SYSTEM OPERATIONAL REQUEST #2006 - USFWS/IDFG - 1

TO:	General Gregg Martin	COE-NWD
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	Cindy Henricksen	COE- RCC
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FROM: Russ Kiefer, Idaho Department of Fish and Game
Susan B. Martin, Supervisor, U.S. Fish and Wildlife Service
Ford Elsaesser, Pend Oreille/Priest Lakes Commission
Paul Wagner, National Marine Fisheries Service

DATE: September 15, 2006

SUBJECT: Request for changes in the timing of the fall draw down of Lake Pend Oreille, Idaho during 2006, to attempt to reduce lake trout spawning success by dewatering their eggs.

SPECIFICATIONS:
Delay the beginning of the fall draw down of Lake Pend Oreille until Oct. 7, or as late as reasonably possible (while minimizing or eliminating the need to spill at Albeni Falls Dam), and reach an elevation of 2051 feet by November 20, 2006. In the event of heavy rainfall, the drawdown period can be extended until November 22. The lake should then be held at whatever elevation is reached on November 22 (potentially above 2051 feet), with ½ foot operating range through the end of December and a 1 foot operating range starting January 1 for the duration of the winter.

JUSTIFICATION:
In Lake Pend Oreille, bull trout are heavily dependent upon kokanee as forage. Without kokanee, lake trout will likely replace bull trout as the dominate char in the lake. Examples of this negative population interaction include Flathead Lake, Montana and Priest Lake, Idaho. Adult kokanee in Lake Pend Oreille are at record low levels. Three decades of annual deep drawdown during the winter months are believed to be a contributing factor to the large declines in kokanee abundance, and are more recently exacerbated by the combined predation effects of lake trout and rainbow trout. Both populations of predators appear to be increasing.

In some lakes, lake trout are known to spawn in water less than 2 m deep, but the spawning depth in Lake Pend Oreille is currently unknown. The intent of this request is to keep the water level near full pool giving lake trout access to shallow, wave-washed substrates. Then, we request to begin the fall draw down to expose these eggs and

impact their spawning success. Limited data indicates that in Lake Pend Oreille most lake trout will have spawned by October 7th. During the draw down, IDFG personnel will survey the shorelines and search for the de-watered spawning sites to evaluate the effectiveness of this approach. Monitoring of the lake trout population five years from now will also be conducted to look for declines in the 2006 year class of lake trout. Five years may be needed to allow these fish to grow and enter the fishery.

An additional benefit to holding Lake Pend Oreille full as long as reasonably possible is that any water then released to aid chum salmon spawning downstream of Bonneville Dam will arrive in better synchronization with actual spawn timing.

Drawing the lake down to 2051' this year will allow wave action to clean and resort shoreline gravels at this elevation. This should improve kokanee spawning in future years when the lake is held higher during winter. Also, the abundance of mature kokanee in the lake is very low this year. These fish should find sufficient spawning habitat below 2051' and past monitoring has shown good egg-to-fry survival under these conditions. And lastly, National Weather Service forecast predicts below normal precipitation during November, December, and January. A full draw down this fall will allow additional water to aid chum salmon spawning and other downstream concerns.