

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

Dear General Strock,

On December 20, 2000, the U.S. Fish and Wildlife Service (Service) issued a biological opinion to the Army Corps of Engineers, Bonneville Power Administration, and the Bureau of Reclamation on the effects of the Federal Columbia River Power System on threatened and endangered species (FCRPS opinion). By way of this letter, we are providing some minor amendments to that document.

During finalization of the FCRPS opinion, some editorial mistakes and minor omissions were made. Corrections to these mistakes or omissions are summarized below. The enclosure indicates appropriate text for amendment of the document.

#### Changes to the Table of Contents

Pages i and ii. There are two references to section 7.A.2. *Lower Columbia River*. The second reference is deleted.

Page ii. Reference to section 9.A.2 *Kootenai River White Sturgeon* is added.

#### Changes in Text of the Opinion

Section 8 is retitled to indicate these are reasonable and prudent alternatives, rather than reasonable and prudent measures.

In Section 8, Reasonable and Prudent Alternatives, item 1. Water Storage for Sturgeon Recruitment, there is an item d., which begins :

d. Beginning in October 2001 the action agencies...

In that paragraph there is a reference to Table 10. The reference should, instead, be to Table 11.

An analysis of anticipated take for Kootenai River White Sturgeon was inadvertently left out of the document. A new section 9.A.2 is provided.

Terms and conditions implementing reasonable and prudent measures for bull trout in the Lower Snake and Clearwater Rivers were inadvertently left out of the document. A new section 11.A.3 is provided.

We apologize for any confusion these omissions or clarifications may have caused. However, we have concluded that these amendments clarify the original opinion, and do not constitute a significant change to the document. Please consider the opinion as amended by these corrections.

If you have any questions, please do not hesitate to contact Susan Martin in our Upper Columbia Fish and Wildlife Office in Spokane (509-891-6839).

Sincerely,

Regional Director

Enclosure

Distribution List for Biological Opinion:

William McDonald, Regional Director  
Bureau of Reclamation  
Pacific Northwest Regional Office

Steve Wright, Acting Administrator  
Bonneville Power Administration

Donna Darm, Acting Regional Director  
National Marine Fisheries Service

The Honorable Dirk Kempthorne  
Governor of Idaho

The Honorable John Kitzhaber, M.D.  
Governor of Oregon

The Honorable Marc Racicot  
Governor of Montana

The Honorable Gary Locke  
Governor of Washington

Burns Paiute Tribe  
Wanda Johnson, Chair  
Haas St. Martin, Fisheries

Columbia River Intertribal Fish Commission  
Donald Sampson, Executive Director

Confederated Tribes of the Colville  
Reservation  
Colleen Cawston, Chair

Coeur d'Alene Indian Tribe  
Ernest Stensgar, Chair

Kootenai Indian Tribe  
Velma Bahe, Chair

Kalispel Indian Tribe  
Glen Nenema, Chair

Nez Perce Tribe  
Samuel Penney, Chair

Confederated Salish and Kootenai Tribes  
Fred Matt, Chair

Shoshone-Bannock Tribe  
Lionel Boyer, Chair

Shoshone-Paiute Tribe  
Marvin Cota, Chair

Spokane Tribe of Indians  
Alfred Peone, Chair

Confederated Tribes of the Umatilla Indian  
Reservation  
Antone Minthorn, Chair

Confederated Tribes of the Warm Springs  
Reservation  
Olney Patt, Jr., Chair

Yakama Nation  
Lonnie Selam, Sr., Chair

Enclosure – Details of corrections to the December 20, 2000  
Biological Opinion on the  
Effects to Listed Species from Operations of the  
Federal Columbia River Power System

Make the changes/additions to the opinion detailed below

*old title*

**8. Reasonable and Prudent Measures – Kootenai River White Sturgeon**

*new title*

**8. Reasonable and Prudent Alternatives – Kootenai River White Sturgeon**

In Section 8, Reasonable and Prudent Alternatives, item 1. Water Storage for Sturgeon Recruitment, there is an item d., which begins :

d. Beginning in October 2001 the action agencies...

In that paragraph there is a reference to Table 10. The reference should, instead, be to Table 11.

Add a new section as noted below:

**9.A.2. Kootenai River White Sturgeon**

Even though the Service anticipates some level of incidental take may continue to occur due to operations of the FCRPS under the RPAs, the best scientific and commercial data available are not sufficient to enable the Service to estimate a specific amount of incidental take to the species as a result of those operations. Incidental take as measured by actual species numbers is difficult when the species occurs in aquatic habitats that makes detection of mortalities difficult. As documented above, there is evidence that high levels of mortality are occurring annually to eggs, larvae and possibly young-of-the-year sturgeon. The RPAs incorporate the best scientific evidence available to reverse this trend. However, even under the RPAs we anticipate that, as a result of operation of the FCRPS, at a minimum, the following forms of take are likely to continue to occur in the Kootenai River downstream of Bonners Ferry, Idaho: 1) an indeterminate level of harassment, harm or killing of sturgeon eggs, larvae or young-of-the-year; and 2) less than optimum spawning conditions constituting harm to adults.

Take is likely because of many factors, including the following: (1) many of the measures contained in the RPAs cannot be initiated immediately, including VarQ, increasing release capacity at Libby Dam, and resolving necessary flood stage control modifications with public safety; (2) natural climatic variations will affect the amount of water available for spawning flow augmentation efforts; and (3) although the RPAs incorporate measures identified in the 1999 Sturgeon Recovery Plan, and other measures representing the best available scientific evidence available, there is still some level of uncertainty as to their ultimate effectiveness in an altered environment. Even if take is drastically reduced and the sturgeon eventually recovered, some level of take is likely to continue to occur absent restoration of historic natural river conditions.

