United States Department of the Interior

FISH AND WILDLIFE SERVICE

Upper Columbia River Basin Field Office
11103 E. Montgomery Drive
Spokane, WA 99206

August 20, 1999

Carl A. Strock, Brigadier General
Division Engineer, North Pacific Division
U.S. Army Corps of Engineers
P.O. Box 2870
Portland, Oregon 97208

Dear General Strock:

This letter acknowledges the U.S. Fish and Wildlife Service's (Service) June 21, 1999 receipt of your June 17, 1999 letter requesting formal section 7 consultation under the Endangered Species Act. The consultation concerns the possible effects of the action agencies' (Army Corps of Engineers, Bonneville Power Administration and Bureau of Reclamation) future operations of the Federal Columbia River Power System (FCRPS) on listed Columbia Basin bull trout (*Salvelinus confluentus)* and Kootenai River white sturgeon *(Acipenser transmontanus)*.

The Service has not received all of the information necessary to initiate formal consultation on the FCRPS as outlined in the regulations governing interagency consultation (50 CFR 402.14 with specific emphasis on subsection (c) parts 1 through 6). To complete the initiation package, we will require the following information:

2.1.2, Flathead River Basin and Flathead Lake. The BA refers (p. 32) to a 5 mile section of the South Fork Flathead River downstream from Hungry Horse Dam, but no description of that river habitat or its use by bull trout is provided. Please provide a description of the South Fork Flathead River downstream of Hungry Horse Dam, including types of habitat, water quality status, and yearly, seasonal, daily, and hourly flows (and rates of change in flow and stage) provided by Hungry Horse Dam. Additionally, please provide a summary, with citations, of fish population assessments in the subject reach and a description of seasonal use by bull trout of the reach historically and since Hungry Horse Dam was constructed.

Section 2.1.5, Mid-Columbia Basin Including Chief Joseph Dam, Population Status. Some fish ladder count information exists for bull trout passing through fish ladders at Wells Dam. We are aware that during May, June, and July, 1998, between 60 and 80, 3 to 8 pound bull trout were

observed ascending the dam. Please provide data on the number of bull trout recorded, their sizes, and the dates when bull trout have been observed passing over Wells Dam in past years. Based on this information, please describe bull trout status in the mid-Columbia River reach downstream from Chief Joseph Dam.

Section 2.1.6, Clearwater River Status, Population Status - Past and Present. This section should include data on bull trout status and life forms in the North Fork Clearwater basin above the reservoir. Descriptions of the spawning and rearing areas, and their connectivity are needed to assess the effects on bull trout in this portion of the basin and effects of the operation of Dworshak.

Section 2.1.7, Lower Snake River and McNary Projects. General Comment: Numerical data for bull trout such as fish ladder counts, spawning populations should be provided where available so that the actual effect of various FCRPS operations can be better determined. Presently, it is difficult to assess the actual impact of various actions because data on bull trout numbers are lacking. For the Lower Snake River projects, actual bull trout passage data should be available from the adult fish counting stations. Please provide information for upstream migrating bull trout at the Lower Snake River projects and, if available, for downstream migrants.

Section 2.1.7, Lower Snake River and McNary Projects, Habitat Use. This section appears to contradict current understanding of bull trout status in the area. Please include known data and a description of migratory bull trout use of the Lower Snake River.

Section 2.1.7, Lower Snake River and McNary Projects, Population Status-Past and Present. The authors refer to Martin et al. 1992, as the most complete information on bull trout in this area. The final report associated with Martin's annual report, "Investigations of bull trout, steelhead trout, and spring chinook salmon interactions in southeast Washington streams," by Underwood et al. 1995, BPA contract DOE/BP-17758-2, supercedes and expands the annual report. Additional data on bull trout counts and distribution in the Lower Snake and Walla Walla Rivers are available from Glen Mendel, WDFW-Dayton Lab. Information from these sources should be used to further describe listed the status of species in this area.

