

Document #1

Forest Service Response to Formal Consultation Package

United States
Department of
Agriculture

Forest
Service

Wallowa-Whitman
National Forest

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Reply To: 2770

Date: May 15, 1997

Elaine Kleckner, Project Manager
Idaho Power Company
P.O. Box 70
Boise, Idaho 83707

Dear Elaine,

Attached are Forest Service comments on Idaho Power Company's Formal Consultation Package. Our review has focused primarily on the proposed studies in relation to National Forest System lands.

Please direct any questions to Kurt Wiedenmann, Planning Staff Officer, at 541-523-1296.

Sincerely,

/s/ Kurt Wiedenmann
WILLIAM R. GAST JR.
Acting Forest Supervisor

cc Walt Dortch, Mt. Baker-Snoqualmie NF
Dave Alexander, Payette NF
Jocelyn Somers, OGC
Alan Mitchnick, FERC

V. AFFECTED ENVIRONMENT AND SIGNIFICANT RESOURCES

5.1. General Description of the Locale

5.1.1. Study Area

This section describes the area of study as upstream of Brownlee Reservoir (RM 351.2) to the confluence of the Snake and Salmon Rivers (RM 188.2). As has been discussed in many of the work groups, the Forest Service contends that potential effects of the Hells Canyon Project include the entire length of the Wild and Scenic Snake River, i.e., to the Washington/Oregon state line (RM 176). The Forest Service recommends that the Wild and Scenic Snake River from RM 188.2 to RM 176 be included in the study area description.

Depending on the scale of analysis for a particular resource (such as aquatic), the study areas could expand to encompass entire watershed. This should be addressed in the description of the study area.

5.2. Water Use and Quality

5.2.2. Existing Water Quality

Page V-13, paragraph 3, line 4. Water temperature should also be a primary pollutant affecting water quality in the study area.

Page V-14, paragraph 3. Need to state the probable cause for the low dissolved oxygen levels. Was it due to low inflow to the reservoir, increased nutrients, increased water temperatures?

5.3. Aquatic Resources

5.3.1.2. Introduced Species (Historic Resident Fish Community)

Page V-18, paragraph 2, line 12. Need reference for the introduction of eastern brook trout, particularly since two specific streams are listed. Date for introductions would be helpful.

5.3.2.1. Historic Distribution (Historic Anadromous Fish Community)

Page V-19, paragraph 1, line 8. Add scientific name of coho salmon (O. kisutch). Protocol for scientific names in documents requires full scientific name of species after the first time the species is referred to in text.

Page V-19, paragraph 1, line 11. Add scientific name of steelhead (Oncorhynchus mykiss). Same comment as above.

Page V-22, paragraph 1, line 6. Add scientific name of common carp (Cyprinus carpio). Same comment as above.

5.3.3.2. Anadromous Fish (Current Fish Resources)

Page V-23, paragraph 1, line 10. The listing date for spring/summer chinook salmon was May 22, 1992. The spring/summer chinook salmon were not listed as endangered but relisted as threatened after review of data to support the threatened status. They are currently listed as threatened. Recommend an accuracy review of listing information.

Page V-23, paragraph 1, line 15. Bull trout are listed as "warranted but precluded" currently. Based on a recent court decision, on June 10, 1997 the bull trout will be proposed for listing as threatened under the Endangered Species Act. Snake River steelhead were proposed for listing as threatened on August 9, 1996. Recommend an accuracy review of listing information.

5.3.7. Threatened or Endangered Species

Page V-37, paragraph 2, lines 1, 2, and 7. Recommend an accuracy review of listing information.

5.4. Wildlife Resources

5.4.1. Historic Habitat Conditions and Wildlife Resources

Page V-47, paragraph 2. This section is very general and there may be opportunities to add specifics. For example, the discussion states that large herds of ungulates did not graze the area. What is considered a large herd?

5.4.2. Current Habitat Conditions

Pages V-50 through V-54. This section is very general. More specific Forest Service information is available from range transects, surveys, ecology plots, and some forthcoming riparian ecology plots to be located in the project area.

5.4.3. Current Wildlife Resources

Pages V-55 through V-134. There appears to be adequate information about the Idaho side of the project, but not about Oregon. The ODFW (Oregon Department of Fish and Wildlife), the BLM (Bureau of Land Management), and the Wallowa-Whitman National Forest may have information that could help fill this void.

5.4.3.10. Threatened and Endangered Species and Sensitive Species

Page V-104, paragraph 1. We believe the Nez Perce NF (National Forest) has also hacked (released) into the Hells Canyon area from Grave Point Lookout with the Peregrine Fund and IDFG (Idaho Department of Fish and Game). The HCNRA (Hells Canyon National Recreation Area) has also hacked in the upper Imnaha River drainage and individuals from that site could also be expected in the project area.

A successful nest with one fledged young was produced from the nest near Hells Canyon Creek. (See Akenson's final report 1996.)

Page V-104, paragraph 2. There are historic bald eagle nests at Wallowa Lake, but the existing nest site is along the Wallowa River, near the watershed for the town of Enterprise, OR. This nest was blown down in March of 1997, and the adults are in the process of rebuilding.

Page V-124, paragraph 1, line 4. The Wallowa-Whitman has records of some spotted bats within the project area in Oregon.

Page V-127, Insectivores. One specimen of Preble's shrew has been collected on the Forest near Sled Springs Guard Station. After several years of intense surveys on the Forest, no additional specimens have been found.

Page V-129, paragraph 1, line 3. Marten are also harvested in Northeastern Oregon.

5.5. Botanical Resources

5.5.1. Historical Botanical Resources

Page V-165. This section is very general. More specific Forest Service information is probably available from range transects, surveys, and ecology plots. Recommend using "Interpreting Long-Term Trends in the Blue Mountains Ecosystems from Repeat Photography" by Skovlin and Thomas 1995.

5.6. Cultural Resources

Pages V-187 through V-210. Section 5.6 presents an adequate synthesis of the prehistoric and historic cultural resources within the study area. A more indepth synthesis of Hells Canyon history and prehistory is desirable, but would be more appropriate in cultural resource overview. Several such overviews already exist but are outdated and should be rewritten.

This section is adequate to provide the reader with a very general understanding of the quality and quantity of the cultural resources which could potentially be affected by the relicensing of Hells Canyon Project.

5.7. Recreational Resources

Following are descriptions and locations of Payette NF recreation facilities and sites associated with the Three Hells Canyon Complex reservoirs. Recreational sites within the Wild and Scenic Snake River corridor are described in the Snake River Plan and FEIS.

Deep Creek Trail and Trailhead. The Forest Service, IDFG, and IPC cooperatively participated in a project to construct and improve a trail from Hells Canyon Dam to Deep Creek and the associated trailhead in 1989. The trail provides access via a series of metal stairways, landings, railing, and natural surfaces to the Idaho side of the Snake River below Hells Canyon Dam for anglers and other outdoor enthusiasts. The trailhead provides natural surface parking for 6-8 vehicles, a unisex vault toilet, and a information display kiosk. The facilities are managed and

maintained by the Forest Service. The Payette NF (National Forest) is presently evaluating minor improvements to enhance public service at this site and on the trail.

Eagle Bar. This is NFS (National Forest System) land managed and maintained by the Payette NF on the Idaho side of Hells Canyon Reservoir. At this time there are no facilities, but the site serves as an impromptu recreation camping site and as trailhead parking (2-5 vehicles) for the Deep Creek (#219) and Haley Ridge (#220) trails. The Deep Creek trail is approximately 11 miles long and the Haley Ridge is approximately 3.5 miles long. The Payette NF is presently evaluating future recreation enhancement opportunities to improve public facilities and service at this site and on the trails.

Kinney Creek Trail (#221) and Trailhead. This is NFS land managed and maintained by the Payette NF on the Idaho side of Hells Canyon Reservoir. The trailhead is a natural surface parking area for 2-3 vehicles and the trail is approximately 6 miles in length. The Payette NF is presently evaluating improvements to enhance public service at this site and on the trail.

Kinney Creek to Eckels Creek Trail (#222). This is NFS land managed and maintained for non-motorized use by the Payette NF on the Idaho side of Hells Canyon Reservoir between Kinney Creek Trail (#221) and Eckels Creek Trail (#223). The trail parallels the Hells Canyon Reservoir for about five miles and has many scenic over views of the reservoir and the surrounding canyon features. The Allison Creek Trail connects with this trail. The Payette National Forest is presently evaluating improvements to enhance public use of the trail.

Allison Creek Trail (#514) and Trailhead. This is NFS land managed and maintained by the Payette NF on the Idaho side of Hells Canyon Reservoir adjacent to the Big Bar area. The trailhead is a natural surface parking area for 1-2 vehicles and the trail is approximately 2 miles long. This trail is the access to the Red Fish Cave and other caves and is one of the major access points to the Flat Iron Rock Formation climbing area. The Payette National Forest is presently evaluating future recreation enhancement opportunities (trailhead and trail) in conjunction with any proposal at the Big Bar site.

Red Fish Cave. This is NFS land managed and maintained by the Payette NF on the Idaho side of Hells Canyon Reservoir adjacent to the Big Bar area. The cave is receiving more and more interest from the public to view and explore it. The Payette NF is presently evaluating future recreation enhancement opportunities (access and displays) at this site.

Flat Iron Rock Formation. This is NFS land managed and maintained by the Payette NF on the Idaho side of Hells Canyon Reservoir adjacent to the Big Bar area. This climbing area has become popular in the last five years. Both beginning and experienced climbers use the area. The Payette NF is presently evaluating future management needs and recreation opportunities in the area.

Big Bar. This is NFS land managed and maintained by the Payette NF on the Idaho side of Hells Canyon Reservoir adjacent to the Allison Creek Trailhead, Red Fish Cave, and the Flat Iron Rock Formation climbing area. The human-terraced and natural areas have limited facilities that include three unisex vault toilets, interpretative display kiosk, two gravel road ramps with docks, two known graves, and some IPC substation facilities. The area has a great deal of historic and prehistoric values, including American Indian and early homestead occupancy of the sites.

Impromptu camping occurs at various locations throughout the site, the campers are engaging in various activities at various locations throughout the canyon. During 1996, IPC worked cooperatively with the Forest Service to install the new vault toilets, improve roads, and establish erosion control. The Payette National Forest is presently evaluating future management needs and recreation enhancement opportunities (facilities and services) at this site and at surrounding sites.

