Alkalinity and Steelhead Habitat Density Scalar

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Species Information

Common Name: Steelhead Trout
Genus: Oncorhynchus mykiss

Stressor Details

Stressor Name: Alkalinity
Units: mgCaCO3/l
Metric: Alkalinity of water
Scale: linear
Function Type: continuous
Vital Rate/Process: Density

Life Stage & Context

Life Stages: Parr

Descriptions

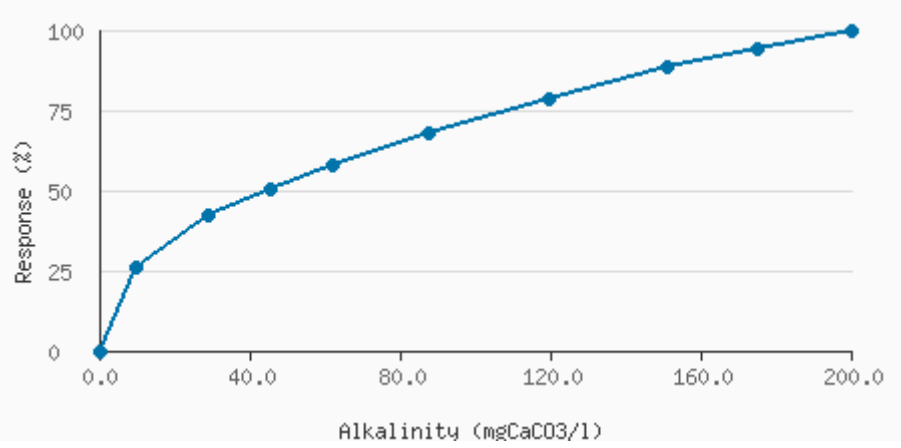
Overview

> Figure 2. Habitat preference relationships applied within the UCM for scaling standard parr densities to those expected under the specific habitat features in a given stream.

Function Derivation

> expert opinion

Stressor Response Data



Stressor (X)	Mean System Capacity (%)	SD	low.limit	up.limit
0	0	0	0	100
9.93	25.72614108	0	0	100
29.31	41.90871369	0	0	100
45.39	50.62240664	0	0	100
61.94	58.09128631	0	0	100
87.94	68.04979253	0	0	100

119.62	78.42323651	0	0	100
151.3	88.38174274	0	0	100
175.41	94.19087137	0	0	100
200	100	0	0	100

Citations

Cramer, S. P., & Ackerman, N. K. (2009). Prediction of stream carrying capacity for steelhead (Oncorhynchus mykiss): the unit characteristic method. In American Fisheries Society, Series: Symposium (Vol. 71, pp. 255-288).

References

Cramer & Ackerman 2009 - https://www.researchgate.net/profile/Steven-Cramer-4/publication/228957643_Prediction_of_stream_carrying_capacity_for_steelhead_the_unit_characteristic_method/links/00b495193f52d05b of-stream-carrying-capacity-for-steelhead-the-unit-characteristic-method.pdf