Section 2.1.8, Lower Columbia River and Tributaries. Please provide a description of the actual records of bull trout passing through ladders in the lower Columbia River Dams. Although bull trout are believed to have been commonly classified as "other trout," the videos taken at the ladders should be reexamined to gain an accurate description of bull trout use and movement in this area. This in turn may add to an effects determination.

Section 2.2, Kootenai River White Sturgeon, Current Environmental Conditions, paragraph 4. This section should also describe the extent to which encroachment of structures on Kootenay Lake floodplain actually limits management of the lake to levels within the 1938 International Joint Commission Order and Libby Dam operations. Raising of Kootenay Lake's elevation has been proposed to improve the upstream migration of sturgeon. Please provide information

regarding the types of structures that have been built near Kootenay Lake and the lake elevations at which these structures are affected. We are seeking the range of stage increase, measured at both Queens Bay and Bonners Ferry, possible under existing conditions and representative of a range of water year scenarios.

Section 2.2, Kootenai River White Sturgeon. Please provide an estimate of the numbers of sturgeon eggs released and presumed to have been fertilized each year since experimental releases began in 1991. Please provide data and description of those naturally spawned sturgeon known to have resulted from these eggs, by age class.

Section 2.2, Kootenai River White Sturgeon. Please provide data and description on sturgeon eggs found in stomachs of predators in the Kootenai River, and associated data or reports supporting Carl Walters' predator-prey risk ratio hypothesis regarding the Kootenai River sturgeon.

Section 2.2, Kootenai River White Sturgeon. Please provide a description of the effect(s) of August reservoir releases on nutrients, and drift of forage out of Kootenay lake, and resulting effects on sturgeon and bull trout.

Section 3.0, Current Operations of the FCRPS. Additional information about the year round operation of the FCRPS is needed to evaluate the effect of present operations on bull trout and Kootenai River sturgeon. For example, operations of the various storage projects for power production and flood control during the winter and spring should be provided.

Section 3.1, Proposed Operations of the FCRPS, Libby, Albeni Falls, Hungry Horse. The Biological Assessment for Effects of FCRPS Operations on Columbia Basin Bull Trout and Kootenai River White Sturgeon (BA) refers (pp. 91, 92 and 93) to ramping rates for operation of Libby and Hungry Horse Dams that are described both as changes in dam discharge or river flow ("cfs") and as changes in river stage ("feet per hour" or "feet per 24 hours"). Please provide standard descriptions of the proposed ramping rates in one unit of measure (or both), preferably in cfs.

The BA refers (pp. 91 and 132) to power peaking operations causing rapid and severe river stage and flow changes in the Kootenai River below Libby Dam with an emphasis on dam discharges less than 10,000 cfs. According to the Corps of Engineers hourly discharge data for Libby Dam, winter power peaking operations during late November and December 1998 caused dam discharge changes in the range of 4,000 cfs to 27,000 cfs in a 4 hour period. Such dam discharge changes can cause dramatic changes in the river channel location of preferred and secure habitats of juvenile and subadult bull trout. These habitat changes (water depth and velocity) can force fish to move from an area of relative security from predation through or to another area less secure from predation (see request below for analysis of the manner in which the action may affect bull trout). Please provide a description of the proposed action (power peaking operations or other operations that cause rapid dam discharge changes), including typical and extreme hourly

rates of change for dam discharges and river stage, at all flows and seasons at Libby Dam. Please provide description of these levels of power peaking on levees and sturgeon habitat in Kootenai Valley, US and Canada, during summer and winter. Please include discussion on maintained and unmaintained portions of the Corps constructed 1961 levee system.

The BA refers (p. 93) to minimum flows and rates of Hungry Horse Dam discharge changes influencing the mainstem Flathead River. Please provide a description of seasonal, daily and hourly flow and stage changes for extreme and typical situations (proposed action) in the Flathead River due to operations at Hungry Horse Dam.