Eckels Creek Dispersed Recreation Site and Trail (#223). This is NFS land managed and maintained by the Payette NF on the Idaho side of Hells Canyon Reservoir. At this time there are no facilities, but the site serves as an impromptu recreation camping site and as trailhead parking for the Eckels Creek trail (1-2 vehicles). The Eckels Creek trail is approximately 5.5 miles long. The Payette NF is presently evaluating future recreation enhancement opportunities (facilities and service) at this site and on the trail.

Limepoint Creek Trail (#224). This is NFS land managed and maintained for nonmotorized use by the Forest Service the Idaho side of Hells Canyon Reservoir between Eckels Creek Trail (#223) and Klenschmidt Summit. The trail parallels the Hells Canyon Reservoir for about five miles and has scenic overviews of the reservoir and the surrounding canyon features. The Payette NF is presently evaluating improvements to enhance public use of the trail.

Brownlee Creek Campground. This is NFS land managed and maintained by the Payette NF approximately eight miles east of the Brownlee Reservoir just off Idaho State Highway 71. The campground has a road system (unsafe haul road #044 bisects the site), vault toilets, water (hand pump), and 11 family units with tables, fire rings, and parking. The site is shady and gives relief from the canyon's hot sunny days. The site receives a great deal of use from people using the canyon's recreation opportunities during the day. The Payette NF is presently evaluating future management needs and recreation enhancement opportunities (facilities and service) at a safer site.

VII. EXISTING PROTECTION, MITIGATION AND ENHANCEMENT MEASURES

7.2. Terrestrial Resources

Pages VII-10 - VII-13. There have been no specific protection, mitigation, and enhancement measures that have directly benefited the Forest Service wildlife and/or botanical resources at this time.

7.2.5. Cooperative Studies with State and Federal Agencies

Page VII-14. We recommend that the Nez Perce NF also be cited as a cooperator on the "Validation of a Mountain Quail Survey Technique."

In addition to the studies discussed, the Forest Service is presently participating in surveying and monitoring for bats in Hells Canyon and in surveying for wolverine denning and denning habitat in the Seven Devils Mountains in Idaho and the Wallowa Mountains in Oregon.

The Forest Service has been very involved in many of the wildlife and botanical studies/monitoring efforts that have been occurring in Hells Canyon.

7.2.4. Cultural Resource Recovery Effort

Page VII-13. This section discusses IPC's participation/cooperation in the archaeological field school at Camp/Tryon Creeks in 1989. IPC's role in this project consisted of the contribution of \$10,000 for excavation of archaeological resources impacted by flow regulation activities.

This is but one of several documented, listed archaeological properties which continues to be affected by flow regulation below Hells Canyon Dam.

Dozens, perhaps hundreds of significant archaeological properties on NFS lands were forever altered and/or destroyed by the construction of Hells Canyon Dam and subsequent filling of Hells Canyon Reservoir. Dozens of additional sites below Hells Dam were subjected to extensive looting/site theft activities as a direct result of improved access provided by the IPC road from Oxbow to the dam.

The few archaeological excavations that occurred as a result of the construction of the dam were cursory salvage operations at best and/or were never completed. The report for the Hells Canyon Creek Village Site excavation, which now lies approximately 20m. beneath the Hells Canyon launch and visitor facility, was finally completed in the late 1980s. The cost was borne by the Forest Service. The McGraw Creek Village excavation report has yet to be completed. This report is in progress and will be paid for by the Forest Service.

Based on the extent of the resource and the adverse effects to cultural resources associated with both access and hydroelectric power operations, IPC's level of involvement in protection, mitigation, and enhancement has been minimal.

VIII. PROPOSED STUDIES

8.1 Aquatic Resources

General Comments

Page VIII-1 through 4. There needs to be consistency on utilization of spring/summer chinook salmon. Protocol is to use the term "spring/summer chinook salmon."

Creating artificial redds which will produce meaningful interpretation is very difficult. It is extremely speculative to determine the exact location that a spawning fish would choose. There is a great chance for error in site selection. Also a redd has numerous egg pockets. These pockets are arranged to take advantage of the hydraulic nature of the redd construction and design. This needs to be stated in the document.

List the assumption for each study to help assess the validity of techniques (methods) used and also document clear thought on objectives.

Document the species status on the State of Oregon list for each species present.

8.1.2. Pollutant Transport and Processing Study

Page VIII-5. This study needs to be conducted. However, there is no reference to conducting water flow assessments to track the pollutant transport. Include this in the methods since the assessment of flow characteristic into Brownlee Reservoir and the limnologic processing in the reservoir is necessary to assess the pollutant work described.

8.1.7. Evaluation of Anadromous Fish Potential within the Mainstem Snake River (RM 149 - RM 458) and Tributaries within the Hells Canyon Complex of Reservoirs.

Page VIII-39, paragraph 1, line 9. Add water quantity to limiting factors list. This will relate to the instream flow incremental methodology work proposed elsewhere in the document. Is water supply the same as water quantity?

Page VIII-46, paragraph 2. Habitat suitability in the tributaries should also be assessed using federal, state and tribal stream survey data for habitat quantity and quality. This will give a much stronger assessment of habitat suitability in conjunction with temperature.

Page VIII-47, paragraph 2. It appears that thermographs are only being placed at the mouths of tributaries. Assess the use of existing federal, state, and tribal water temperature monitoring and place additional thermographs throughout the tributaries to measure temperature for fish suitability.

Page VIII-49, paragraph 1. A main disadvantage of this type of sediment sampling is that as the containers are taken out of the bed, water bearing infiltrated sediment flows out of the containers. They can also be impacted by flood and ice flows and inundation by large sediment spills. The element of scour and fill needs to be addressed to determine bed movement. An alternate method

is the integrated method described by Lisle and Eads (1991) which uses a combination of infiltration bag, freeze tube, and scour chain.

8.2 Wildlife

Pages VIII-139 through 462.

Primary Issues of Concern

Many of the issues that have been identified are of interest to the Forest Service, some more than others. In general, the effects of the Hells Canyon Complex construction and maintenance on the varied species of the area may have predetermined some of our options and opportunities.

Below are the issues that are most significant to NFS lands and the species of which the Forest Service is in part responsible.

1. Determining the effects of original impoundments on the wildlife and botanical resources. How much habitat was lost and what were the effects on these resources? This would provide the historic condition with which existing condition could be compared to determine losses or gains in specific habitat and species. Examples: loss of low elevation winter range; loss of low elevation cliff habitat; loss of large stable, low elevation, complex riparian habitats, etc.
2. Impacts of water levels on reservoir and riverine habitats. What is the effect of the constant change on the existing habitats? e.g., water fluctuations on riparian species and habitats?
3. The effect of changing from a free-flowing riverine habitat to large, slack water impoundments.
4. Lack or loss of quality riparian habitats. Riparian habitats are very important to many species and are a major concern for all land manratv.7(e.g.c-0.0025 Twoarian loss o.5(p)0c e.o3J-p)05 Tc-raTD0

8. Habitat fragmentation caused by construction and operation of the project. There is the potential to cause habitat fragmentation for some species, some of which are of specific concern to land managers.
9. The loss of, or reduction in, some micro habitats from dewatering and flooding.
10. The potential effects of recreation on PETS species and other wildlife resources, e.g., increased recreation use tied to the impoundments, later season water flows below dams, and roads associated with the project.

General Studies

Many of these studies will result in information that the Forest Service will be able to incorporate in the Forest Plan compliance determination for the relicensing. A number of the studies are descriptive, or are surveys which will provide information, that can be used for future planning and land management decisions. The data could be useful in developing base lines that could be used for species or vegetative monitoring and/or become part of existing or future species recovery plans.

Following are general comments related to many of the studies:

1. How were the species chosen to be studied? Some endangered, threatened, and sensitive species were chosen, but other were not. What criteria was used? For example, why were Idaho ground squirrels chosen for additional survey efforts, but not the spotted frog, when both are considered candidate species by the USFWS (U. S. Fish and Wildlife Service)?
2. Is there going to be an opportunity for a specific review of detailed study proposals in the future? Most of the studies lack detailed study plans.
3. Are some of the studies going to be repeated and, if so, over what time period? This would help in determining trends and whether protection, mitigation, and enhancement measures are creating the desired outcomes.
4. Many of these studies could be broadened to include additional species, species/habitat relationships, spatial distribution, and an evaluation of the impacts from project operations.

The following comments refer to Studies 8.2.1. through 8.2.8.

1. These general descriptive studies will provide useful information on existing populations. They are not trend studies and will not yield information that could be used to determine the relative health of the studied species.
2. It appears that some of the studies are utilizing other studies to determine specific species information. We recommend combining some of the studies to reduce confusion.

3. We recommend including discussion on all PETS species that are known or suspected to occur in the project area. Some species are included in the study plans and others are not, without explanation as to why or why not.

8.2.3. A Description of the Raptor Community Nesting in Hells Canyon

Page VIII-156, Timetable. Is the short time period proposed for the surveys sufficient to determine nesting success?

8.2.4. A Description of the Amphibian and Reptile Community in Hells Canyon

Page VIII-161, paragraph 3. A more intense sampling effort may be required for the surveys that occur below Hells Canyon Dam.

The spatial distribution model development and testing is a great idea for these species and we would recommend this for other wildlife species/groups. Will the USFWS habitat evaluation procedure be used to evaluate habitat suitability?

8.2.5. A Description of the Bat Community in Hells Canyon

8.2.6. Distribution and Abundance of Wintering Bald Eagles in Hells Canyon

8.2.7. Distribution of Nest Sites and Productivity of Nesting Peregrine Falcons in the Hells Canyon Study Area.

Pages VIII-164 through 177. The Forest Service assumes that IPC will survey more sites than funded in our existing challenge cost share project. Otherwise a lot of the potential habitat will not be included and, consequently, not surveyed.

8.2.9. Mule Deer Population Surveys in Hells Canyon (VIII-214)

We recommend that you include a delineation of winter range for the entire project area.

8.2.10. Distribution and Abundance of Mountain Goats in Hells Canyon

Page VIII-221, State of Knowledge. The Forest Service believes that ODFW has confirmed through archaeological evidence that mountain goats were present in this part of Oregon.

Information on suitable habitat, distribution, potential and historic numbers would assist in determining potential numbers and release sites in both States.

8.2.11. Literature and Status Review of Big Game Species in Hells Canyon

Page VIII-224, State of Knowledge. Mule deer, mountain goats, black bears, and mountain lions are all covered at some level in other studies. It is unclear why specific studies are not being done for Rocky Mountain bighorn sheep and elk (two species of high interest to the Forest Service).

