drawdown Study to examine the transportation impacts of dam breaching on other state highways and county and city roadways. HDR Engineering (Bellevue) is the lead technical consultant. This second, or Phase II, WSLTC study also will consider state highways that were not included in the earlier WSLTC study. Based on work to date, it appears that the transportation impacts from Alternative #4—Dam Breaching

54, 55 cont. will result in significant additional costs for the roadway systems in southeastern Washington. For these reasons, the Corps should consider the findings and results of this work in the preparation of the Revised Draft FR/EIS.

56, 57 Second, the State of Washington/Port of Benton Hanford Investment Study was completed in January 2000 with HDR Engineering (Portland) as the prime consultant. One finding is that the practical capacity of BNSF's Columbia River Gorge and Stevens Pass mainlines will be reached in 2005 or 2006, given current rail traffic growth rates. Although the Stampede Pass line will not reach its practical capacity until the 2020s, it is only 12 trains per day. The Corps should specifically address potential east-west mainline capacity constraints as part of its analysis of the transportation impacts resulting from Alternative #4—Dam Breaching.

58, 59 Third, WSDOT is funding an examination of the benefits and impacts of 286,000-pound and 315,000-pound rail cars on light-density rail lines in Washington State. The transition to heavier rail cars has been underway for some time because of the cost savings they can yield for mainline railroads. Although heavier cars may help address capacity constraints on existing mainlines, such as those noted above, most light-density lines do not have the necessary rail infrastructure to carry heavier cars. Two important objectives of this study are to assess the likelihood of heavier cars being used on Washington light-density lines and to estimate the capital investment needs associated with upgrading light-density lines to accommodate heavier cars. This research study is being directed through the Department's Transportation Research Center. The findings of this work, like the results of other two studies, could significantly alter the transportation impact costs of Alternative #4—Dam Breaching.

Institutional Responsibilities

60 WSDOT is requesting that the Revised Draft FR/EIS address the organizational structure, along with specific organizational responsibilities, for implementing and funding required transportation infrastructure and for mitigating transportation impacts that will result from the preferred alternative. The Department is prepared to work with the Corps and other federal agencies in addressing transportation impacts within an identified organizational framework and with financial assistance. The organizational framework should reflect the responsibilities of existing organizations and agencies and build on current institutional efforts, such as the state's Salmon Recovery Strategy, to save and recover salmon. Financial resources and responsible parties for providing that funding should be identified, recognizing the fiscal realities of state and local government agencies as well as the federal responsibility for federal actions.

WSDOT appreciates the opportunity to provide these comments and those in the attachment to the Corps on its Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement. The department plans to provide further comment when the Corps releases its Revised Draft FR/EIS identifying a preferred alternative. WSDOT stands ready to answer any questions the Corps may have concerning the department's comments on the Draft FR/EIS.

Sincerely,

Sid Morrison
Secretary of Transportation

SM:ah/nr
Attachment

cc: The Honorable Gary Locke, Governor
Washington State Transportation Commission

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Sincerely,

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cc: The Honorable Gary Locke, Governor
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50 CFR § 402.02 and § 402.14 require that indirect effects which can be expected to result from an action must be considered under Section 7 of the Endangered Species Act.

61, 62, 63 cont. Impacts potentially significant to transportation systems and the environment are recognized in Section 5.8 of the Draft FR/EIS. It is the responsibility of the federal lead agency to determine what the infrastructure impacts will be and determine, using informed judgment, what the environmental impacts will be as a result of correcting those impacts to the transportation infrastructure. The analysis of the indirect and cumulative effects related to the Corps' proposed action as described in Alternative #4—Dam Breaching is not consistent with the requirements of the National Environmental Policy Act, the Clean Water Act or the Endangered Species Act.