Section 3.1, Proposed Operation of the FCRPS, Flow Objectives. This section states that the FCRPS is operated to meet seasonal flow objectives. When possible, the FCRPS is actually operated to meet weekly flow objectives during the juvenile salmon migration season. This operation may affect the operation of the FCRPS for Kootenai River sturgeon or bull trout. Examples and discussion of weekly operation(s) of the FCRPS for salmon flow augmentation or spill during recent years should be provided.

Section 3.1, Proposed Operations, Libby, Revised Flood Control Operations. The VARQ operation has the potential to improve the probability of refilling Libby and Hungry Horse reservoirs which would benefit bull trout, Kootenai River sturgeon and listed salmon. This section should detail the steps needed to authorize implementation of VARQ operation at the Libby Project rather than only indicating that the action agencies will continue to evaluate the operation. As we understand, gaining approval from the Bureau of Reclamation for operation of Grand Coulee and maintenance of flows at Columbia Falls are necessary. Approval from Canada will also be needed before VARQ can be implemented. Please provide a description of the additional steps needed to implement VARQ operations at the Libby and/or Hungry Horse projects. Please do the same regarding implementation of the flood control measures and reservoir refill aspects of the Kootenai Integrated Rule Curves. These descriptions should be compared with existing flood control operations and refill probability.

Section 3.1, Project Operations, Libby, Additional Flow Capacity. The action agencies state that additional flow capacity is not a part of the proposed action because there are no Corps funds available to study or implement needed measures. The action agencies should provide information regarding the necessary steps to either install additional turbine capacity on the existing turbines 6, 7, & 8, or to install flow deflectors on the spillway. This description should include mechanisms such as may be available through Bonneville Power Administration authorities.

Section 3.1, Proposed Operations, Hungry Horse. The VARQ operation could also apply to the Hungry Horse Project. Such an operation could lead to a greater probability of reaching full pool elevation of 3560 feet to help maintain higher summer elevations and meet listed salmon flow augmentation needs. Please describe in detail the potential for VARQ operation at Hungry Horse and include the necessary steps required to implement this action.

Section 3.2, Project Descriptions. Gas supersaturation caused by spill is noted as a possible cause of mortality of bull trout. Excessively high levels of total dissolved gas have the potential to cause fish mortality at FCRPS projects. Total dissolved gas measurements are collected downstream of many of the projects in the Columbia River system. Total dissolved gas data are necessary to determine the actual levels reached in areas inhabited by bull trout so that effects of spill can be determined. Please provide a summary of total dissolved gas data for the FCRPS projects during periods of both voluntary and involuntary spill.

Section 3.2.1, Proposed Operations, Libby Dam. Please provide information on the volume of water that may be spilled from Libby Dam under full powerhouse release condition(s) without violating the present 110 percent total gas saturation standard.

Section 3.2.1, Proposed Operation, Libby Dam. Please provide any information recently developed on gas saturation standards and effects on salmonids elsewhere in the system that suggest a higher standard for Libby may be feasible with State/EPA concurrence.

Section 3.2.1, Project Descriptions, Libby Dam. Please describe the International Joint Commission constraints on the elevation of Kootenay Lake and the influence of these constraints on the operation of Libby Dam as this may affect recovery of listed fished including Kootenai River sturgeon.

Section 3.2.1, Project Description, Libby Dam. Please determine the extent of increased flow through or over Libby Dam that is necessary to recreate pre-impoundment conditions during the sturgeon spawning period with these peak stage reductions occurring in Kootenay Lake since Libby Dam became operational. Please provide description of depth and velocities that could be achieved in the Kootenai River at Bonners Ferry during May or June with water temperatures near 10 ^{o}C and with annual stage peaks averaging 2 meters higher (pre Libby Dam) at Queens Bay, or with 25-, 30-, 35-, 40-, and 50,000 cfs passing through and over Libby Dam.