The Forest Service is very interested in receiving each progress report completed. None have been received to date.

8.2.12. Spring Distribution, Habitat Use, and Relative Abundance, of Upland Game Birds in Hells Canyon (VIII-229)

This project should yield some useful information. What about a follow-up winter study? What about mountain quail? They appear to have been left off the list.

8.2.13. Distribution and Abundance of Sage and Sharp-tailed Grouse in Hells Canyon (VIII-235)

We recommend this be incorporated into the previous study. Same comments as for the previous study.

Sharp-tailed grouse are no longer extinct in Oregon. The Forest Service has been working with ODFW and OSU (Oregon State University) to reintroduce them and there is a reproducing population near Enterprise, OR.

We have not yet received a copy of the draft technical report that was to be completed by October 1996.

8.2.14. Summer Survey of Waterfowl Broods in Hells Canyon (VIII-240)

Harlequin ducks, a species of special interest, should be included in the survey (although sightings are expected to be rare).

8.2.15. Use of Hells Canyon by Wintering Waterfowl (VIII-245)

Are there any progress reports available? (Project started in winter of 1994).

8.2.16. Distribution and Relative Abundance of Mammalian Carnivores and Furbearers in Hells Canyon (VIII-251)

We are doubtful that scent stations will adequately monitor all of these species. Change the study to reflect only those species adequately monitored by this technique and develop additional techniques for the other target species.

It is unclear to us how this technique will determine relative abundance.

The monitoring time period appears to be very short, considering that several of these species are very wide-ranging.

The Forest Service has not yet seen a copy of the progress report (completed in January 1996).

8.2.17. Survey of Wolverine Dens in the Seven Devils Mountains of Hells Canyon (VIII-258)

Because of weather and snow conditions, this project did not get completed this year. It is scheduled for next year. The total project area includes the Wallowa Mountains of Oregon.

8.2.18. Nongame Wildlife Habitat Measurements (VIII-264)

This study could be very important in determining impact of the project on species and habitats. If plots are taken above and below the project and used to determine what could have been available before construction, a picture of the changes that have occurred could be developed.

Techniques used and developed with this study could be of value for future Forest Service surveys and analysis.

8.2.22. Movements, Habitat Use, and Population Characteristics on Mountain Quail in West-Central Idaho: Big Canyon Creek (From Reese and Smasne 1996) (VIII-289)

This study has been completed; the Forest Service was a participant.

Mountain quail do exist in other areas of the HCNRA. The Forest Service, in cooperation with ODFW and OSU, has been releasing and monitoring habitat use of mountain quail in the area.

8.2.23. through 8.2.27. Water Fluctuations

The following comments address the five study proposals dealing with the effects of water level fluctuations (8.2.23. through 8.2.27.). It appears that these studies could be condensed into one or two studies as they address many of the same elements--just for different species.

- 1.Many issues were generated to address the effects of water level fluctuations on different species, much of which concentrated on potential habitat fragmentation or loss.
- 2.Water fluctuation studies and the developed protection, mitigation, and enhancement measures could influence operation and scheduling both on the impoundments and downstream releases.
- 3.It is not clear how specific species were identified for analysis and there is no rationale for not including others.
- 4.It appears some of the information for these studies will be coming from other, concurrent studies, which is efficient, but care must be taken that economics do not drive the need for effects information.

8.2.25. Effects of Water Level Fluctuations on Threatened and Endangered Species: Bald Eagle (VIII-340)

There are historic bald eagle nests at Wallowa. The existing nest was located on the Wallowa River, near the City of Enterprise watershed. The nest was blown down in March of 1997, but the adults are in the process of rebuilding.

8.2.28. Effects of Reservoir Icing on Big Game Populations (VIII-377)

We recommend that the effects of reservoirs on movement for all species be studied, not just big game.

8.2.30. Effects of Roads and Transmission Line Corridors on Wildlife Habitat: Threatened and Endangered Species and Species of Special Concern (VIII-403)

1. Consider combining 8.2.29. and 8.2.30. into one study. Both address the effects of roads and transmission line corridors.

2. Discuss the use of these roads by people and the associated effects.

8.2.31. Effects of Human Recreational Activities on Nesting Peregrine Falcons in the Hells Canyon Study Area

8.2.32. Effects of Human Recreational Activities on Wintering Bald Eagles in
the Reservoir Reaches of the Hells Canyon Study Area

8.2.33. Effects of Human Recreation Activities on the Distribution and Relative
Abundance of Townsend's Big-eared Bats and Spotted Bats in the
Unimpounded Reach of the Hells Canyon Study Area

Pages VIII-422 through 448. The following comments refer to the above study proposals (8.2.31.-8.2.33.).

1. These three studies are of interest to the Forest Service and pertinent to making project consistency determinations.

2. It is unclear how this list of study species was generated relative to additional PETS species.

3. After reviewing the proposals it is unclear exactly what types of recreation/human activities are to be evaluated (roads, boating, camping, campgrounds, etc.).

8.2.34. An Evaluation of Raptor Electrocution at Transmission Lines Associated with the Hells Canyon Project (VIII-449)

Since these species are of management interest to the Forest Service, we support the idea of evaluating the existing transmission lines to ensure they meet the safest standards for raptor protection. The Forest Service assumes that any lines that do not meet standards will quickly be corrected.

8.2.35. An Evaluation of Avian Collision with Transmission Lines Associated with the Hells Canyon Project (VIII-456)

Since these species are of management interest to the Forest Service, we support the idea of evaluating the existing transmission lines to ensure they meet the safest standards for avian species

protection. The Forest Service assumes that any lines that do not meet standards will will quickly be corrected.

It is not clear how IPC is going to determine biological significance of the effects.

8.3 Botanical Resources

8.3.1. Vegetation Description of Hells Canyon -- Weiser, Idaho to the Salmon River (VIII-510)

Information generated from this analysis will be helpful, but fairly general in nature. It would be advantageous to the Forest Service in making project consistency determinations to have descriptions from rim to rim and not just 0.5 mile from the impoundment shoreline and 0.25 from the river.

8.3.2. Inventory of Threatened, Endangered, and Sensitive Plant Species along the Snake River, Weiser, Idaho to Salmon River (VIII-530)

Information generated from this analysis will be helpful in making project consistency determinations. It would be advantageous to the Forest Service to have descriptions from rim to rim and not just 0.5 mile from the impoundment shoreline and 0.25 from the river.

Forest Service botanists should be involved in the prioritization of the survey areas.

8.3.3. Effects of Water Fluctuations on Noxious Weeds (VIII-539)

8.3.4. Effects of Road and Transmission Line Right-of-ways on Noxious Weeds (VIII-552)

These two studies are very important to the Forest Service. Noxious weeds are one of the major threats to the resources of the Hells Canyon area.

We recommend that noxious weed sites associated with the construction and operations of the project be surveyed, inventoried, and immediately controlled/ eradicated.

These studies survey very short distances of the reservoir, river, and roads (50 meters) and towers (100 meters). The potential for noxious weed spread is much greater than these distances. We recommend that the survey distances be expanded accordingly to respond to this concern.

8.3.5. Effects of Water Level Fluctuations on Botanical Resources (VIII-564)

8.3.7. Effects of Water Level Fluctuations Resulting from Operation of the Hells Canyon Complex upon Threatened, Endangered and Sensitive Plant Species (VIII-590)

Consider combining these two study proposals; they address many of the same elements--just for different species.

Many issues were generated to address the effects of water level fluctuations on different species, much of which concentrated on potential habitat fragmentation or loss.

These water fluctuation studies and the developed protection, mitigation, and enhancement measures could influence operation and scheduling both on the impoundments and downstream releases.

8.3.6. Effects of Road and Transmission Line Rights-of-way on Botanical Resources (VIII-577)

8.3.8. Effects of Road and Transmission Line Rights-of-way on Threatened, Endangered, and Sensitive Plant Species (VIII-604)

We recommend that these two studies be combined since both are measuring the effects of roads and transmission line corridors.

8.4 Historical and Archaeological

Pages VIII-627 through 684. The proposed studies for archaeological and historic resources identified in the consultation package were not developed as part of the collaborative process. However, they are largely driven by the issues identified by the collaborative team.

Comments Common to All Cultural Resource Study Plans

The desired future conditions and standards/guidelines for cultural resources per the HCNRA CMP (Comprehensive Management Plan), the Wild and Scenic Snake River Plan (the Snake River Plan), and those identified in IPC's study plans, are driven by Section 106 of the National Historic Preservation Act, as amended, 1992 (36 CFR 800) and the National Register of Historic Places, etc. Since the Forest Service and IPC are regulated by the same Federal laws and regulations with respect to cultural resources, a high degree of consistency exists between the two planning efforts.

The "state of knowledge" sections for all cultural resource study plans appear to reflect a thorough understanding of relevant scientific/archaeological literature, research, and resources.

The "methods" sections for cultural resource study plans reflect state of the art archaeological field methods and techniques.

8.4.1. Archaeological Inventories-Hells Canyon Complex Transmission Lines (VIII-627)

The issues and problem statement are consistent with Forest Service issues and concerns as they pertain to possible adverse effects to cultural resources from the construction, operation, and maintenance of transmission lines and access roads.

This study links to the following terrestrial issues:

- Cultural and natural resource inventories (FERC requirement)

- Cumulative impacts to discovered and undiscovered archaeological properties from construction and operation/maintenance of powerline corridors

This study proposes to inventory archaeological resources along primary transmission lines and access roads. In the majority of cases, no cultural resource surveys were conducted in advance of the construction of transmission line and access roads. Therefore, the degree to which prehistoric cultural resources were affected by construction, and/or continue to be impacted by the operation and maintenance of these facilities, on national forest lands is unknown. This study as proposed will provide that information and increase our understanding of the resource overall.

8.4.2. Archaeological Inventories-Brownlee, Oxbow, and Hells Canyon Reservoir (VIII-634)

This particular study links to the following terrestrial issues:

- Cultural and natural resource inventories (FERC requirements)
- Potential impacts to discovered and previously undiscovered archaeological properties due to fluctuation of reservoir levels and wave action
- Potential effects of recreation on cultural, botanical, and wildlife resources (e.g., bald eagles, cultural sites, threatened and endangered plant species)

Portions of the HCNRA lie within the Hells Canyon Reservoir. Like the free-flowing sections of the Snake River within Hells Canyon, the reservoir areas are thought to contain high densities of prehistoric, archaeological resources. However, prior to dam construction and subsequent filling, the reservoir areas received only cursory cultural resource surveys. Therefore, the degree to which archaeological resources may be affected by reservoir operations (i.e., wave action, erosion, and recreational use) on NFS lands, are unknown. This proposed study would answer those questions and could greatly increase our understanding of prehistoric site settlement within Hells Canyon facilitating consistency determinations for relicensing.