Geology and Soils

The Draft FR/EIS Appendix D—Natural River Drawdown Engineering noted that a test drawdown in 1992 caused slope and base failure in the transportation facilities observed. A study commissioned by the Washington State Legislative Transportation Committee and prepared by HDR Engineering identified costs of $ 48 million to $192 million for geotechnical impacts to the transportation infrastructure. Approximately 78 miles of railroad grade and 30 miles of state and county roads are at risk. The impacts to the transportation infrastructure as a result of slope and embankment failure caused by the drawdown of the pools would be direct impacts from the federal action of breaching the dams, should that alternative be selected. Any environmental impacts resulting from either the projects to prevent failure or to correct failures that have occurred will be indirect impacts resulting from the federal action of breaching the dams; these effects are reasonably foreseen and therefore must be identified and analyzed.

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What transportation infrastructure projects can be reasonably foreseen as being required to prevent or correct slope and embankment failures that may result from the implementation of the dam breaching alternative? What are the potential impacts to resources down slope of the transportation facilities as a result of projects to prevent failure and to repair failures that are a direct effect of the breaching alternative? What mitigation is proposed for these environmental impacts that may result form the slope and embankment failures and the projects to correct them? What mitigation is proposed for the direct impacts to the transportation infrastructure as a result of the implementation of the dam breaching alternative?

Water Resources

66, 67 A critical element that was not addressed in the Draft FR/EIS Appendix C—Water Quality was an evaluation of water quality impacts due to transportation impacts if Alternative #4—Dam Breaching is the preferred option. If dams are breached, there will

be an immediate and economically critical need to annually transport approximately 3.8 million tons of grain to ports either on the Columbia River or Puget Sound. If the Alternatives #1, #2 or #3 are chosen, then barging will continue as a freight mobility option and ancillary water quality impacts from the alternate transportation options can probably be considered negligible. The degree of the water quality impacts will be dependent on the alternate transportation modes(s) chosen for freight mobility.

66, 67 cont.

If trucks become the preferred replacement mode to barging under Alternative #4—Dam Breaching, there will be a significant increase in the number of heavy truck trips to the Tri-Cities area using rural state highways 12, 26, 124, 260, 261, and/or 395. Increased heavy truck traffic will accelerate pavement degradation on those highways and may increase both sediment and metals loading to receiving streams from highway runoff. It is likely that the impacts will be to tributaries of the Snake River that intersect the above-mentioned state highways rather than the Snake River itself. There are few structural water quality best management practices (ponds, vegetated buffers, vaults, dry wells, etc.) constructed along highways in the Snake River basin, and most stormwater runoff from highways is conveyed (and infiltrated) from the highway prism using roadside swales and channels. The degree of hydraulic "connectedness" between the highways and individual streams would vary greatly, and impacts may be negligible if the vast majority of the highway runoff is infiltrated rather than discharged into surface streams. Less frequent impacts from increased truck traffic would be accidental spills of oil and gas and losses of accidents. Another secondary impact to water quality could also result from expansion of basic support services for the trucking industry, such as truck stops and gas stations, which would further increase the probabilities of fuel spills that could adversely affect water quality.

It is recommended that the Corps expand the water quality analysis to evaluate impacts from alternate freight mobility options that would be necessary for freight movement if Alternative #4—Dam Breaching is selected as the preferred alternative. This analysis should include an overview of water quality conditions in the major tributaries to the Snake River and the potential impacts of increased highway truck traffic on those conditions.

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Aquatic Resources

Some issues of consideration for new impervious transportation surfaces created as a result of the federal action to breach the dams that need to be addressed include: How many road miles will need to be added/modified to off-set the loss of barge transport and where will these additions/modifications take place? How many stream crossings will the new impervious surfaces pass by/over? How much instream construction will occur in response to the new impervious surface? What are the long term effects on the aquatic resources adjacent to new impervious surfaces?

68, 69, 70 cont. What will be the effects of Snake River tributaries adjusting and re-grading, as a result of dam breaching, on resident and anadromous salmonids, their habitat and ability to migrate therein?