Section 3.2.1, Project Descriptions, Libby Dam. Please provide information on the effectiveness of various gas abatement modification alternatives for the spillway at Libby Dam, and the extent of flow augmentation possible after modification yet within the established dissolved standard (110% saturation).

Section 3.2.1, Project Descriptions, Libby Dam. Please provide information on the frequency of availability of the spillway to supplement turbine releases during sturgeon operations; under (1) existing operations and flood rule curves, (2) VARQ, and (3) Kootenay Integrated Rule Curves. By availability we are referring to the frequency at which Lake Koocanusa elevations will be above 2409 feet when 10 ^{o}C water is achievable at Bonners Ferry.

Section 3.2.1, Project Descriptions, Libby Dam. Please provide data on the total capacity of the spillway at Libby Dam at various reservoir stages.

Section 3.2.1, Project Description, Libby Dam. Please provide information on all the steps necessary to install dissolved gas abatement structures on the spillway at Libby Dam, and existing funding opportunities available to the action agency(ies).

Section 3.2.1, Project Description, Libby Dam. Please provide information on the disposition of the generators in storage for existing turbine units 6, 7, or 8 at Libby Dam. How many complete generators remain?

Section 3.2.1, Project Description, Libby Dam. Please provide all feasibility reports and any associated documentation on the installation of existing generators on existing turbines 6, 7, and 8 at Libby Dam.

Section 3.2.1, Project Description, Libby Dam. Please provide information on the steps necessary to install generators on turbines 6, 7, and 8 at Libby Dam, and existing funding opportunities available to the action agency(ies).

Section 3.2.1, Project Description, Libby Dam. Please provide all available information on the constraints to the Libby-Arrow swap. Please provide information on any constraints precluding the federal action agencies from initiating the Libby-Arrow swap. Please provide information on the steps necessary to place the U.S. Entity in position to initiate requests for the Libby-Arrow swap.

Section 3.2.1, Project Description, Libby Dam. Please provide Libby project documentation showing the original authorized level(s) (event probability) of flood protection for property along the Kootenai River including farm lands in Kootenai Valley.

Section 3.2.1, Project Description, Libby Dam. Please provide information comparing and contrasting 1) existing flood control criteria, i.e. 200 year event protection; 2) originally authorized Libby Dam flood control criteria, ie. 85 or 100 year event protection; 3) the 1961 levee project alone; 4) Kootenai Integrated Rule Curves, i.e. 1998 draft sturgeon recovery plan version; 5) VARQ. These requested comparisons and contrasts should address (a) local flood protection, (b) system flood protection at The Dalles with and without adjustment at Grand Coulee, (c) reliability and extent of storage and release of water for sturgeon and bull trout flows, (d) refill frequency and date, and (e) effects on Kootenay Lake stage.

Section 3.2.1, Project Description, Libby Dam. Please provide a representative copy of the agreements and all associated documentation explaining the agreements and cash payments to cover Kootenai Valley farmer levee maintenance and pumping costs in perpetuity.

Section 3.2.1, Project Description, Libby Dam. Please provide project documentation of the Corps 1961 levee project in Kootenai Valley and any other information associated with flood thresholds such as the 1770 feet referenced on page 98. What authorized level (event probability)

of flood protection were these levees designed to achieve? What increased level of

protection has been provided with changes in Canadian operation of Kootenay Lake since Libby Dam and Duncan Dam became operational?

Section 3.2.1, Project Description, Libby Dam. Please provide all information describing the target "flood stage" elevation of 1764 feet identified on page 98. Please provide any information indicating that this 1764 foot target flood stage in any way limits sturgeon recovery flows to less than 1770 feet at Bonners Ferry.

Section 3.2.1, Project Description, Libby Dam. Please describe and provide all documentation on all measures taken to date to fulfill the reasonable and prudent alternative in the 1995 sturgeon biological opinion, to seek a means of releasing greater volumes of water from Libby Dam during sturgeon flows than the capacity of the five existing turbines. Please provide a description of the steps necessary to fulfill this reasonable and prudent alternative.