8.4.3. Archaeological Inventories-Below Hells Canyon Dam (VIII-641)

This study is linked to the following terrestrial issues which are consistent with Forest Service issues and concerns:

Cultural and natural resource inventories (FERC requirement)

Potential Impacts downstream to listed archaeological properties from flow regulation activities

Potential effects of recreation on cultural, botanical, and wildlife resources (i.e., bald eagles, cultural sites, threatened and endangered plant species)

Subsequent to the creation of the HCNRA, intensive archaeological surveys were conducted in the Wild and Scenic Snake River corridor resulting in the identification of hundreds of significant archaeological properties. However, most of these surveys took place over 16 years ago and many of the sites have been revisited infrequently, if at all. This proposed study, even though it will be limited to a sample survey, will provide invaluable data relative to the effects of flow regulation and erosion as well as recreational user impacts.

8.4.4. Euro-Asian Oral History Studies-Hells Canyon, Oxbow, and Brownlee Area (VIII-648)

8.4.5. Native American Oral History Studies-Hells Canyon, Oxbow, and Brownlee Area (VIII-653)

While these studies would probably provide much needed historical data/ information, it is not associated with any Forest Service issues relative to relicensing.

Although some oral histories have been collected for Hells Canyon, much remains to be done. Those conducted to-date are limited to white Americans; no American Indian oral histories have been collected. These proposed studies will provide invaluable data which will both improve our understanding of Hells Canyon history and prehistory and will greatly enhance our ability to interpret the resource for the public, in addition to facilitating consistency determinations for relicensing. Oral history interviews with relevant American Indian groups could also reveal information which would help the Forest Service more effectively address American Indian traditional use issues.

8.4.6. Reconnaissance Inventory of Existing Project Structure: Brownlee, Oxbow, and Hells Canyon Dam (VIII-659)

This particular study involves buildings and/or structures used to generate hydroelectric power. These facilities, which include the dams, are the property of IPC. Information/data generated could have limited relevance in providing material for interpretive purposes at sites such as Hells Canyon Launch or Big Bar.

8.4.7. Effects of Reservoir Water Level Fluctuations on Cultural Resources (VIII-664)

This study links to the following terrestrial issues:

- Potential impacts to discovered and previously undiscovered archaeological properties due to fluctuation of reservoir levels and wave action

This study would attempt to determine whether or not reservoir fluctuations have an adverse effect on cultural resources. Much of the Oregon portion of Hells Canyon Reservoir borders national forest lands within the HCNRA. As mentioned under study 8.4.2., prehistoric site densities within the reservoir area are expected to be high, yet the current level of inventory above

Hells Canyon Dam is currently inadequate to make this determination. In order to assess the effects of water level fluctuations, more intensive inventories within the reservoir will have to be

conducted. Such inventories would be beneficial to the Forest Service only if they involved significant portions of NFS lands bordering the pool.

8.4.8. Effects of Water Level Fluctuations on Cultural Resources (VIII-674)

The issues identified under this section do not clearly reflect the seriousness of the adverse impacts to cultural resources from flow regulation. The Forest Service recommends that the issue read: "Numerous, significant archaeological resources down stream from Hells Canyon Dam have been adversely impacted by flow regulation activities. How can these impacts be mitigated?"

As for the problem statement, the question should not be whether flow regulation activities adversely affect cultural resources; rather, the question should be: "How can the adverse impacts to cultural resources from flow regulation activities be mitigated?"

Of all the proposed studies discussed above, this particular investigation will contribute the least amount of new information relative to flow regulation impacts to cultural resources. Numerous investigations conducted in the free-flowing portions of dammed river systems such as the Colorado have clearly demonstrated the adverse impacts to cultural resources from flow regulation.

As a direct result of the operation of Hells Canyon Dam, so much sediment has been removed from the Snake River within IPC's study area (Hells Canyon Dam to the mouth of the Salmon River) that many, if not most, of the prehistoric sites within the 500 year flood plain no longer exist. The damage to the few sites which remain at the river's edge is blatantly obvious as is the disappearance of most of the sand bars below the dam. To study the effects of flow regulation on cultural resources while the remnants of the few remaining river edge sites erode away would be irresponsible to say the least.

8.5 Other Terrestrial Resources

8.5.1. Effects of Water Level Fluctuations on Soil Resources (VIII-690)

Many of the issues were generated to address the effects of water level fluctuations on different species, much of which concentrated on potential habitat fragmentation or loss. The soil resource will determine the potential vegetative species that could occur. The potential lack of established riparian vegetation due to water level fluctuations is a major issue tied to the project.

These water fluctuation studies and the developed protection, mitigation, and enhancement measures could influence operation and scheduling both on the impoundments and downstream releases.

8.5.2. Effects of Road and Transmission Line Rights-of-ways on Soil Resources (VIII-700)

We recommend that existing problem areas be corrected as soon as they have been identified.

8.5.3. Influences of Land Management Practices on Terrestrial Resources on IPC Non-Project Lands (VIII-708)

Since this study is specifically related to IPC lands, there will be little direct information available specific to Forest Service activities. Much of the information will be useful for cumulative effects analysis or watershed analysis relative to project consistency determinations.

8.5.4. Influences of Recreation Activities on Terrestrial Resources (VIII-718)

While the information generated from a study such as this will be useful to the Forest Service, it appears this is somewhat redundant considering the other studies evaluating recreational effects.

8.6. Recreation

In general, a review of the proposed recreation studies 8.6.1 through 8.6.14 indicates a need to increase the type of information collected from recreation users of the Hells Canyon Complex reservoirs and Snake River. Additional visitor use information is necessary to accurately predict changes in recreational use that may occur as a result of changes in operations, protection, enhancement, or mitigation measures for the Hells Canyon Complex.

Changes in recreation use may affect the Wallowa-Whitman and Payette NFs' ability to protect and enhance the ORVs (outstandingly remarkable values) for the Wild and Scenic Snake River and the Imnaha Wild and Scenic River, and resource values for the HCNRA and Payette uplands, and standards and guidelines from the Wallowa-Whitman and Payette Forest Plans for other specific issues identified by the collaborative team and the Forest Service relative to aquatic, wildlife, botanical, historical and archeological, terrestrial, recreation, and aesthetics resources in the Wallowa-Whitman and Payette National Forest Relicensing Project Overview (Overview, May 1997).

Forest Plans for the Wallowa-Whitman and Payette, the Snake River Plan, the pending HCNRA CMP, the pending FEIS/ROD for the ICBEMP (Interior Columbia Basin Ecosystem Management Project), and future Forest Plan amendments define the desired future conditions for the recreation program in the project area. Recreation goals and objectives that help achieve desired future conditions can be found in those management plans and amendments.

Recreation Opportunity Spectrum (ROS)

The Forest Service uses a recreation opportunity spectrum (ROS) to establish planning criteria, generate objectives for recreation, evaluate public issues, integrate management concerns, anticipate recreation needs and demands, and coordinate management objectives. ROS is based upon managing for a range of recreation experiences ranging from primitive to urban. Analyses indicate that since the establishment of the HCNRA in 1975, the ROS settings on the river have been moving away from the primitive end of the spectrum.

Wallowa-Whitman

ROS settings for the Wild and Scenic Snake River corridor can be found in tables III-1 (wild river) and III-2 (scenic river) of the FEIS for the Snake River Plan.

Payette

That land in the Road 454 corridor from the reservoir's water line to approximately 1/4 of a mile east of the road is roaded natural (RN), and the land beyond the RN area to the top of the ridge is semi-primitive nonmotorized (SPNM).

8.6.1. A Review of Past Recreation Issues and Use in Hells Canyon Complex (Page VIII-732)

This study will have value to the Forest Service to the extent that it provides new information responsive to issues R15, R16, R27, R30, R31, R31, and the proposed induced use issue described below.

Issues

All of the listed issues are potentially Forest Service-related issues to the extent that they apply to NFS lands.

R2. and R4. Monitoring of use trends and management of increasing use is an issue from our perspective because there is specific wording in both the HCNRA Act and the Wild and Scenic Rivers Act requiring that use levels be managed. Adjacent to the reservoir, the issue is the need to protect resources, plan for the construction and maintenance of adequate recreational developments and opportunities, and to coordinate with other land managers. Where lands designated as wilderness are affected by increasing use, wilderness values and the wilderness resource must be considered.

R14. At present, wildlife viewing sites are not a significant issue within the study area.

R15. Seasonal closures of access area is an issue both from the perspective of sites being open or closed, as well as seasonally varying maintenance levels.

R16. At present, only limited areas are at risk of not being available to the public. These areas include private land within the HCNRA and limited portions of the HCNRA where the rights-of-way on trails/roads are not clearly established.

R27. The river corridor within Hells Canyon is a National Historic District. Additionally, heritage resources are an ORV within the Wild and Scenic Snake River corridor in Hells Canyon. Historic interpretation is an important issue within the study area.

R28. Please add clarifying language regarding type and level of marketing used and provide reviewers a chance to comment.

R30. The Forest Service is actively looking for opportunities to manage public resources in cooperative ventures with interested partners. This is a major issue.

R31. Operation and maintenance costs of facilities are a significant issue for constructed facilities and for dispersed, undeveloped high use areas.

R32. It is essential that the study area extend to the north boundary of the HCNRA. From a Forest Service perspective, our issues, sites, and information all include land extending to our northern boundary.

R34. Recommendations to other managing entities are at issue because ecosystem management, recreation management, visual resource management all transcend landownership boundaries.

Issues That Need to be Added

1. The project has induced higher levels of use at sites adjacent to the reservoir and along the free-flowing river through the enhancement of attractions and the improvement of roads, and by mitigating flow extremes on the river below the dam. Information about induced use will be useful in the identification and selection of appropriate potential protection, mitigation, and enhancement recommendations.

2. Effects upon wilderness values and the wilderness resource (Congressionally-designated wilderness areas).

Page VIII-732, last paragraph. Please substitute the word "affecting" for "stressing" in the problem statement in order to broaden the statement to include changes in the recreation opportunity due to increased use. Address use numbers, types of use, and locations above and below the boat launch site.

Page VIII-733, paragraph 1. Include site-specific locations with the past use numbers and user types. Insert the following additional goal: "An additional goal of this study will be to estimate the amount of use that would be present if there were no project and the amount that has been induced by the construction and operation of the project."

