

IMPACT ASSESSMENT TOOL

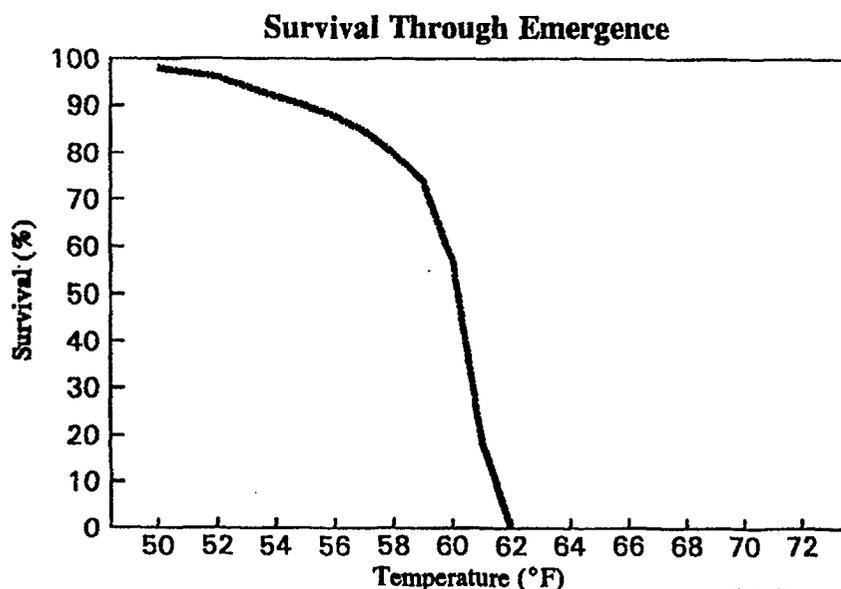
Species/Life Stage: Chinook Salmon (all runs) / Eggs and Larvae

Assessment Variable: Water Temperature

Fish Community/Geographic Limits (i.e., specific stream, river reach, or area): Squawfish-Sucker-Hardhead Community / None

Assessment Tool: Temperature-Egg Survival Relationship for Spawning through Emergence

Description: The relationship shown in the figure below depicts survival through emergence as a function of water temperature. Simulated water temperatures can be used to generate estimated survival of eggs through emergence of fry. Estimated survival can be used to compare differences between CALFED alternatives.



Reference: Brett, J. R., W. C. Clarke, and J. E. Shelbourn. 1982. Experiments on thermal requirements for growth and food conversion efficiency of juvenile salmon *Oncorhynchus tshawytscha*. (Canadian Technical Report of Fisheries and Aquatic Sciences No. 1027.) Department of Fisheries and Ocean, Fisheries Research Branch, Pacific Biological Station. Nanaimo, B.C., Canada.

Input Data: Simulated Water Temperature Data in Degrees Fahrenheit

September 13, 1996