

Idaho - Montana

Proposed 2001 Emergency Water Management Plan

February 15, 2001

The following is a jointly proposed Water Management Plan by the States of Idaho and Montana designed to establish priorities and decision criteria for the current water year. The latest water supply forecasts indicate that the region is about to experience the fourth lowest water year on record. The most recent forecast for the January – July runoff volume at The Dalles is for 67 million acre feet (Maf) which is 63 percent of the average runoff. The record low water year was a runoff at The Dalles of 53.4 Maf or 50.4 percent of normal.

The current water year will present major challenges to manage the available water to provide the best conditions possible for fish and wildlife while recognizing that the west coast power crisis will continue to require high priority emergency power system operations to protect the reliability of the Western Interconnection. Emergency hydropower operations will be necessary to prevent major impacts on human health and safety but the specifics of the needed power operations cannot be fully anticipated at this time. However, it is clear that there will additional power requirements during what is already a very poor water year. For these reasons, it is of critical importance that the region establishes clear biological priorities that assign the limited water available this year to provide the greatest biological benefits.

This year there will clearly not be enough water to meet all the requirements of the various fish and wildlife populations listed for protection under the Endangered Species Act, maintain power system reliability and secure BPA's financial viability. The extreme nature of this water year, combined with the west coast power crisis makes it imperative that water management decisions need to be carefully prioritized to insure that those populations that at greatest risk are given highest priority for whatever available resources. This will help to maximize the survival rates for critical fish populations during this extremely poor water year.

Prioritized List of Populations at Greatest Risk

- Adult Passage and survival to the spawning grounds for all listed stocks but especially Upper and Mid-Columbia listed Chinook and Steelhead.
- Upper Columbia juvenile Steelhead, $\lambda = 0.83$
- Middle Columbia juvenile Steelhead, 0.84
- Upper Columbia juvenile Spring Chinook, 0.85
- Flathead and Kootenai Bull Trout
- Snake River juvenile Steelhead, 0.83
- Snake River juvenile Spring/Summer Chinook, 0.91
- Snake River juvenile Fall Chinook, 0.92

- Lower Columbia juvenile Steelhead, 0.91
- Snake River Sockeye
- Lower Columbia Chum, 1.04
- Kootenai River White Surgeon
- Strong salmon and steelhead populations such as those in the Hanford reach
- Resident fish and wildlife

Biological Priorities for Water Management Operations

- Manage flows, reservoir elevations and spills to maintain adult ladders within established criteria.
- Manage flows, spills and generation patterns to speed adult passage.
- As soon as possible reduce outflows from the storage reservoirs to the minimum allowed flows to meet local constraints. This will help to reserve as much water as possible in Libby and Horse to provide flow augmentation for bull trout in July and August.
- As soon as possible reduce flows below Bonneville to achieve maximum possible storage of water in the region's reservoirs. Undertake actions designed to maintain as many chum salmon redds as possible.
- Until regional temperatures increase and power requirements decline, flows will continue to be above minimum. During the remainder of this winter draft Libby, Horse & Dworshak in proportion to their current reservoir contents and forecast inflows. Drawdown and refill trajectories should be designed based on inflow forecasts at each reservoir to achieve comparable levels of reservoir refill probability.
- Store as much water in Dworshak as possible to provide flow and temperature control in August and September. Do not draft DWO during April, May and June unless refill is at least 90 percent probable.
- Beginning in early August, establish a constant flow rate from Dworshak that will achieve the Biop target elevations by the middle of September.
- Provide sliding-scale flows from Libby and Horse that create a gradual flow reduction from the spring peak and constant "flat" flows for Bull trout during the productive warm months. Beginning in early July, draft Libby and Horse at a constant flow rate that will achieve the Biop target elevations by the end of August.
- Achieve refill at Grand Coulee on or about July 1, and maintain summer elevation limits in the Biop of 1278 unless additional draft is required to meet power requirements. Beginning in early July, establish a constant flow rate from Grand Coulee that will achieve the target ending elevation by the end of August.
- Meet Vernita bar flows to the extent possible but this is lower priority than the items above.

Priorities for Transportation

- Maximize transportation of collected fish during both the spring and summer periods. Transportation should be provided at all collector projects as soon as

- sufficient numbers of juvenile fish are collected. Transport from McNary in both the Spring and Summer to avoid poor water conditions expected this year.
- Design and implement all possible monitoring and evaluation to determine the effects of this extremely poor water year on fish survival.
 - Provide for appropriate numbers of test fish that will not be transported to achieve appropriate control groups for survival studies.

Priorities for Spill

- No spill at headwater storage projects this spring and summer.
- Spill during nighttime hours at non-storage (run of river projects?) projects at reduced levels and for shorter durations.
- Spill at Dworshak up to the level jointly agreed upon by the State and the Tribe if this is required to achieve the target elevations.