Conclude this section with: "Desired future resource goals for specific land areas will be based upon the plans (River Plan, CMP) applicable to that area."

Page VIII-733, paragraph 2. Adjust to address use numbers, user types, and locations. Insert: "In addition to a literature review, new analysis will be conducted to estimate project induced use."

In the last line of the abstract, insert: "and the river corridor from Hells Canyon Dam to the northern boundary of the HCNRA". This addition will make the abstract consistent with the river mileage reference in the immediately following introduction.

Page VIII-734, last paragraph. Insert: "A study design for the induced use portion of this study will be developed by an independent consultant or IPC staff, in cooperation with the Recreation and Aesthetic Resources Work Group and other appropriate entities. Input will be solicited

directly from all land management authorities (federal, state, county) located within the study boundary." The study needs to address use numbers, user types, and locations.

Insert after Hells Canyon Complex: "and the river corridor to the northern boundary of the HCNRA."

Page VIII-735, paragraph 3. Insert: "A consultant with demonstrated skills in developing innovative methods and/or experience in conducting studies on induced use may be selected to conduct the induced use portion of the study."

8.6.2. A Description of Current and Potential Recreation Use and Users

Associated with Reservoirs within Hells Canyon Complex (VIII-737)

This study will have value to the Forest Service to the extent that it provides new information responsive to all the issues in the following section.

Issues

All of the listed issues are potentially Forest Service-related issues to the extent that they apply to NFS lands.

R1. and R2. Monitoring of use trends and management of increasing use is an issue for the Forest Service because of the need to protect resources, plan for the construction and maintenance of adequate recreational developments and opportunities, and to coordinate with other land management entities.

Recreation use patterns associated with the reservoirs are of concern because any changes to operations or protection, enhancement, and mitigation measures for the Hells Canyon Complex may affect reservoir values and use. Changes may cause recreationists to alter patterns of use either onto NFS lands or displace them from the Forest. Changes in use patterns may affect ORVs, uplands, and other specific resource issues identified above (Overview, May 1997).

Potential changes to operations or protection, enhancement, and mitigation measures for the Hells Canyon Complex may affect operations of special use permits administered by the Forest for outfitters and guides on the Snake River, and uplands of the HCNRA and Payette NF. Changes in patterns of recreation use may also affect outfitter and guides operations. We recommend identifying patterns of recreation use associated with outfitters and guides as a separate component of current and potential users associated with the reservoir.

R15. Seasonal closures of access areas is an issue both from the perspective of sites being open or closed, as well as seasonally varying maintenance levels.

R16. At present, only limited areas are at risk of not being available to the public. These areas include limited portions of the Payette and/or HCNRA where the rights-of- way on trails/roads accessing recreation attractions are not clearly established.

R34. Recommendations to other managing entities is an issue because ecosystem management, recreation management, visual resource management all transcend landownership boundaries.

Issues That Need to be Added

1. The project has displaced some users because of the conversion of a free-flowing river to a reservoir and, in a separate action, by increasing use levels adjacent to the reservoir.
2. Recommend adding a related issue that addresses the potential changes to socio-economic impacts to communities and surrounding regions associated with recreation use on NFS lands. Any changes in patterns of recreation use, including impacts to outfitters and guides, may cause changes in surrounding communities and regions that could cause cumulative effects to recreation use on NFS lands. This information would be necessary to assess the effects to the ORVs, uplands, and other specific resource issues identified above.
3. What are current and projected management and/or development needs at Big Bar?
4. What are the mix of current (through 2000) recreation activities taking place on NFS lands within the project?
5. How many users and what types of use are attracted to NFS lands, because of the reservoirs and/or IPC facilities?

R27. Historic interpretation is an issue relevant to this study and should be added.

Page VIII-737. Please substitute the word "affecting" for "stressing" in the problem statement in order to broaden the statement to include changes in the recreation opportunity due to increased use. Include locations as well as use numbers and user types.

Page VIII-738, paragraph 1. Include locations as well as use numbers and user types. Conclude "Desired Future Resource Goals" with: "Desired future resource goals for specific land areas will be based upon the plans (River Plan, CMP) applicable to that area."

Page VIII-738, Abstract. Insert: "In addition, a new analysis will be conducted to estimate use displaced by the project."

Page VIII-739, State of Knowledge. Consider information and studies available from the Idaho Department of Labor, the Oregon Employment Department, Oregon and Idaho tourism divisions, and the USFWS. Also consider data on use patterns from the Wallowa-Whitman and Payette National Forests on numbers, types and distribution of recreational use, demographics, and opinions of users for the area surrounding and adjacent to the Hells Canyon Complex.

Page VIII-739, Methods. Insert: "A study design for the displaced use portion of this study will be developed by an independent consultant or IPC staff, in cooperation with the Recreation and Aesthetic Resources Work Group and other appropriate entities. Input will be solicited directly from all land management authorities (federal, state, county) located within the study boundary."

The proposed surveys should include questions to gain information about origin of visitors, patterns of access including portal communities and route of travel, primary and secondary destinations, other points of interest to the visitor, length of stay, season of use, type of activities (including big game, small game, waterfowl, and upland bird hunting), fishing (warm water and cold water), participation rate, expenditures by type (meals, lodging, fees, etc.), where goods and services are purchased, type of accommodations used (dispersed or developed sites, hotels, RV parks, etc.), mode of transportation, number in party, satisfaction of visit, age, use of outfitter and guides, etc. The information collected should be detailed enough to compile visitor profiles according to type of use.

We recommend that the proposed methodology be adequate to determine growth rates in use by activity types and to identify shifts in recreational demand and expectations.

Although Study 10.2.3. has been identified as a preliminary need with further development of the proposal to occur over the next year, it would be easier to collect the additional visitor use data at the same time as other proposed surveys referenced in the recreation studies. The visitor profiles are critical to reliably predicting effects to recreation use, outfitter and guides, communities, and surrounding regions as a result of changes in operations, protection, enhancement, and mitigation measures for the Hells Canyon Complex. These predictions are necessary to assess effects to ORVs, uplands, and other specific resource issues identified (Overview, May 1997).

Page VIII-740, Statement of Capabilities. Insert: "A consultant with demonstrated skills in developing innovative methods and/or experience in conducting studies on displaced use may be selected to conduct the displaced use portion of the study."

8.6.3. A Description of Current and Potential Use and Users Associated with the Snake River within the HCNRA (VIII-742)

This study will have value to the Forest Service to the extent that it provides new information responsive to any and all of the cited issues. Many of the same comments from 8.6.2 pertain to this study.

Issues

All of the listed issues are potentially Forest Service-related issues to the extent that they apply to NFS lands.

R2. and R4. Monitoring of use trends and management of increasing use are issues for the Forest Service because there is specific wording in both the HCNRA Act and the Wild and Scenic Rivers Act requiring that use levels be managed. Additionally, this issue is a central focus in the Snake River Plan, as amended.

R14. At present, wildlife viewing sites are not a significant issue within the study area.

R15. Seasonal closures of access areas is an issue both from the perspective of sites being open or closed, as well as seasonally varying maintenance levels.

R16. At present, only limited areas are at risk of not being available to the public. These areas include private land within the HCNRA and limited portions of the HCNRA where the rights-of-way on trails/roads are not clearly established.

R27. The river corridor within Hells Canyon is a National Historic District. Additionally, heritage resources are an ORV within the Wild and Scenic Snake River corridor in Hells Canyon. Historic interpretation is an important issue within the study area.

R34. Recommendations to other managing entities is an issue because ecosystem management, recreation management, and visual resource management all transcend landownership boundaries.

Issues that Need to be Added

1. This is an alternate location for the issue of induced use to be studied. This issue has been proposed for addition to Study 8.6.1. The project has induced higher levels of use at sites adjacent to the reservoir and along the free-flowing river through the enhancement of attractions, improvement of roads, and by mitigating flow extremes on river below the dam.
2. Maintain road access to NFS lands and facilities. There needs to be guaranteed public access to the Hells Canyon Visitor Center.
3. Commitments outlined in the October 31, 1961 agreement between IPC and the Forest Service relative to trail rights-of-way must be fulfilled.

Existing Issues that Apply to This Study

R30. Cooperative opportunities among concerned entities is a major issue. The Forest Service is actively looking for opportunities to manage public resources in a cooperative ventures with interested partners.

R31. Operation and maintenance costs of facilities are a significant issue for constructed facilities and for dispersed, undeveloped high use areas.

Page VIII-742. Please substitute the word "affecting" for "stressing" in the problem statement in order to broaden the statement to include changes in the recreation opportunity due to increased use.

Page VIII-742, Desired Future Resource Goals. Insert the following additional goal: "An additional goal of this study will be to estimate the amount of use that would be present if there were no project and the amount that has been induced by the construction and operation of the project."

Conclude this section with: "Desired future resource goals for specific land areas will be based upon the plans (River Plan, CMP) applicable to that area."

Page VIII-743, Abstract. Insert: "In addition to a literature review, new analysis will be conducted to estimate project induced use".

Page VIII-744, Methods. Insert: "A study design for the induced use portion of this study will be developed by an independent consultant or IPC staff, in cooperation with the Recreation and Aesthetic Resources Work Group and other appropriate entities. Input will be solicited directly from all land management authorities (federal, state, county) located within the study boundary."

Insert after Hells Canyon Complex: "and the river corridor to the northern boundary of the HCNRA."

Page VIII-745, Statement of Capabilities. Insert: "A consultant with demonstrated skills in developing innovative methods and/or experience in conducting studies on induced use may be selected to conduct the induced use portion of the study."

8.6.4. An Investigation into the Current and Potential Physical and Social Conflicts Associated with Recreational Use and Recreational Carrying Capacity of the Hells Canyon Complex (VIII-746)

This study will have value to the Forest Service.

Issues

All of the listed issues are potentially Forest Service-related issues to the extent that they apply to NFS lands. Specific comments on selected issues are as follows:

R3. and R4. Monitoring of use trends and management of increasing use are issues for the Forest Service because there is specific wording in both the HCNRA Act and the Wild and Scenic Rivers Act requiring that use levels be managed. Adjacent to the reservoir, this is an issue from our perspective because of the need to protect resources, plan for the construction and maintenance of adequate recreational developments and opportunities, and coordinate with other land management entities. Where lands designated as wilderness are affected by increasing use, wilderness values and the wilderness resource must be considered.

