Mean Annual Discharge and Chinook Salmon

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Species Information

Common Name: Chinook Salmon
Genus: Oncorhynchus tshawytscha

Stressor Details

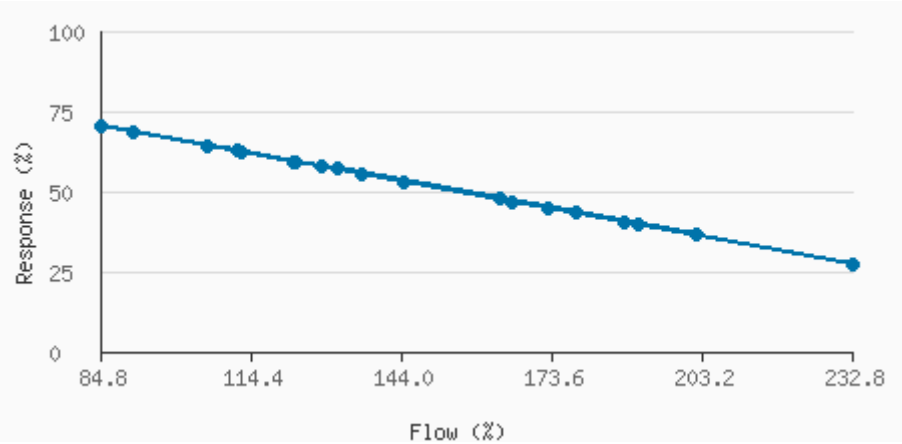
Stressor Name: Flow
Units: %
Metric: Mean Annual Discharge (MAD)
Scale: linear
Function Type: continuous
Vital Rate/Process: Residual recruits (Ricker stock-recruit curve)

Life Stage & Context

Life Stages: Juvenile
Geography: Salcha River, Alaska, USA
Season: Apr-Sept

Descriptions

Stressor Response Data



?PERCENT_MAD	Mean System Capacity (%)	SD	low.limit	up.limit
136.2997658	55.4730679	0	0	100
112.412178	62.4004684	0	0	100
163.4660422	47.5948478	0	0	100
178.4543326	43.2482435	0	0	100
123.4192037	59.2084309	0	0	100
187.8220141	40.5316159	0	0	100
131.381733	56.8992974	0	0	100
202.1077283	36.3887588	0	0	100
105.8548009	64.3021077	0	0	100
111.9437939	62.5362998	0	0	100
122.9508197	59.3442623	0	0	100

84.77751756	70.4145199	0	0	100
232.7868852	27.4918033	0	0	100
144.4964871	53.0960187	0	0	100
190.6323185	39.7166276	0	0	100
173.0679157	44.8103044	0	0	100
91.10070258	68.5807963	0	0	100
166.0421546	46.8477752	0	0	100
128.5714286	57.7142857	0	0	100

Citations

Neuswanger, J.R., Wipfli, M.S., Evenson, M.J., Hughes, N.F., and Rosenberger, A.E. Low productivity of Chinook salmon strongly correlates with high summer stream discharge in two Alaskan rivers in the Yukon drainage. Can. J. Fish. Aquat. Sci. 72: 1125–1137 (2015) dx.doi.org/10.1139/cjfas-2014-0498