Terrestrial Resources

According to Section 5.5 of the Draft FR/EIS, Alternative #4—Dam Breaching may impact approximately 668 acres of wetlands. 40 CFR 1502.14(f) requires that mitigation be included in the EIS. What wetland impacts are reasonably foreseen as a consequence of transportation infrastructure projects required in response to the effects of the dam breaching alternative, should that alternative be selected? What wetland impacts are reasonably foreseen as being associated with the transportation infrastructure projects

71, 72 required to stabilize slopes, roadbeds and embankments?

What mitigation is proposed for those wetland impacts that may be associated with the transportation infrastructure project required to stabilize the roadbed? What wetland impacts are reasonably foreseen as associated with the transportation improvements to pavement and intersections required in response to the increased truck traffic that the Draft FR/EIS identifies as a consequence of the dam breaching alternative? What wetland mitigation is proposed for those impacts resulting from transportation projects required as a result of the dam breaching alternative?

Cultural Resources

The following observations are based a review of the Draft FR/EIS and its Appendix N—Cultural Resources and Appendix O—Public Outreach Program. Although discussions on requirements pertaining to cultural resources were identified extensively throughout the Draft FR/EIS, no quantifiable assessments can be made due to the lack of cultural resource surveys and lack of all tribal input to the Alternative #4—Dam Breaching alternative.

73, 74, 75, 76 Section 106 of the National Historic Preservation Act requires the federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council a reasonable opportunity to comment. Section 106 procedures are detailed under the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation 36 CFR Part 800. Section 106 seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among the Agency Official and other parties with an interest in the effects of the undertaking on historic properties, commencing at the early stages of project planning. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. Section 106 must be complete prior to the approval of the expenditure

73, 74, 75, 76 cont.

of any federal funds on the undertaking or prior to the issuance of any license. Complex projects such as this often are presented as a phased approach, with the final identification of properties and evaluation of historic properties specifically provided for in a Memorandum of Agreement executed pursuant to Sec. 800.6, a Programmatic Agreement executed pursuant to Sec. 800.14(b), or NEPA pursuant to Sec. 800.8. It is unclear at this time how this Draft FR/EIS will comply with Section 106.

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There is no discussion of coordination with the State Historic Preservation Officer (SHPO), no new in-depth cultural resource studies for the project, no testing measures, and limited discussion of interested parties' views. There are currently no properties identified in which to apply the National Register criteria and determination of effect. Determinations of National Register eligible properties are essential to determining what impacts the project will have on historic properties. Has this document been submitted to the Advisory Council for Historic Preservation? Adverse effects appear unavoidable for this project. Extensive planning, scheduling and costs will be needed for mitigation once the effects have been determined.

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Alternative #4—Dam Breaching would result in increased traffic on existing roads and may result in the need for widening and/or new roadways. Any disturbance of previously undisturbed soils will also require surveys, potential testing and determinations of eligibility and effect. Erosion and/or slope stabilization have the potential to destroy the known archaeological sites as well as expose new sites. What measures will be taken to prevent this? Will these measures be acceptable to the tribes affected? Are there any historic structures within the project area (buildings, bridges, landmarks, etc.) that are eligible and/or listed in the National Register?

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Revised regulations of Section 106, effective June 17, 1999, now require tribal consultation in the early stages of project planning. Tribal and SHPO concurrence on the Areas of Potential Effect (both off and on tribal lands) is also required. The importance of tribal input is thoroughly discussed, but there is no documentation of tribal opinions and exchange of ideas regarding the project. Most of the focus was understandably on the salmon issues pertaining to the tribes. However, other cultural resource issues, such as artifacts, sites, districts and traditional cultural sites, will need to be identified and assessed. Visual, audible, alterations to property, and atmospheric elements will also need to be assessed. The document does not reflect meaningful consultation to address concerns of all the directly and indirectly affected tribes.

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Hazardous Materials

The Draft FR/EIS does not include a separate discussion for hazardous materials impacts. While NEPA does not specifically require a discussion of hazardous materials as a separate discipline, the subject should be thoroughly analyzed within the study.

84 cont. WSDOT's review found that hazardous materials impacts are not adequately discussed. The document's discussion of hazardous materials is limited to a brief analysis of sediment quality.

