U.S. ARMY CORPS OF ENGINEERS
NORTHWESTERN DIVISION

Executive Summary

RECORD OF CONSULTATION AND STATEMENT OF DECISION

on

Effects to Listed Species from Operations of the Federal Columbia River Power System issued by the U.S. Fish and Wildlife Service on December 20, 2000

and

Reinitiation of Consultation on Operation of the Federal Columbia River Power System, Including the Juvenile Fish Transportation Program, and 19 Bureau of Reclamation Projects in the Columbia Basin Biological Opinion issued by National Marine Fisheries Service on December 21, 2000

May 2001

Executive Summary

This Record of Consultation and Statement of Decision (2001 ROCASOD) is the U.S. Army Corps of Engineers (Corps) response to the recommendations in the Endangered Species Act (ESA) Section 7 Biological Opinion on Effects to Listed Species from Operations of the Federal Columbia River Power System (FCRPS) issued by the U.S. Fish and Wildlife Service (USFWS) on December 20, 2000 (USFWS 2000 BiOp) as amended by letter dated January 25, 2001, and the Biological Opinion issued by National Marine Fisheries Service (NMFS) on December 21, 2000 on the Reinitiation of Consultation on Operation of the Federal Columbia River Power System, Including the Juvenile Fish Transportation Program, and 19 Bureau of Reclamation (Reclamation) Projects in the Columbia Basin (NMFS 2000 BiOp). Those BiOps addressed the effects of the FCRPS on listed anadromous species, resident fish and wildlife species and plant species in the Pacific Northwest.

The 2001 ROCASOD addresses the operation of and certain actions at Dworshak, Lower Granite, Little Goose, Lower Monumental, Ice Harbor, Libby, Albeni Falls, Chief Joseph, McNary, John Day, The Dalles and Bonneville projects located in the states of Idaho, Oregon, Montana and Washington. These Corps projects along with Grand Coulee and Hungry Horse Dams operated by the Bureau of Reclamation make up the Federal Columbia River Power System. The 2001 ROCASOD also addresses NMFS 2000 BiOp habitat and hatchery actions.

The Corps concurs with NMFS's determination that the integrated operation of the FCRPS by the three action agencies, in a manner consistent with the NMFS 2000 BiOp, will avoid jeopardy to listed anadromous fish stocks and will ensure the survival and recovery of the listed species. The Corps also concurs with USFWS's determination that the integrated operation of the FCRPS by the three action agencies, in a manner consistent with the USFWS 2000 BiOp, will avoid jeopardy to listed Kootenai River white sturgeon and bull trout and will ensure the survival and recovery of the listed species.

The Corps has evaluated the effects of the certain operational actions to be implemented utilizing past NEPA documents. The last system NEPA document was the System Operation Review EIS (SOR EIS) completed with the issuance of a Record of Decision in 1997. The Corps believes that the effects are within the range of the analysis conducted in the SOR EIS. Except for studies of certain future operations and structural modifications of the projects, the Corps has determined that the effects of the operations to be within the analysis contained in the existing NEPA documentation. There are other laws and regulations that the Corps is responsible to consider in making decisions on the actions contained in the NMFS and USFWS 2000 BiOps. The Corps has evaluated the hydropower operations described in the BiOps and has considered the effects of those actions in regard to any standards or requirements set forth in these laws and regulations in making decisions in this 2001 ROCASOD.

FLOW MANAGEMENT

The NMFS and USFWS 2000 BiOps call for operating the FCRPS to meet flow objectives set for listed salmon, steelhead and white sturgeon. The Corps' in-season decisions on shaping (timing and amount) of water releases (flow augmentation, spill, etc.) during the migration and fish passage season are made after considering recommendations of the Technical Management Team (TMT). The TMT includes federal, state and tribal representatives who meet throughout the year to monitor and evaluate the shaping of available water based on real time flow and biological information during the fish passage season. The TMT makes recommendations on water management and system operations to the Actions Agencies, which include the Corps, Reclamation and Bonneville Power Administration (BPA). In coordination with NMFS and USFWS, the Corps may adopt a different operation, including an operation for flood control, approved research, emergencies, to meet other requirements or operations for other project uses. Unless the Corps determines that alternative operations should be implemented, the Corps plans to operate the following projects as follows:

- **Dworshak.** Between April and June, the Corps may draft the project if needed for flood control, refill by June 30 or provide spring flow augmentation as coordinated with TMT. Dworshak may be drafted as low as elevation 1520 by August 31 to provide flow augmentation and temperature moderation in the lower Clearwater and Snake Rivers, or to meet BiOp flow objectives at Lower Granite or McNary. Project may draft lower than 1520 feet in September, to as low as 1500 feet, to evaluate effects of cool temperature releases on migrating fish as part of an adaptive migration approach.