Section 3.2.1, Project Description, Libby Dam. Please describe the extent of storage operations above the flood control rule curves, (1) existing, (2) VARQ, and (3) Kootenai Integrated Rule Curves, which are necessary to assure (a) sturgeon recruitment flows, (b) bull trout minimum instream flows, and (c) while assuring a high probability of refill for anadromous fish conservation and other benefits.

Section 3.2.1, Project Description, Libby Dam. Please provide a description of how reliably the total annual volumes of water recommended in the draft sturgeon recovery plan "tiered approach" will be fulfilled under existing operations, VARQ, and the Kootenai Integrated Rule Curves.

Section 3.2.1, Project Description, Libby Dam. Please provide data on volumes of water which were specifically stored above flood control rule curves at Libby Dam for sturgeon recruitment in each year, 1995 through 1999.

Section 3.2.1, Project Description, Libby Dam. Please provide a description of the opportunities and constraints to maintenance of minimum powerhouse releases from Libby Dam for up to four weeks during January and February. This condition is believed important for migrating and spawning burbot in the lower Kootenai River. This transboundary burbot population is in a depressed condition in both the U.S. and Canada.

Section 3.2.4, Grand Coulee Dam, Hydrologic Data, second paragraph. This section indicates that Lake Roosevelt is refilled to elevation 1283 feet in September for resident fish needs. Please provide a description of the nature of the resident fish needs, the reasons for the specific elevation requirement, and if there are alternative means to meet these needs.

Section 3.2.4 and 3.2.5, Project Description, Chief Joseph and Grand Coulee Dams. Please provide daily water temperature records for July through September for Wells Dam for the period

of record, including pre-impoundment records. Similar water data are requested for this same period for Chief Joseph and Grand Coulee Dams. Please provide a description of the typical travel time(s) for water reaching Wells Dam after being released from Grand Coulee Dam, during the period of June through September.

Section 3.3.1, Columbia River Treaty. This section briefly describes the Columbia River Treaty and that it includes a process to coordinate flood control and hydropower operations. Treaty operations potentially can greatly influence operations of the FCRPS under a biological opinion for bull trout or Kootenai sturgeon. More detail is needed regarding operation of the FCRPS under the Columbia River Treaty to enable the Fish and Wildlife Service to determine what limitations the Treaty may impose on operations of projects for bull trout and Kootenai sturgeon. Please provide additional information regarding operations and flexibility under the Columbia River Treaty that may affect operations of FCRPS projects for bull trout or Kootenai River sturgeon. Please provide information on the steps necessary to allow the Service to have input into the annual negotiations to the extent of flexibility existing within this Treaty for the U.S. Entity.

Section 3.3.2, International Joint Commission. Please describe what flexibility exists within the 1938 IJC order for raising the stage of Kootenay Lake during sturgeon operations? How many vertical feet, measures at Bonners Ferry, could be achieved with Canadian cooperation during a dry (20th percentile), median, and wet (80th percentile) water year? Please provide information on the equivalent increases in flow augmentation through or over Libby Dam necessary to achieve these same effects on stage(s) at Bonners Ferry in absence of cooperation in adjusting Kootenay Lake stage.

Section 3.3.2, International Joint Commission. Greater detail is needed about the International Joint Commission, especially the 1938 Order on Kootenay Lake and other operations that could limit Libby Dam operations. Restrictions on Kootenay Lake elevations may limit the ability to manage these elevations and Libby Dam releases for sturgeon spawning. Please provide information about the 1938 Order on Kootenay Lake and operations of the International Joint Commission that relate to lake elevations.

