SYSTEM OPERATIONAL REQUEST: #2003-12

The following State, Federal, and Tribal Salmon Managers have participated in the preparation and support this SOR: U.S. Fish & Wildlife Service, National Marine Fisheries Service, Idaho Department of Fish and Game, Montana Fish Wildlife & Parks, Oregon Department of Fish and Wildlife, the Washington Department of Fish and Wildlife and the Columbia River-Inter Tribal Fish Commission.

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FROM:      David Wills, Chairperson, Salmon Managers

DATE:      July 15th, 2003

SUBJECT:   Libby/ Arrow-Duncan Swap

SPECIFICATIONS:

Explore the potential for a Libby/Arrow-Duncan Swap of storage water.

JUSTIFICATION:

SOR 2003MT-1 asks for drafts at Libby to be limited to 2449 feet by the end of September. Despite Montana’s predicted benefit to resident fish in Libby reservoir, this operation would have a negative impact in terms of July and August Columbia River flows below Libby. Summer flows in the Columbia River are already well below the 200 Kcfs Biological Opinion Flow Objective at McNary (average daily outflow on 7-14-03 was 155.9 Kcfs). Flows are projected to continue to remain significantly below the BiOp Flow Objective even with a 20-foot draft of the Libby reservoir by August 31st. The Montana SOR states that resident fish benefit if drafts are limited to 10 feet at Libby by the end of September. If this SOR is implemented, the reduced drawdown will exacerbate the problem of flows significantly below the Biological Opinion Flow Objectives at McNary, affecting both listed and unlisted juvenile fall chinook migrants. Juvenile fall chinook survival data collected in the lower Columbia River between McNary and John Day dams shows a significant flow survival relationship for fall chinook (attached). A water storage swap between Libby and either Arrow or Duncan would make it possible to meet the Montana SOR without further reducing flows for, and survival of, juvenile fall chinook by holding the Libby Reservoir at a higher level while also providing flows in the Columbia River. This will avoid further degradation of summer migration flows and magnitude of deviation from the Biological Opinion flow target for summer migrants.
Survival from McNary Dam to John Day Dam

(NOAA Fisheries)