R3. Expand this issue to identify where people go when they feel crowded, congestion in sites, etc. This is relevant to assessing the Forest's ability to protect and enhance ORVs, uplands, and other specific resource issues (Overview, May 1997).

R11. The range of strategies appropriate for responding to user expectations and desires relating to access varies according to the management strategy for each land area. Congressional direction must be considered along with user input. See the land management plans appropriate to each land area.

R20. The depletion of beaches below Hells Canyon Dam has both biological and recreational sub-issues. Recreational sub-issues include: visuals, number and quality of camping opportunities, displacement of camping from beaches to grassy benches and associated vegetation and site maintenance issues, boat mooring/beaching opportunities, and day use of beaches (lunch stops, swimming areas, volleyball opportunities, etc.) See terrestrial studies for biological sub-issues.

R23. The issue regarding "improved" facilities versus dispersed sites needs to be explored in the context of existing laws (wilderness, wild and scenic river, and recreation area designations) and associated regulations and plans. For example, the Wild and Scenic River Act requires that the free-flowing river below Hells Canyon Dam be administered as a "vestige of primitive America".

R15. Seasonal closures of access areas is an issue both from the perspective of sites being open or closed, as well as seasonally varying maintenance levels.

R27. Historic interpretation is an important issue within the study area. The river corridor within Hells Canyon is a National Historic District. Also, heritage resources are an ORV within the Wild and Scenic Snake River corridor in Hells Canyon.

R30. The Forest Service is actively looking for opportunities to manage public resources in a cooperative ventures with interested partners. Cooperative opportunities among concerned entities is a major issue.

R31. Operation and maintenance costs of facilities are a significant issue for constructed facilities and for dispersed, undeveloped high use areas.

R32. It is essential that the study area extend to the northern boundary of the HCNRA. Forest Service issues, sites, and information all include land extending to our northern boundary.

R34. Recommendations to other managing entities is an issue because ecosystem management, recreation management, visual resource management all transcend land ownership boundaries.

Issues that Need to be Added

1. Effects of increasing use upon wilderness values and the wilderness resource (Congressionally-designated wilderness areas).
2. The project itself has induced higher levels of use at sites adjacent to the reservoir and along the free-flowing river through the enhancement of attractions, improvement of roads, and by mitigating flow extremes on river below the dam.

Page VIII-747. Recommended problem statement: Current recreation use numbers and some user types are affecting the social environment and experience of other recreation users in the HCRC.

Page VIII-747, Desired Future Resource Goals. Add the following goal: "An additional goal of this study will be to estimate the amount of use that would be present if there were no project and the amount that has been induced by the construction and operation of the project."

Deal with the social (recreational carrying capacity) described in the title.

Conclude this section with: "Desired future resource goals for specific land areas will be based upon the plans (River Plan, CMP) applicable to that area."

Page VIII-747, Abstract. In the last line of the abstract, insert: "and the river corridor from Hells Canyon Dam to the northern boundary of the HCNRA". This addition will make the abstract consistent with the river mileage reference in the immediately following introduction.

Address the social (recreational carrying capacity) and social conflicts, not the physical conditions.

Page VIII-749, State of Knowledge. Same recommendations as Study 8.6.2, but include survey questions about how visitors would react to crowding, congestion, both reservoir and river-related. Where are they displaced to? Do they travel onto NFS lands or different locations on NFS lands? Do they leave the area completely?

Page VIII-750, Methods. Insert: "A study design for the induced use portion of this study will be developed by an independent consultant or IPC staff, in cooperation with the Recreation and Aesthetic Resources Work Group and other appropriate entities. Input will be solicited directly from all land management authorities (federal, state, county) located within the study boundary."

Insert after Hells Canyon Complex: "and the river corridor to the northern boundary of the HCNRA."

8.6.5. A Description of the Impacts of Reservoir Water Level Fluctuations Within the Hells Canyon Complex on Navigation, Recreational Opportunities, Amount of Recreational Use and Quality of Recreational Experience (VIII-753)

This study will have value to the Forest Service in relationship to the land management adjacent to the reservoir. This study has a companion study for the river corridor.

Issues

All of the listed issues are potentially Forest Service-related issues to the extent that they apply to NFS lands.

R26. Recommend considering how these businesses are affected by changes in spending patterns as a result of changes in recreation use due to water level fluctuations. This issue relates to assessing patterns of use and numbers of users accessing more or less of the HCNRA as a result of changes in recreational opportunities. These changes may affect the Forest's ability to protect and enhance ORVs, uplands, and other specific resource issues identified above (Overview, May 1997).

P24R. Identify effects to outfitters and guides as separate components from private recreational use for this issue. This distinction would allow assessing cumulative changes in economies and potential changes in recreation use on or adjacent to NFS lands which may affect ORVs, uplands, and other specific resource issues identified above (Overview, May 1997).

Page VIII-755. Problem Statement. Recommended problem statement: Project operation (reservoir and river water levels) impact recreation use in numbers (specific and total) and user types in the HCRC.

Page VIII-755, Desired Future Resource Goals. Needs change to addresses the title changes (numbers and type impacted on both the reservoirs and river).

Page VIII-756, paragraph 2, line 8. It is misleading to refer to recreation as a "non-marketed commodity". It is marketed by a significant number of outfitters and other entities operating within the Hells Canyon Complex, including IPC at its campgrounds. Please consider alternate language such "amenity-based commodities".

Page VIII-757, Methods. Insert: "Input will be solicited directly from all land management authorities (federal, state, county) located within the study boundary."

In visitor surveys, include questions about how people use outfitter and guides, how much they spend, where they obtain services, the length of trip, the type of activity they participate in with outfitter and guides, the quality and satisfaction of their trip, the reasons they use outfitters and guides, etc.

8.6.6. A Description of Project-Induced River Water Level Fluctuations Within the HCNRA on Navigation, Recreational Opportunities, Amount of Recreational Use and Quality of Recreational Experience (VIII-759)

Use 8.6.5 instead of 8.6.6 for the bases of the following study or change 8.6.6 to match the intent of 8.6.5.

This study will have high value to the Forest Service in relationship to the River's recreational and biological resources. This study has a companion study for the reservoir complex.

Issues

All of the listed issues are potentially Forest Service-related issues. Comments to selected issues follow:

R20. See discussions in related studies for details about the breadth of the issue regarding depletion of beaches below Hells Canyon Dam.

R26. River outfitters have diverse flow needs but, in general, are more adaptable to high flows than self-outfitted recreationists.

P1A. The issue on water level fluctuations and impacts on fish, insects, crayfish, and recreation (floating) should be modified to include both floating and powerboating.

P2R. This issue should be modified to include "hazards to moored powerboats from overnight flow fluctuations."

Page VIII-761, Desired Future Resource Goals. Insert "(navigation)al safety," after navigation in line two of this section.

Page VIII-762, paragraph 2, lines 5-6. It is misleading to refer to recreation as a "non-marketed commodity". It is marketed by a significant number of outfitters and other entities operating within the Hells Canyon Complex, including IPC at its campgrounds. Please consider alternate language such "amenity-based commodities".

Page VIII-763, Methods. Insert: "Input will be solicited directly from all land management authorities (federal, state, county) located within the study boundary."

8.6.7. An Inventory of Existing Dispersed Recreational Access Sites Associated with the Reservoirs within Hells Canyon Complex, Recreational Use at those Sites, and Attitudes about Dispersed Access (VIII-765)

This study will have value to the Forest Service.

We recommend this study be modified to include: an inventory of the location and physical condition of existing and potential recreational sites (developed and dispersed, trailheads, boat launches, picnic sites, interpretive sites, roads, trails, etc.) and facilities, access points and rights-of-ways (roads, trails, etc.), and public/private conflict points (fences, gates, etc.) associated with the reservoirs in the HCC.

The Payette National Forest has the following facilities that will need to be inventoried.

There is dispersed camping at Eagle Bar, and the site serves as a trailhead for Deep Creek (#219) and Haley Ridge (#220) trails. The Deep Creek Trail is approximately 11 miles long and the Haley Ridge is about 3.5 miles.

The trailhead for the Kinney Creek Trail is a natural surface parking area and the trail is approximately six miles long. The Kinney Creek to Eckels Creek Trail (#222) is managed and maintained for nonmotorized use between Kinney Creek Trail (#221) and Eckels Creek Trail (#223). The Allison Creek Trail (two miles long) connects with this trail and provides access to the Red Fish Cave and other caves. The cave is receiving more and more interest.

Big Bar, adjacent to the Allison Creek Trailhead, Red Fish Cave, and the Flat Iron Rock Formation Climbing Area, has limited facilities. The area has a great deal of historic and prehistoric values, including American Indian and early homestead occupancy of the sites. The Flat Iron Rock Formation Climbing Area has become popular in the last five years.

There are no facilities at the Eckels Creek Dispersed Recreation Site and Trail (#223), but the site is used for impromptu recreation camping and provides trailhead parking for the Eckels Creek Trail (5.5 miles).

Limepoint Creek Trail (#224), managed and maintained for nonmotorized use between Eckels Creek Trail (#223) and Klenschmidt Summit, parallels the Hells Canyon Reservoir for about five miles.

Brownlee Creek Campground is approximately eight miles east of the Brownlee Reservoir just off Idaho State Highway 71. The campground has 11 camp sites.

Issues

All of the listed issues are potentially Forest Service-related issues.

Issues that Need to be Added

1. Identification of wilderness sites. (The effects of reservoir use upon wilderness sites has not been quantified or evaluated. These effects could include conflicting uses, noise, congestion, impacts to native vegetation, human waste deposition, etc.)
2. Identification of current and potential wilderness users.
3. Attitudes and preferences of users of wilderness sites affected by the Hells Canyon Complex. (It is expected that wilderness users may have different values, attitudes, and expectations than nonwilderness users.)

Page VIII-766, Problem Statement. Recommended change: Existing recreational sites and facilities are in poor physical condition, because of recreation use numbers, natural forces, and other man caused forces.

Page VIII-766, Desired Future Resource Goal. Recommended change: Identify the location and physical conditions, at all sites and facilities, so that they can be analyzed with recreational use information gathered from concurrent studies.

Page VIII-766, Abstract. Recommended change: Address location and physical condition of recreations sites and facilities, as addressed in the title.

Page VIII-767, State of Knowledge. Please insert: "There is comprehensive information available concerning present and potential access, facilities, conditions, and rights-of-way for Hells Canyon Wilderness, including wilderness legislation, a Wallowa-Whitman National Forest Management Plan, and a Hells Canyon Comprehensive Management Plan."