Notwithstanding the uncertainties described above, we believe that the extent and effect of incidental take likely to occur is inversely correlated with timely implementation of the RPAs. In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or adverse modification of critical habitat when the reasonable and prudent alternatives are implemented.

Add a new section as noted below:

### **11.A.3. Lower Snake and Clearwater River**

1. The Service believes that the following terms and conditions are necessary and appropriate to implement RPM #1 in the Lower Snake and Clearwater River areas:
  - a. The action agencies shall immediately implement a program to record the occurrence of bull trout in the smolt monitoring facilities at the Lower Snake River dams.
  - b. The Corps shall immediately include bull trout in the species to be counted at Lower Granite, Little Goose, Lower Monumental, and Ice Harbor dams.
  - c. The Corps shall immediately expand the fish counting period to record year round at Lower Monumental and Little Goose dams for 3 consecutive years, either manned or with video monitors. This will be done to monitor the movement of bull trout into and out of the Tucannon River. If it is shown that bull trout are passing these dams during periods that are currently not monitored, then the adjacent dam should also count bull trout during subsequent months. For example, if bull trout are counted at Little Goose Dam in January, then Lower Granite Dam should also be surveyed for bull trout in January and February. This will be done to assess the value of permanently extending the fish counting periods so that the extent and number of passing bull trout is determined and/or an appropriate estimate of take is determined. The Service will evaluate all fish counting data after 3 years to determine if the extension of the fish counting period is further warranted.

*It is important to note that if bull trout are seldom observed, it simply means they seldom use the fish passage facilities, and does not necessarily mean they seldom use the mainstem. For this reason, this term and condition should be implemented in conjunction with term and condition #1.d. below, to determine if the facilities are impeding the movements of migratory bull trout originating from the Tucannon River.*

- d. The Corps shall immediately investigate the presence in, and use of, the main stem by bull trout migrating from the Tucannon River. *See discussion under term and condition #1.c. above.*

- e. The Corps shall initiate studies associated with terms and conditions #1.c. and 1.d. above, to begin data collection that will determine bull trout timing and usage of the Lower Snake River dam facilities. Before beginning any major facility improvements the Service will review these data and develop recommendations to minimize bull trout take during any facility modifications.
  - f. The action agencies shall estimate annual population size of bull trout migrating to and from the Lower Snake River Reservoirs, and develop abundance trends over time.
2. The Service believes the following term and condition is necessary and appropriate to implement RPM #2 in the Lower Snake and Clearwater River areas:
- a. The action agencies shall estimate annual population size of bull trout migrating to and from Dworshak Reservoir, and develop abundance trends over time.

## Revised Table of Contents

### TABLE OF CONTENTS

#### BIOLOGICAL OPINION

##### Section

1. Introduction
2. Consultation History
3. Description of the Proposed Action
  - 3.A. Upper Columbia River
    - 3.A.1. Hungry Horse Dam
    - 3.A.2. Libby Dam
    - 3.A.3. Lower Columbia and Lower Snake/Clearwater Rivers
4. Environmental Baseline
  - 4.A. Upper Columbia River
  - 4.B. Lower Columbia River
  - 4.C. Lower Snake/Clearwater Rivers
5. Status of the Species and Critical Habitat
  - 5.A. Bull Trout
    - 5.A.1. Bull Trout Status and Distribution within the Columbia River DPS
    - 5.A.2. Bull Trout Habitat Requirements
    - 5.A.3. Bull Trout Threats
  - 5.B. White Sturgeon: Kootenai River population
    - 5.B.1. Kootenai River White Sturgeon Distribution
    - 5.B.2. Kootenai River White Sturgeon Habitat Requirements
    - 5.B.3. Kootenai River White Sturgeon Threats
6. General Effects of the Action
7. Species' Response to the Proposed Action
  - 7.A. Bull Trout
    - 7.A.1. Upper Columbia River
      - Libby Dam
      - Hungry Horse Dam
      - Albeni Falls Dam
    - 7.A.2. Lower Columbia River
      - Passage/Entrainment
      - Downstream passage
      - Upstream passage

- Power peaking
      - Inundated habitat
      - Gas supersaturation
      - Temperature
    - 7.A.3. Lower Snake/Clearwater River
      - Passage/Entrainment
      - Inundated habitat
      - Gas supersaturation
      - Clearwater River temperatures
      - Other Snake River Subpopulations
    - 7.A.4. Cumulative effects
    - 7.A.5. Conclusion
  - 7.B. Kootenai River White Sturgeon
    - 7.B.1. Cumulative effects
    - 7.B.2. Conclusion
- 8. Reasonable and Prudent Alternatives – Kootenai River White Sturgeon
- 9. Incidental Take Statement
  - 9.A. Amount or Extent of Take/Effect of Take
    - 9.A.1. Bull Trout
    - 9.A.2. Kootenai River White Sturgeon
- 10. Reasonable and Prudent Measures
  - 10.A. Measures Specific to Bull Trout
    - 10.A.1. Upper Columbia River
    - 10.A.2. Lower Columbia River
    - 10.A.3. Lower Snake/Clearwater River
- 11. Terms and Conditions
  - 11.A. Bull Trout
    - 11.A.1. Upper Columbia River
    - 11.A.2. Lower Columbia River
    - 11.A.3. Lower Snake/Clearwater River
- 12. Conservation Recommendations
- 13. Reinitiation
- Literature Cited
- Appendix A. Letter from action agencies clarifying proposed actions.

Appendix B. Summary table of bull trout subpopulations and effects from FCRPS facilities.