- **Libby.** The Corps plans to operate Libby Dam in an attempt to meet the sturgeon flow requirements consistent with existing treaties and laws, and will reduce releases if monitoring identifies potential adverse effects of flooding, bank erosion, or dissolved gas levels, and/or the Corps is requested by USFWS to reduce releases. Libby plans to operate to meet bull trout minimum flow objectives in July and August. If, at the conclusion of the operation for sturgeon and bull trout, Lake Koocanusa is above elevation 2439, the Corps may, if necessary, lower Libby Reservoir to elevation 2439 by August 31 to meet salmon flow objectives in the Columbia River.

- **Albeni Falls.** In accordance with the BiOps, the Corps intends to operate Albeni Falls so that elevation of Lake Pend Oreille during the winter varies over the next several years. The purpose of this winter operation is to evaluate kokanee spawning and production, the utilization of kokanee by bull trout as a food source, and ultimately the survival of listed bull trout. In the winter of 2001-2002, the Corps plans to operate Lake Pend Orielle at elevation 2051 and in the following winter at elevation 2055. By the summer of 2003, USFWS is to recommend to the Corps, based on an independent scientific review, the sequence of winter elevation for future years' evaluation. Summer operation would be within the summer operating range

above elevation 2062 at Lake Pend Oreille provided normal and planned conditions continue to exist within the Columbia Basin.

- **Chief Joseph.** The reservoir is maintained from elevation 950 to 956 year round due to bank sloughing concerns below Grand Coulee Dam.

- **Lower Snake River Projects.** The Corps plans to operate Lower Granite, Little Goose, Lower Monumental and Ice Harbor within a one-foot range above Minimum Operating Pool (MOP) from April 3 until adult fall chinook salmon begin entering the lower Snake River as determined by the TMT. In coordination with NMFS, the Corps may operate at different elevations for approved research, flood control, navigation, other requirements or special operations.

- **Lower Columbia River Projects.** The Corps plans to operate Bonneville, The Dalles and McNary Reservoirs in their normal operating range. The Corps will operate John Day down to as low as 257 feet for flood control if required for downstream protection. The Corps plans to operate John Day within a one-and-a-half foot range above elevation 262.5' from April 20 to September 30 each year without adversely affecting irrigators which means that the irrigation pumps will be able to withdraw water from the reservoir. The pool will be raised if irrigation pumping problems occur.

SPILL

The Corps plans to provide the annual spill program for juvenile fish passage at Lower Granite, Little Goose, Lower Monumental, Ice Harbor, McNary, John Day, The Dalles and Bonneville projects identified in the NMFS 2000 BiOp. This spill program involves voluntary spill which could exceed current states' water quality standards of 110% for total dissolved gas (TDG) based on a risk assessment conducted by NMFS. Annual spill volumes may be adjusted or interrupted due to emergencies, adult passage, navigation, research activities, flood control, other requirements and unanticipated events. The Corps will coordinate and request TDG variances for voluntary spill called for in the NMFS and USFWS 2000 BiOps.

JUVENILE FISH TRANSPORTATION PROGRAM

The Corps plans to transport in accordance with the NMFS 2000 BiOp criteria and existing ESA Section 10 Permit. This includes transportation of all juvenile fish collected at Lower Granite, Little Goose and Lower Monumental in the spring, and transportation of all juvenile fish collected at the three Snake River projects and McNary in the summer. Based on water conditions and further evaluations, transport from McNary to benefit upper Columbia stocks in the spring may be considered on a case by case basis. The Corps will consider the existing biological information and runoff conditions in making decisions on the amount, location and timing of the overall juvenile transportation program as part of an adaptive migration approach. In low runoff years, the Corps

considers this program as one of the options that would increase overall system survival of migrating juvenile salmonids.

FUTURE STUDIES OF OPERATION AND CONFIGURATION MODIFICATIONS

The Corps is continuing to pursue configuration studies of potential system improvements identified in NMFS' and USFWS' 2000 BiOps. Some configuration studies are evaluating structural modifications that could be made to Federal projects on the lower Snake and Columbia rivers to improve juvenile salmon migration. There are also evaluations recommended to examine modifications at the storage projects for bull trout and white sturgeon. The biological opinion also recommends that the Corps conduct several studies of the operation of the FCRPS to address improvements for listed species. The Corps is committed to pursue funding to conduct these studies. The exact scope and schedule of each study will be dependent upon congressional appropriations, public input, compliance with applicable laws and regulations and other procedural requirements.