Section 3.3.3, Regional Forum, Technical Management Team. The Dissolved Gas Team has been reorganized into the Water Quality Team (WQT) with responsibilities that encompass general water quality issues. The main areas of emphasis for the WQT are dissolved gas and water temperature. Recommendations from this team, particularly those for water temperature or total dissolved gas, may affect implementation of future biological opinion measures for bull trout and Kootenai sturgeon. Please provide information regarding water quality guidelines that have been developed for the FCRPS by the WQT. It may also be necessary to inform the WQT of this biological assessment and biological opinion to obtain its views and recommendation regarding water quality criteria for bull trout and Kootenai River sturgeon.

Section 4.1, Effects, Bull Trout. The BA refers (pp. 33, 133, 136, 137, 138, 140, 141, 143, 144,

and possibly other pages) to food habits of juvenile or subadult bull trout residing in the reservoirs or downstream rivers. Please provide a summary, with citations, of specific food habit

information, including presence and relative importance by biomass of insect and zooplankton food items, for the subject sizes of bull trout from these reservoir and river systems.

Section 4.1, Effects, Bull Trout. The BA refers (pp. 91, 93, 132, 134, 135, 136, 137, 141, 142, 144, and possibly other pages) to power peaking operations causing severe daily flow fluctuations in the Kootenai and Flathead Rivers (and presumably the South Fork Flathead River) that have a negative effect on bull trout by affecting bull trout food supplies (benthic and terrestrial prey production). The BA also states that rapid river stage fluctuations can cause stranding of small bull trout which normally orient to shallow near shore areas and are thus forced to move (or be stranded) as river levels change. The BA implies that predation (especially lake trout predation in the Flathead River, pp. 41, 46 and 142) is a problem for juvenile bull trout survival. However, the BA does not address the increased susceptibility to predation, caused by power peaking operations, of young bull trout as they are forced to move from secure cover as rapid changes in river flow and stage change the location of their preferred habitats. Please provide a description, with citations if available, of the manner in which operationally caused rapid river flow and stage fluctuations may affect juvenile and subadult bull trout (and their preferred habitats) through increased susceptibility to predation in the Kootenai and Flathead River systems.

Section 4.1.1, Kootenai River Basin. The BA refers (p.133) to Corps of Engineers' funding of Montana's Murray Springs Fish Hatchery, at which recent changes were made to provide for the rearing of bull trout. The BA further states that the effect of reservoir inundation on tributary streams (including bull trout spawning and rearing habitats) will continue to be handled through artificial propagation. Please provide a description of the proposed action (Federal funding) detailing plans for fish hatchery propagation and stocking of bull trout.

Section 4.1.1, Kootenai River Basin. The BA refers (pp. 133, 134 and 136) to entrainment of bull trout through the turbines at Libby Dam as not being a significant problem. This operational effect constitutes "take" under Section 9 of the Endangered Species Act. Please provide a description of the manner, including quantification (estimate) of the number of bull trout entrained, in which operations may affect listed bull trout through entrainment at Libby Dam.

Section 4.1.3, Pend Oreille Basin. The BA refers (p. 145) to trophic effects on Lake Pend Oreille bull trout by potentially lessening the available prey base through operation of Albeni Falls Dam. The BA refers (p. 57) to additional effects of competition among predators resulting from a depleted prey base potentially caused by dam operations. Please provide a description, with citations, of the manner in which operationally caused effects on the Lake Pend Oreille prey base may affect bull trout through competition and/or predation on juvenile bull trout.

Section 4.1.3, Pend Oreille Basin. Please provide daily maximum and minimum water temperature data for the period of record in the Pend Oreille River, both above and below Albeni

Falls Dam, both before and after commencement of operations of Albeni Falls Dam.

Section 4.1.3, Pend Oreille Basin. Please provide information on entrainment of bull trout at Albeni Falls Dam. Please provide data on the relative risk to bull trout or other representative salmonids passing through the existing facilities as operated at Albeni Falls Dam. Please provide a description of the manner in which the above requested data and analysis are considered in this effects analysis.