85, 86 The only areas in which hazardous wastes are briefly discussed are with regard to sediment quality in the water quality discipline study (Appendix C) and the air quality discipline study (Appendix P). The air quality study discusses fugitive dusts resulting from exposed lake bed sediments. However, it does not discuss the potential for airborne sediments to contain contaminants, citing a lack of existing information on sediment quality. Conversely, the water quality study indicates, that while existing data is limited, there were numerous elevations of contaminants of concern found in these sediments. Elevated concentrations of organochlorine pesticides, including DDT, as well as elevated levels of TPH were detected in lake sediments. The sediment quality study was limited to surface sediment sampling (top 10 cm). Historical use of DDT and other pesticides would more likely result in encountering elevated concentrations in deeper sediments. According to modeling performed as part of the air quality study, these deeper, potentially contaminated sediments, once exposed, could become airborne and pose inhalation and other health risks to humans and to the environment.

Final disposition of any airborne contaminated sediments is also of concern as, depending on contaminant concentrations, deposition could in fact result in creation of upland cleanup sites. Locations for deposition of any contaminated fugitive dust should be predicted by the study. Resuspension of any contaminated sediments into the Snake River system is also of concern. The water quality study examines resuspension and deposition of clean sediments; however, it does not consider the potential impacts of resuspending contaminated sediments which may be encountered beneath the surface sediments. In summary, a much more thorough assessment of sediment quality is needed in the Revised Draft FR/EIS to ensure the above potential impacts are adequately addressed.

87, 88 Fugitive dust emissions from dam deconstruction are addressed in the air quality study. It is not clear whether lead-based paints, guano, asbestos, silica or other contaminants might be encountered during demolition. If no such contaminants exist, the study should expressly state this, or the reader is left to wonder. If contaminants are potentially present, inhalation risks and risks associated with final deposition of those airborne or waterborne contaminants should be addressed.

89, 90, 91 Removing the dams will result in increased quantity and distribution of goods transported by highway and rail. Though the Draft FR/EIS recognizes this, the hazardous waste issues associated with this level of impact are not addressed. According to the water quality study, in 1994, over 4.2 million tons of freight passed through the locks at Ice

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Transportation

97, 98 The Draft FR/EIS does not adequately address the increased operating and maintenance costs for highways, roadways and railways that will result from the increased truck and rail traffic arising from the loss of waterborne traffic under Alternative #4—Dam Breaching. Based on the estimates of increased truck and rail traffic, the Revised Draft FR/EIS must identify the increased operating and maintenance requirements for highways, roadways, and railways.

99, 100 Under Alternative #4—Dam Breaching, increased truck and rail traffic will result in capacity, pavement, intersection and/or track deficiencies. The Revised Draft FR/EIS should identify specific improvement projects for each deficiency directly resulting from the dam breaching alternative. What capacity improvements will be required? What pavement and intersection projects will be required? What track improvements will be required? What is the cost of these projects and what are the associated environmental impacts? What mitigation is required to address these environmental impacts? What are the costs associated with the mitigation?

101, 102, 103 Bridge piers for highways, roadways and railways in the affected area of Alternative #4—Dam Breaching will be subject to increased scour. The projects required to protect the affected structures and the costs of those projects must be identified in the Revised Draft FR/EIS. The environmental impacts caused by the projects to protect the existing bridge piers must be identified. What are the reasonably foreseeable impacts to the salmonid species and to the critical habitat for salmonids as a result of the indirect impacts from the dam breaching alternative? What mitigation is proposed for the potential impacts to the species and the habitat? What consultation with NMFS must be done?

104, 105 The Draft FR/EIS does not adequately address mitigation means and mitigation costs for Alternative #4—Dam Breaching. What mitigation is proposed for the direct effects to transportation infrastructure? What mitigation is proposed for the indirect effects on transportation as a result of the diversion of commodities from waterborne to rail and truck transportation? What mitigation is proposed for the indirect effects to intersection deficiencies caused by the increased truck traffic? What mitigation is proposed for the indirect effects to pavement and capacity deficiencies?