Page VIII-768, Methods. Insert: "Input will be solicited directly from all land management authorities (federal, state, county) located within the study boundary."

Add questions to surveys about visitors willingness-to-pay for dispersed sites, values associated with dispersed use, activities associated with dispersed use, and potential responses to crowding and congestion at dispersed sites. This information is necessary to understand visitors potential responses to changes in operations, protection, enhancement, and mitigation measures that may affect ORVs, uplands, and other specific resource issues identified above (Overview, May 1997).

8.6.8. An Inventory of Existing River Related Dispersed Recreational Access Sites within the HCNRA, Recreational Use at those Sites, and Attitudes about Dispersed Access (VIII-771)

We recommend changing this study to include an inventory of the location and physical condition of existing and potential (river-related) recreational sites, facilities, and access points in the HCNRA.

This study may have value to the Forest Service. Virtually all of the issues are addressed in the recent "Wild and Scenic Snake River Recreation Management Plan" and associated environmental analyses.

Issues

All of the listed issues are Forest Service-related issues.

Page VIII-772, Problem Statement. Recommended change: Existing recreational sites and facilities are in sub-optimal physical condition, because of recreation use numbers, natural forces, and other human-caused forces.

It is not completely clear whether all dispersed sites and access sites are being inventoried or just dispersed sites used for access. It is recommended that this language be clarified and that all dispersed use sites be inventoried.

Page VIII-772, Desired Future Resource Goals. Recommended change: Identify the location and physical conditions, at all sites and facilities, so that they can be analyzed with recreational use information gathered from concurrent studies.

Page VIII-773, Methods. Add questions to surveys about visitors willingness- to-pay for dispersed sites, values associated with dispersed use, activities associated with dispersed use, and potential responses to crowding and congestion at dispersed sites. This information is necessary to understand visitors potential responses to changes in operations, protection, enhancement, and mitigation measures that may affect ORVs, uplands, and other specific resource issues identified above (Overview, May 1997).

8.6.9. An Evaluation of Current (1997-2000) and Potential Recreational Use at Major Developed Sites on Reservoirs within the Hells Canyon (VIII-775)

8.6.9 will be covered in (8.6.1 and 2) if the recommended changes are implemented.

This study will have limited value to the Forest Service. Currently, we have no sites at a high enough development level to be included in this study.

Issues

Few of the listed issues are Forest Service-related issues.

P18R. Primitive campgrounds should be developed/provided.

To the extent that HCNRA visitors camp adjacent to the reservoir on the night prior to a river or wilderness trip, there is a limited linkage to the Forest Service. Because these users are equipped

to camp in undeveloped sites within the HCNRA, they are potential users of additional primitive campgrounds.

Issues that Need to be Added

1. What specific design elements (facilities) will meet the public's desired present and future needs and expectations to insure a quality recreation experience at Big Bar?
2. What facilities will maintain and/or enhance the public's recreation activities and/or experiences on NFS lands within the project?
3. The Brownlee Creek Campground must be relocated in the future to eliminate the unsafe road location that bisects the campground. What specific management and design elements (facilities) will meet the public's desired future needs and expectations to insure a quality recreation experience at the new site?

Page VIII-773, Methods. Add questions to surveys about visitors willingness- to-pay for dispersed sites, values associated with dispersed use, activities associated with dispersed use, and potential responses to crowding and congestion at dispersed sites. This information is necessary to understand visitors potential responses to changes in operations, protection, enhancement, and mitigation measures that may affect ORVs, uplands, and other specific resource issues identified above (Overview, May 1997).

8.6.10. An Evaluation of Users' Attitudes about and Expectations of Major Developed Sites and Facilities Associated with Reservoirs with the Hells Canyon Complex (VIII-781)

This study will have limited value to the Forest Service. Currently, the Forest Service has no sites at a high enough development level to be included in this study.

We recommend changing this study to include an evaluation of users' desires and expectations related to planning, design elements, management, and operations and maintenance at recreation sites and facilities associated with the HCRC.

Issues

Few of the listed issues are Forest Service-related issues..

P18R. Primitive camp grounds should be developed/provided.

To the extent that HCNRA visitors camp adjacent to the reservoir on the night prior to a river or wilderness trip, there is a limited linkage to the Forest Service. Because these users are equipped to camp in undeveloped sites within the the HCNRA, they are potential users of additional primitive campgrounds.

Page VIII-782, Problem Statement. Recommended change: Existing recreational sites and facilities are in poor physical condition, because of recreation use numbers, natural forces, and other human-caused forces.

Page VIII-782, Desired Future Resource Goals. Recommended change: Address need for information that will assist in planning, design, management, and operations and maintenance of sites and facilities.

Page VIII-784, Methods. Same recommendations as 8.6.7, but relevant to questions about expectations of developed sites and facilities and other services needed (e.g., hotels, primitive campgrounds, etc.).

8.6.11. Description of Current Angling Use, Users and Angling Results at Reservoirs within the Hells Canyon Complex (VIII-787)

This study will not have a direct value to the Forest Service. An indirect value will be better information about angling visitors to the Hells Canyon Complex area. Many of the comments in 8.6.2 are relevant to this study.

Issues

Few of the listed issues are Forest Service-related issues.

P31R. Flow levels on river below Hells Canyon (Dam?) adversely affecting fishing. This issue is more appropriately addressed in 8.6.12.

8.6.12. Description of Current Angling Use Associated with the Snake River within the HCNRA (VIII-792)

This study will be a useful addition to existing information about angling use with the HCNRA. Many of the comments in 8.6.2 are also relevant to this study.

Issues

All of the listed issues are Forest Service-related issues to the extent they affect habitat conditions and/or the quality and quantity of recreation opportunity.

8.6.13. A Description of Hunting Pressure within the Hells Canyon Complex (VIII-796)

This study will be a useful addition to existing information about hunting use within the Hells Canyon Complex. However, it is not clear whether this study includes the river corridor from Hells Canyon Dam to the HCNRA northern boundary. Please clarify this situation to include the river corridor to the northern boundary. All comments that follow assume the study extends to the HCNRA northern boundary. Many of the comments in 8.6.2 are relevant to this study.

Issues

All of the listed issues are Forest Service-related issues to the extent they affect habitat conditions and/or the quality and quantity of recreation opportunity.

8.7 Land Managment

- Endangered Species Act of 1973, as amended
- Hells Canyon National Recreation Act of 1975
- National Forest Management Act of 1976
- American Indian Religious Freedom Act of 1978
- Archaeological Resources Protection Act of 1979, as amended
- Americans with Disabilities Act of 1990

Federal Regulations and Forest Service Policy

The management of public and private lands within the HCNRA is guided through federal regulations. These regulations will provide guidance in the relicensing process:

- 36 CFR 292, Subpart F - Hells Canyon National Recreation Area - Federal Lands, 1994
- 36 CFR 292, Subpart E - Hells Canyon National Recreation Area - Private Lands, 1994
- 36 CFR 297, Subpart A - Water Resources Projects

Forest Service policy, as disclosed in the manual and handbook system, will provide further guidance in the relicensing process.

Land and Resource Management Plans

Land and resource management plans (forest plans) provide management guidance through their established goals, desired future conditions, objectives, standards, guidelines, and monitoring requirements. Forest plans implement legislative intent and provide the foundation for 4(e) articles the Forest Service will stipulate to the FERC for the new license.

Wallowa-Whitman Land and Resource Management Plan, 1990

This forest plan has the following amendments which will provide guidance in the relicensing process:

- Noxious Weed Management Plan, Forest Plan Amendment 4, 1992
- Imnaha Wild and Scenic River Management Plan, Forest Plan Amendment 6, 1993
- Prescribed Natural Fire Program, Forest Plan Amendment 9, 1994
- Wild and Scenic Snake River Recreation Management Plan, Forest Plan Amendments 12 and 20, 1994 and 1996.
- Comprehensive Management Plan for the Hells Canyon National Recreation Area, anticipated amendment in July, 1997.

Payette National Forest Land and Resource Management Plan, 1988

This Forest Plan has had no amendments pertinent to the relicensing process.

Both the Wallowa-Whitman and Payette Forest Plans have been amended by the Chief of the Forest Service as follows:

- Interim Strategies for Managing Anadromous Fish-Producing Watersheds on Federal Lands in Eastern Oregon and Washington, Idaho, and Portions of California, 1995 (PACFISH)
- Inland Native Fish Strategy Environmental Strategy, 1995 (INFISH)

This management direction is intended to be interim until the completion of the ICBEMP, which upon issuance of an FEIS (final EIS) and ROD (record of decision), will provide long-term management direction for the affected lands within this relicensing process.

Site-Specific Management Plans

Both the Wallowa-Whitman and Payette NFs have management plans and related direction for specific locations or resources that are being implemented under the umbrella of the Forest Plans. The following is a list of those plans that will provide guidance in the relicensing process:

- Site plans for administrative and recreation sites within the Wild and Scenic Snake River corridor
- Hells Canyon National Recreation Area Interpretive Plan
- Trails Management Plans
- Hells Canyon Scenic Byway Plan
- Cave Management Plans
- Allotment Management Plans for Domestic Livestock Grazing
- Peregrine Falcon Nest Site Plans
- Bighorn Sheep Management Plan
- MacFarlane's four-o'clock Recovery Plan

Page VIII-807, Methods. The Forest Service is encouraged that IPC is considering the watershed analysis approach. We intend to discuss this approach with the FERC. We are committed to using the watershed analysis approach as a mid-level planning tool to guide land management actions and decisions. As an indication of Forest Service and BLM commitment to watershed analysis, the soon-to-be-released DEIS (draft EIS) for the ICBEMP will have proposed direction requiring the completion of watershed analysis prior to implementation of activities requiring an EA or EIS. The study area for this relicensing has been identified by the DEIS preferred alternative as an area requiring watershed analysis prior to implementation of activities requiring an EA or EIS. It is uncertain at this point how this proposed management direction (anticipated to be final in 1998) could influence Forest Service responsibilities in this relicensing process.

The process outlined in the Federal Guide for Watershed Analysis provides a systematic way to understand and organize ecosystem information. The watershed analysis approach would allow responsible federal agencies to estimate the direct, indirect, and cumulative effects of the Hells Canyon Project. This is particularly important since the NFS lands border almost 50 percent of the river miles influenced by the project. The watershed analysis process could be a valuable procedure for IPC to validate the need for individual study proposals and the appropriate geographic scale. This should ultimately facilitate greater efficiency and cost savings in the implementation and integration of the study plans.