Section 4.1.3 Pend Oreille Basin. Please provide information on the status of migratory bull trout in the Pend Oreille River below Albeni Falls Dam both historical and present.

Section 4.1.3, Pend Oreille Basin. Please provide a description of the feasibility of providing upstream passage for bull trout at Albeni Falls Dam, and the steps needed to provide passage if deemed necessary.

Sections 4.1.4 and 4.1.5, Upper and Mid Columbia Basins. Please provide a description and modeling information regarding the potential extent to which water temperature may be lowered at Wells Dam if the various power houses at Grand Coulee were seasonally operated to provide cooler water during July through September in the vicinity of Wells Dam. Please provide a description of the manner and extent of effects of water temperature on bull trout presence and movement in the Columbia River near Wells Dam based on existing operations at Grand Coulee Dam.

Section 4.1.6, Clearwater River Basin. Losses due to entrainment at Dworshak Dam should be considered as a suppressing factor, as well as those listed. Please include any data establishing level of lake trout population in Dworshak Reservoir, and the probability of competition with bull trout.

Section 4.1.6. Clearwater River Basin. Please describe the risk and extent of bull trout losses through entrainment. The temporal relationship between the conditions created by the “channel” cut during drawdown and the seasonal use of the reservoir by bull trout should be explored. Since the authors have stated that this channel interferes with kokanee spawning, and that this has a bearing on bull trout, please examine this possible threat with appropriate data.

Section 4.1.7, Lower Snake and McNary Projects, Current Environmental Conditions. This section should consider the effects of the dams themselves, including potential turbine mortality, fall back during spill, migration delays, and gas supersaturation for the Snake projects, and the complete migration block at Dworshak Dam. The degree of entrainment and the effects of entrainment to individuals and the population should be described, both for Dworshak and the Snake River Dams. The suitability of the fishways for bull trout, and significance of the associated delays for bull trout should be described.

Section 4.1.7, Lower Snake River and McNary Projects. Please provide an evaluation of the effects of entrainment at the Snake River Dams on bull trout, as well as of the efficacy and

efficiency of the fishways for bull trout.

Section 4.2, Kootenai River White Sturgeon. Please describe how a handful of juvenile recruits compares with recovery goals in the 1998 draft recovery plan.

Section 4.2, Kootenai River White Sturgeon. Please describe what flows would be sufficient to recover the population.

The present information does not appear to support all of the effects calls of "not likely to adversely affect" bull trout. Some of these calls would benefit from additional supporting information and rationale. If you have additional information, please provide it.

The formal consultation process for the project will not begin until we receive all of the information or a statement explaining why that information cannot be made available. We will notify you when we receive this additional information; our notification letter will also outline the date within which formal consultation should be complete and the biological opinion delivered on the proposed action.

We understand that the proposed action(s) may change subsequent to pending decisions to conserve listed anadromous fishes involving portions of the FCRPS. Should this occur before consultation is complete, please advise, and supplement the subject biological assessment as necessary.

In the event that formal section 7 consultation on the FCRPS is not completed prior to water year 2000 storage decision deadlines, to address section 7(d) (irreversible or irretrievable commitment of resources)the Service recommends adoption of the flood control/refill components of VARQ or Kootenai Integrated Rule Curves for Libby Dam operation. The Service also recommends storage specifically for sturgeon and bull trout conservation flows and refill for subsequent anadromous fish conservation needs. Further, if necessary, inseason conservation recommendations for listed species may again be provided by the Service at appropriate decision points during water year 2000 to guide releases of stored water and other related actions.

If you have any questions or concerns about this consultation or the consultation process in general, please feel free to call me at 509-891-6839.

Sincerely,

Robert J. Hallock
Acting Field Supervisor

C NMFS, Portland

USFWS, Portland, Vancouver, Boise, Helena, Moses Lake, Ahsahka, Leavenworth, Kalispell