HABITAT ACTIONS

The NMFS Biological Opinion calls for the action agencies to take offsite actions to improve habitat for listed salmon and steelhead species. Within its existing authorities and subject to available funding, the Corps plans to implement habitat research, protection, enhancement, and monitoring and evaluation actions in the Columbia River estuary, in the Columbia Basin tributaries and in the mainstem habitats.

HATCHERY ACTIONS

The NMFS Biological Opinion calls for the action agencies to study and make improvements at hatcheries. The Corps, under existing authorities and in coordination with the BPA, Reclamation and the relevant hatchery operators, plans to implement the hatchery actions listed in the NMFS 2000 BiOp. The most immediate action will be enabling the relevant hatchery operators to complete the Hatchery and Genetic Management Plans. These plans will identify the necessary operational and facility improvements.

ADAPTIVE MANAGEMENT FRAMEWORK

The Corps will rely on the required annual and five year implementation plans to identify the anticipated work, changes in schedules and actions, and the supporting biological information. The timing of the Corps to implement actions is dependent upon receiving adequate funding, completing appropriate engineering designs and prototype tests, obtaining favorable test conditions (weather and available fish) and engaging the region on the priority of each action. Appropriate modifications to the actions and/or performance standards will be made as new scientific information is gathered, as activities are prioritized given available funding and as progress is made on biological and engineering designs. The Corps

is committed to working with regional entities through a regional forum. Decisions will be based on determinations of ESA compliance made by NMFS and USFWS in response to the Action Agencies implementation plans.

CLEAN WATER ACT

Further, this 2001 ROCASOD is responsive to the order issued on February 16, 2001 by the court in National Wildlife Federation, et al. v. Corps of Engineers, Civ. No. 99-442-FR, (D. Or. 2001). In the court's opinion, Judge Frye ruled that in taking action to comply with its legal obligations under the Endangered Species Act, the Corps was not free to do so without considering compliance with its legal obligations under the CWA. In response to that directive, the Corps has examined the impact of its project operations on meeting states' TDG and temperature water quality standards and how the Corps will seek to comply with both ESA and CWA.

The NMFS 2000 BiOp calls for voluntary spill to 120% TDG at the Corps lower Snake and Columbia river projects for juvenile fish passage and spill at Dworshak project to augment flows for fish and to moderate water temperatures downstream. USFWS 2000 BiOp requests that the Corps test spill at Libby Dam for purposes of increasing flows for listed sturgeon. These voluntary spill recommendations would exceed states' TDG water quality standard of 110%.

The Corps will seek to harmonize operations to comply with both the ESA recommendations and the applicable states and tribal water quality standards. The Corps is working with Oregon, Washington, Idaho, and Montana, and has proposed a regional, multi-year agreement to accomplish both the ESA goals of survival and recovery of listed species and the TDG and temperature water quality goals of the CWA. The Corps intends to undertake this effort by working with EPA, states and tribes on their Total Maximum Daily Load (TMDL) process.

In the future, subject to available funds and Congressional directives, the Corps is committed to work, in conjunction with the other federal agencies, on implementation of a water quality plan (included as Appendix B of the NMFS 2000 BiOp) for the mainstem Columbia and Snake rivers to address CWA objectives. The geographic scope of this plan is broader than the FCRPS and would include additional actions to improve mainstem water quality by reducing TDG and temperature.

SUMMARY

The Corps has taken into consideration the environmental consequences, the economic costs and the biological data supporting the hydropower operations and project improvements, habitat actions and hatchery reforms discussed in this ROCASOD. The Corps has determined that adequate authority, NEPA documentation, and biological rationale exist to implement certain hydropower operations and investigate future hydropower, habitat and hatchery actions.

The Corps has taken into account the effect of the operations on compliance with State and Tribal water quality standards. The Corps has determined that the actions set forth in the NMFS and USFWS 2000 BiOps are consistent with our legal obligations under the CWA.

The Corps has taken into account the Northwest Treaty Tribes' fishing rights, the United States' trust responsibility to Indian Tribes and its responsibility to act in a manner consistent with the trust responsibility.

The Corps finds that the determinations made in this ROCASOD are sufficient for the Corps to adequately implement the reasonable and prudent alternatives and incidental take statements in the NMFS and USFWS 2000 BiOps. These actions are a coordinated mixture of system operations, configuration measures, habitat restoration and continued monitoring activities which are consistent with the reasonable and prudent alternatives and incidental take statements in the USFWS and NMFS 2000 BiOps.