United States Department of the Interior

FISH AND WILDLIFE SERVICE
Upper Columbia Fish and Wildlife Office
11103 E. Montgomery Drive
Spokane, WA 99206

April 23, 2002

Brigadier General David A. Fastabend
Division Engineer
U. S. Army Corps of Engineers
North Pacific Division
220 NW 8th Avenue
Portland, Oregon, 97206-3589

Subject: Kootenai River Sturgeon Spawning/Incubation and Bull Trout Flows: Fish and Wildlife Service Operational Request No. 02-01 (6402.2002)

Dear General Fastabend:

On December 20, 2000 the Fish and Wildlife Service (Service), in accordance with section 7 of the Endangered Species Act, issued a jeopardy biological opinion regarding the effects operations of the Federal Columbia River Power System on the Kootenai River white sturgeon (sturgeon) and bull trout. The reasonable and prudent alternatives (RPAs) included in this biological opinion were designed to reestablish natural sturgeon reproduction, and to restore critical habitat based on the best available information regarding the relationships between the annual timing, magnitude, temperature, and duration of flows below Libby Dam. The Kootenai River White Sturgeon Recovery Plan, however, acknowledged that the precise relationship between these factors has not yet been fully demonstrated. Accordingly, the RPAs, elaborated upon in the attached operational guidelines, provide for adaptive management. This year, emphasis is being placed on in-river survival of progeny of wild fish to be spawned in the Kootenai Tribal Hatchery. The intent is to better define the life stage in which most mortality is occurring, for more efficient recovery actions in the future, and as a means to better deal with system configuration constraints. Findings from this biological study are intended to complement ongoing U. S. Geological Survey sediment transport studies on the Kootenai River, both funded by Bonneville Power Administration.

The enclosed 2002 sturgeon / bull trout guidelines for operations of Libby Dam were developed after consultation with the sturgeon recovery team. These guidelines are consistent with the Service's December 20, 2000 biological opinion, the 1999 Kootenai River White Sturgeon Recovery Plan. As draft, the attached guidelines have been reviewed by your staff; Bonneville Power Administration; B.C. Hydro; National Marine Fishery Service; the British Columbia Ministry of Water, Land and Air Protection; Canada Department of Fisheries and Oceans; the

Fish Passage Center; the Idaho Office of Species Conservation; Idaho Department of Fish and Game; Montana Fish, Wildlife and Parks; the Kootenai Tribe of Idaho; Boundary County, Idaho; and the City of Bonners Ferry, Idaho.

These guidelines supersede all previous such recommendations. If you have any questions regarding this matter or need additional information, please call me or Bob Hallock of my staff at (509) 891-6839.

Sincerely,

Robert J. Hallock

for Susan B. Martin
Supervisor

enclosure

STURGEON / BULL TROUT GUIDELINES
FOR
2002 LIBBY DAM OPERATIONS
(Fish and Wildlife Service Operational Request No. 02-1)
April 23, 2002

1. Regulate flows from Libby Dam consistent with laws and treaties to achieve flows at Bonners Ferry to maximize the survival of sturgeon larvae to be released from the preservation stocking program hatchery operated by the Kootenay Tribe of Idaho, and to promote natural recruitment [1] for a new year class of sturgeon. At this time it is estimated that the first group of approximately 4 day old larvae will be available for release about June 23. This group and subsequent groups of sturgeon larvae will be released well above Bonners Ferry, Idaho to determine if cover provided through intergravel spaces, and greater water velocity will enhance survival.

2. When it is determined when the first group of larvae are available, begin ramping up flows at Libby Dam to achieve a total flow measured at Bonners Ferry which approximates the average natural hydrograph for that date. This would result in a combined flow of approximately 20,000 cfs at Bonners Ferry if larvae are first available on June 23.

3. Continue to augment local runoff with releases from Libby Dam to approximate flows of the average unregulated hydrograph at Bonners Ferry through July 6, 2002. At that time the average combined flow measured at Bonners Ferry would be approximately 15,000 cfs. Then ramp down to meet bull trout tiered flows.

4. Additional flows associated with the spill test of Libby Dam should be superimposed upon these sturgeon flows to conserve water for other listed species. It is understood that these spill test(s) will involve total releases of about 28,000 cfs for four hours each.

5 Augmentation flows for bull trout are requested to begin on May 15 and continue through July 31, exclusive of the period when greater flows are being released for sturgeon. Bull trout flows should follow the tiered approach proposed by the action agencies as documented in the Fish and Wildlife Service's Federal Columbia River Power System Biological Opinion of December 20, 2000, based on the May Kootenai River runoff forecast. If at any time it appears that reservoir refill is unlikely the default bull trout flow recommended for this 10 week period is 6,000 cfs.

6. Because of the variables in the above recommendations, total volume involved are expected to range between 0.6 and 0.8 maf.

7. If the runoff forecast is such that reservoir refill is assured and additional water becomes

available, it is recommended that after meeting the applicable bull trout tiered flows that any additional water would be released to 1. further augment the larval release flows (items 2 and 3 above), and 2 . begin augmentation earlier in June, prior to the releases for sturgeon larvae. This additional water may then aid in incubation of naturally spawned sturgeon eggs.

8. During any sturgeon releases the selective withdrawal structure of the face of Libby Dam should be used to the extent feasible to release water in the range of 10 to 12 degrees Centigrade.

9. Ensure the availability or stored water of sufficient quantity for successful out-year needs of all listed species in the Columbia River basin per the December 20, 2000 Biological Opinion.

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[1]The Kootenai River Sturgeon Recovery Team has defined that natural recruitment is achieved when "a naturally produced year class is demonstrated through detection by standard recapture methods of at least 20 juveniles from that class reaching more than 1 year of age."