Spillway passage 40%

Surface weir passage 24%

Spillway survival 97.49

Spillway survival 95.8%

**Turbine passage 11%** 

Juvenile bypass passage 25%

**Turbine survival 91.0%** 

Juvenile bypass survival 99.3%

Overall dam survival: 96.8%

**BiOp Performance Standard: 96%** 

**Actual spill operation:** 

Combined 30% and 40% 24 hours /day

John Day Dam 2011 Passage and Survival Estimates Yearling Chinook

Ploskey et al. 2012

Report by Battelle- PNNL 21442