

Columbia Basin Research

Route-specific Passage Proportions and Survival Estimated by Juvenile Acoustic Tags at FCRPS Hydroprojects, 2010–2018

volume xxxi

16 June 2020

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# Preface

Project 1991-051-00 was initiated in response to the Endangered Species Act and the subsequen

Using the acoustic-tag data from the U.S. Army Corps of Engineers survival compliance studies under the 2008 Biological Opinion conducted 2010–2018, information on juvenile salmonid passage through seven of the eight Federal Columbia River Power System (FCRPS) dams was analyzed and compiled. Passage performance was compared between subyearling and yearling Chinook salmon and steelhead and between projects. The purpose of the analysis was to better understand juvenile salmonid passage at the dams and to provide a baseline of performance that can be compared to smolt passage during the years of court-ordered spill studies.

devtools::install\_github("swhitCBR/failCompare")

data(sockeye)  
taglife=sockeye$days # vector of tag failure times

> weibull failure model object   
>   
> Parameter estimates:  
> est se  
> shape 11.76181 1.3428043  
> scale 16.33821 0.2035392  
>   
> \*This object can be used to adjust survival estimates using the 'ATLAS'

weib\_mod=fc\_fit(time=taglife,model="weibull")

,xlab="Days")