A noted concern for this relicensing process is the potentially vast scale and the magnitude of the acres involved in watershed analysis. Broad scale information is available from the ICBEMP

scientific assessment, BPA, the pending CMP FEIS, and the Endangered Species Act Section 7 Watershed Assessments for listed species, that would greatly facilitate and expedite the watershed analysis process.

An important element of watershed analysis that needs to be understood is the flexibility of the process. Not all resource issues need to be analyzed at the watershed scale. As an example, if a work group feels that the scale of a particular issue, such as recreation or noxious weeds, is narrowly confined to the river corridor, it is appropriate to analyze it at that scale. The benefit of the watershed analysis process is to synthesize and interpret the information in relation to all the resources and between watersheds within the project area. This would facilitate reasoned and informed recommendations for protection, mitigation, or enhancement.

The geographic scale of each proposed study will need to be considered relative to taking a watershed analysis approach. Appropriate scale of the studies will be critical to determining the appropriate direct, indirect, and cumulative effects analysis for the Forest Service to make consistency determinations of the project.

Page VIII-811, Deliverables. We recommend that the analysis, relative to NFS lands, be synthesized and interpreted on a watershed scale to facilitate our determination of project consistency with Forest Plans.

8.8 Aesthetics

8.8.1. An Evaluation of the Aesthetic Resources of Hells Canyon (VIII-813)

This study will be useful to the Forest Service in carrying out its visual management responsibilities under the HCNRA Act, the Wild and Scenic Rivers Act, Forest Plans, the HCNRA CMP, and the Snake River Plan, and in making project consistency determinations.

Issues

All of the listed issues are Forest Service-related issues to the extent they affect visual resources on NFS lands.

R35. This issue needs to include the concern about the appearance of project facilities, including transmission lines, meeting scenic integrity objectives of the prospective recreation management unit identified in the CMP FEIS and related direction in the Snake River Plan.

R36. Views from recreation facilities, heavily used dispersed sites, travel routes and scenic overlooks on the HCNRA must be conserved and preserved in accordance with the amended CMP direction.

Views from recreation facilities, heavily used dispersed sites, travel routes and scenic overlooks within the wild and scenic river corridor on the HCNRA must be protected and enhanced in accordance with the Snake River Plan and amended CMP direction.

R39. When considering the effects of transportation facilities on aesthetic quality (dust, proposed facilities), please address these concerns: designing new road construction to minimize visual impacts and ensuring that existing roads do not detract from surrounding landscapes. Consider roads, exposed cuts, skyline profiles, etc.

Issues that Need to be Added

1. Do facilities have a public vs. private appearance (e.g., reservoir; house docks, RV pads, stairs, structures, etc.) and are they welcoming to the public?
2. Appropriate color and form of recreation facilities in relation to the landscape.
3. Effects of flow levels upon river aesthetics. Consider such factors as the existence of algal lines on rocks, vegetation growth patterns in comparison to natural-appearing growth patterns on rivers with natural flow patterns, effect of beach erosion upon aesthetics.

Please amend the problem statement by inserting these items in the factor list for the river below Hells Canyon Dam:

- 4) What are the aesthetic impacts to existing scenic integrity, existing landscape character, and sense of place? (These items are defined and addressed in the pending HCNRA CMP FEIS).
- 5) concern levels, context, scenic class **** DON'T UNDERSTAND ****
- 6) What are the aesthetic impacts to scenic integrity objectives?

Page VIII-817, State of the Knowledge. The VQO (visual quality objectives) system for Forest Service lands has been replaced by Agriculture Handbook Number 701, "Landscape Aesthetics, A Handbook for Scenery Management". The pending CMP FEIS for the HCNRA contains new management direction relative to scenery management.

Page VIII-817, Methods. The Forest Service recommends that scenery analysis, relative to national forest service lands, be conducted within the framework of the new scenery management system, as noted above, to facilitate our determination of project consistency with Forest Plans.

X. ECONOMIC CONSIDERATIONS

A review of the economic considerations, 10.2.1 through 10.2.6, indicates a need for additional work to identify relevant questions, specificity, and relationship to other study plans. All of the economic study plans would be valuable to the Forest Service for assessing the relationship between quantified and nonquantified costs and benefits associated with the Hells Canyon Complex. This information would be important to consider in evaluating the relationship between proposed protection, mitigation, and enhancement measures and the public's willingness-to-pay and ability-to-pay (power rates) to protect environmental resources on NFS lands particularly relevant to protecting and enhancing ORVs, uplands, and other specific resource issues (Overview, May 1997). These studies have been proposed as preliminary studies that are not required for completion, and would be developed more fully over the next year. The Forest Service recommends that Study 10.2.3. be completed to provide baseline information about socio-economic and environmental conditions in order to adequately address changes from modified operations, including protection, enhancement, and mitigation measures, dam removals, or decommissioning.

These recommended changes are key to addressing "tradeoffs... between hydroelectric power, nonmarketed commodities such as recreation, ... and salmon recovery efforts" (VIII-756). These tradeoffs are equally important to consider in assessing the Wallowa-Whitman and Payette NFs' ability to meet the goals, standards, and guidelines in the Forest Plan in addition to the key issues identified in the Wallowa-Whitman and Payette NF Project Overview, May 1997.

The Idaho Power Consultation Package states that:

"The following studies are preliminary attempts to capture analysis that may need to be performed to address the questions raised by the Resource Work Groups and the public. They are not currently proposed as studies by the IPC. However, IPC will consider them, once they are fully developed, as part of the comprehensive analysis requested by the Collaborative Team. During the next year, the Economics Work Group will fully develop these descriptions and, in coordination with IPC, perform the related feasibility analyses".
(X-2)

Because the studies identified under "Economic Considerations", pages X-1 through X-10 do not fully identify issues, problem statements, desired future condition goals, abstracts, introductions, state of knowledge, and methods, the expressed problem statements, goals, and timelines have been reviewed relative to addressing the issues listed in the Wallowa-Whitman and Payette NF Relicensing Project Overview (May, 1997).

10.2. Problem Statements, Research Questions, and Goals

10.2.1. Removal or Decommissioning of Hells Canyon Complex Dams

Page X-3, Problem Statement

We recommend adding the following questions:

1. What are the direct, indirect, and cumulative effects to recreational opportunities and uses identified in Study 8.6.2 (Current and Potential Recreation Use and Users) from removing one or more of the Hells Canyon Complex dams?
2. What are the direct, indirect, and cumulative effects to recreational opportunities and uses identified in Study 8.6.2 (Current and Potential Recreation Use and Users) from decommissioning one or more of the Hells Canyon Complex dams?
3. What are the direct, indirect, and cumulative effects to the ORVs for the Wild and Scenic Snake River and the Imnaha River, the HCNRA uplands, and other specific resource issues identified for aquatic, wildlife, botanical, historical, archeological, terrestrial, recreation, and aesthetics resources? (Overview, May 1997).

This study is not necessary to the Forest Service, unless serious consideration is given to decommissioning or removal of any of the Hells Canyon Complex dams. It would be vital to assessing the Forest Services ability to protect and enhance ORVs, uplands, and other specific resource issues (Overview, May 1997).

10.2.2. Current Operating Constraints for the Hells Canyon Complex

Page X-5, Problem Statement

We recommend adding the following questions:

1. What are the nonquantifiable costs and benefits associated with current operating constraints?
2. What are the nonquantifiable costs and benefits associated with current constraints?
3. What constraints are legal, regulatory, or voluntary in nature, and what are the associated costs and benefits with each category of constraint?

This study would be of value to the Forest Service to distinguish existing costs and benefits associated with current operating constraints from potential costs and benefits from protection, mitigation, and enhancement measures identified for relicensing. The results of this study would be valuable to assessing tradeoffs between hydroelectric power production and environmental resources, particularly relevant to protecting ORVs, uplands, and other specific resource issues (Overview, May 1997).

10.2.3. Socio-economic and Environmental Impacts Related to the Hells Canyon Complex

Page X-6, Problem Statement

We recommend adding the following questions:

- 1.What are the activities that produce socio-economic impacts associated with the Hells Canyon Complex? What economic sectors are affected?
- 2.What are the direct, indirect, and induced effects (employment, income, sales, etc.) related to these activities?
- 3.What is the scope of the effect within broad scale, mid-scale, and fine scale resolutions?
- 4.What communities are within each region of influence?
- 5.What is the reliance of the regions of influence on the socio-economic effects from the Hells Canyon Complex? What is the reliance of individual communities within these regions?

The study would be value to the Forest Service in determining how proposed protection, mitigation, and enhancement measures would affect these socio-economic linkages. This information would be useful in assessing tradeoffs between hydroelectric power production and environmental resources, particularly relevant to protecting and enhancing ORVs, uplands, and other specific resource issues (Overview, May 1997).

We recommend that this study be completed in order to adequately assess risks related to protection, mitigation, and enhancement measures and cumulative effects to local and regional economies and related environmental tradeoffs.

10.2.4. Effect of Relicensing on Power Rates

Page X-8, Problem Statement

We recommend adding the following questions:

- 1.What are the quantifiable costs and benefits associated with protection, mitigation, and enhancement measures?
2. What are the nonquantifiable costs and benefits associated with protection, mitigation, and enhancement measures?
- 3.How much of an increase in power rates can be attributed to protection, mitigation, and enhancement measures?

This study would be valuable to the Forest Service to assess the public's willingness-to-pay to protect ORVs, uplands, and other resource specific issues identified above (Overview, May 1997).

10.2.5. Fish Passage at the Hells Canyon Complex

Page X-9, Problem Statement

We recommend adding the following questions:

1. What are the nonquantifiable costs and benefits associated with fish passage alternatives?
2. What are the socio-economic affects of alternatives for fish passage?

This study would be valuable to the Forest Service to assess the effectiveness of fish passage measures and protection of the ORVs for fish and aquatic resources (Overview, May 1997). The study would also be valuable for addressing subsequent socio-economic impacts and tradeoffs relevant to protecting and enhancing fish and aquatic resources.

10.2.6. Deregulation Impacts

Page X-10, Problem Statement

We recommend adding the following questions:

1. How will protection, mitigation, and enhancement measures be paid for in the event of deregulation?
2. How will the willingness-to-pay relationship identified in **Study 10.2.4. (Power Rates)**, be affected by deregulation?

This study is valuable to the Forest Service to identify costs and benefits associated with protection, mitigation, and enhancement measures and the public's willingness-to-pay to protect ORVs, uplands, and other specific resource issues (Overview, May 1997).