106, 107, 108 The Draft FR/EIS does not adequately identify specific projects that will prevent or correct embankment failure resulting from Alternative #4—Dam Breaching. What impacts will projects to prevent or correct embankment failure have on salmonid species, cultural resources and water quality?

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands

March 31, 2000

Lonnie Mettler, lead planner
Department of the Army
Walla Walla District, Corps of Engineers
201 North Third Avenue
Walla Walla, WA 99362-1876

ATTN: Lower Snake River Study

Dear Lonnie:

Thank you for the opportunity to comment on the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (DEIS). The DEIS identifies 4 possible courses of action for improving salmon passage through 4 dams within a 140 mile stretch of the lower Snake River which are operated by the U.S. Army Corps of Engineers.

As manager of state owned lands, particularly aquatic lands, the Washington Department of Natural Resources (DNR) has a vested interest in the outcome of this proposal. DNR currently manages approximately 2.4 million acres of navigable waters of the state, as defined by the Revised Code of Washington (RCW 79), which include shorelands and beds of navigable waters. Additionally, DNR manages approximately 3 million acres of uplands including approximately a million acres of agricultural and grazing lands. Each of these lands, aquatic, forested and agricultural lands are held in public trust by the state and managed by DNR for the people of the state.

109 DNR appreciates the effort that it took to pull together a document of this magnitude. There are however, a few areas where additional information should be provided. In general, the department found that there is not enough information provided in the DEIS to adequately determine whether or not state owned lands are likely to be impacted. Also, the DEIS lacks a discussion of the impacts that each of the proposed alternatives is likely to have to adjacent land uses, including agriculture.

Attached please find our specific comments. We appreciate the opportunity to comment on this proposal. If you have any questions concerning our comments, please feel free to contact Dave Dietzman at (360) 902-1633.

Sincerely,

Kaleen Cottingham
Deputy Commissioner of Public Lands

cc. Bill Vogel, United States Fish and Wildlife Service
Steve Landino, National Marine Fisheries Service
US Army Corp of Engineers
US Environmental Protection Agency
Rebecca Inman, Department of Ecology
Bill Tweit, Governmental Policy, Department of Fish and Wildlife

Attachment

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DNR's specific comments regarding the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (DEIS) are as follows:

Aquatic Lands:

- The DNR requests that the final EIS discuss ownership of the beds of navigable waters in the areas associated with the dams. There currently is not enough information provided in the DEIS to determine ownership.

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- The DEIS states that the Corps will need to acquire state owned parcels adjacent to the proposal sites. From the maps provided, it is unclear which lands this will involve. DNR will need to see detailed plat maps of any adjacent DNR managed uplands that the Corps will need to acquire.

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- The final EIS should include in the discussion for alternative 4, what the status of the river bed will be after breeching of the dams. For instance, which parts of the river are expected to revert back to natural status? This discussion should also describe which, if any, areas the Corps expects to revert back to DNR management.

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- The final EIS needs to describe any right-of-way use authorizations that have been granted by the Corps in the past and how those easements will be affected by each of the alternatives. It should include details such as who are the easements granted to and for what purpose, the agreed upon life of the easement, and whether it is expected that the management of these agreements will change under any of the proposed alternatives.

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- The FEIS needs to include information regarding sediments, including their composition and any contaminants that may be present. This should include a discussion of the likelihood of those sediments being transported downstream with any of the alternatives, but especially with alternative 4. The final EIS should include a summary of any testing data and/or sediment transport information that is currently available.

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- The Final EIS should include a plan, approved by local noxious weed control boards, which describes how any disturbed soils, or exposed soils from drawdown, will be protected from invasive weeds. This plan should also describe what the desired future condition in the area is. This should include compliance with any requirements by local noxious weed boards, however DNR suggests a more pro-active approach which includes treatment of the area to discourage noxious weed or invasive species from becoming established in the area. Specifically, the noxious weed plan should include a schedule for planting of native species. A monitoring plan should also be included which will indicate if seedlings have become established or if additional plantings are necessary.