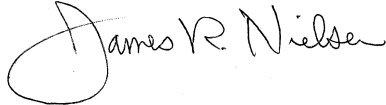


SYSTEM OPERATIONAL REQUEST: #2000-18

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

TO: **Brigadier General Strock** **COE-NPD**
 William Branch **COE-Water Management**
 Cindy Henriksen **COE-RCC**
 Doug Arndt **COE-P**
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 Lieut. Col. W.E. Bulen, Jr. **COE-Walla Walla District**
 J. William McDonald **USBR-Boise Regional Director**
 Judith Johansen **BPA-Administrator**
 Greg Delwiche **BPA-PG-5**



FROM: **Jim Nielsen, Chairperson, Salmon Managers**

DATE: **May 2, 2000**

SUBJECT: **System Spill**

GOAL: To spill the maximum amount possible at each project without exceeding the gas waiver limits.

SPECIFICATIONS: Increase spill to the gas waiver at all mainstem projects. In particular, it has been noted that spill has been reduced significantly below the gas waiver at Little Goose Dam. Present dissolved gas levels are significantly below the gas limits in the tailrace and at the next downstream project (Lower Monumental forebay). In addition, it has been shown that total dissolved gas levels at the John Day Dam tailrace monitor are affected by the operation of spillbay #1, which is not equipped with a spill deflector. Presently, the COE is experimenting with operating spillbay #1 in a partly closed mode. This has resulted in lower tailrace gas levels. It is likely that not operating this spillbay would further reduce gas levels and allow spilling of a greater volume of water. Therefore, it is recommended that spillbay 1 not be operated (except when necessary to pass high flow) and that increased spill be provided at John Day Dam to the gas cap.

JUSTIFICATION: Spill in the hydrosystem is provided as mitigation for mortality from project passage. Specifically, spill is provided to avoid turbine mortality and to reduce delay in the forebay of projects. Spill provides protection from predation both by decreasing the forebay residence time and by dispersing predators from the tailrace. In order to maximize the benefit of this mitigation spill should be provided to the maximum allowable amounts.