

FRANK L. CASSIDY JR.  
"Larry"  
CHAIR  
Washington  
  
Tom Karier  
Washington

## NORTHWEST POWER PLANNING COUNCIL

851 S.W. SIXTH AVENUE, SUITE 1100  
PORTLAND, OREGON 97204-1348

JUDI DANIELSON  
VICE CHAIR  
Idaho  
  
Jim Kempton  
Idaho

Gene Derfler  
Oregon  
  
Melinda Eden  
Oregon

**Fax:**  
503-820-2370

**Phone:**  
503-222-5161  
1-800-452-5161

**Internet:**  
www.nwccouncil.org

Ed Bartlett  
Montana  
  
John Hines  
Montana

January 7, 2002

### MEMORANDUM

**TO:** Council Members

**FROM:** Bruce Suzumoto

**SUBJECT:** Mainstem juvenile survival: CRiSP modeling results

Chris Van Holmes of the University of Washington's Columbia Basin Research group will present juvenile survival results using the CRiSP mainstem passage model. The Council requested the University of Washington to analyze the possible effects of the 2002 Draft Mainstem Amendments on various populations of migrating juvenile salmon and steelhead. Council staff provided the University of Washington with average river flows for a high, medium and low flow year based on the Council's proposed reservoir operations.

At the December 11 Council meeting there was some confusion about the amount of spill used in the analysis. It was requested that the Council staff and the University of Washington review the data and rerun the analysis. After that review, it was agreed that most of the data sets used in the first analysis were correct and should remain unchanged. However, a few alterations were made in the new analysis to make the results more accurate. In the new analysis:

- a new, corrected low flow year data set was used,
- for the low flow year, water temperature data that more is more typical of a low flow year was used,
- a corrupt input file from the previous runs was discovered and replaced.

The attached table gives a brief summary of the results from the new CRiSP analysis.