Boulder Cover and Steelhead Habitat Density Scalar

Downloaded on: 2026-11-20, From: https://mjbayly.com/stressor-response/boulder-cover-and-steelhead-habitat-density-scalar
Function Updated by mbayly on Tue, 12/31/2024 - 21:21.

Species Information

Common Name: Steelhead Trout
Genus: Oncorhynchus mykiss

Stressor Details

Stressor Name: Boulder cover
Units: %
Metric: Proportion of boulder substrate cover
Scale: linear
Function Type: continuous
Vital Rate/Process: Density

Life Stage & Context

Life Stages: Parr

Descriptions

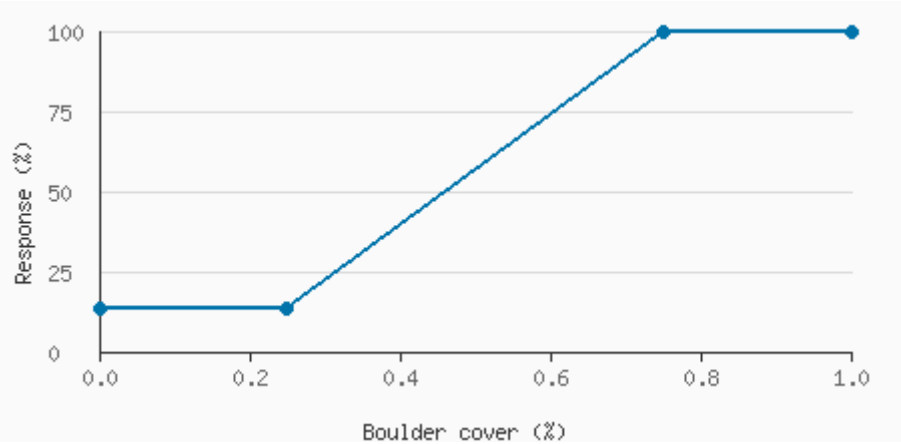
Overview

> 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.
>
> Scaled from the original curve so that the highest upper limit value equals to 100% (original value was 70.3%).

Function Derivation

> expert opinion

Stressor Response Data



Stressor (X)	Mean System Capacity (%)	SD	low.limit	up.limit
0	13.51351351	0	0	0
0.25	13.51351351	0	0	0
0.75	100	0	0	0
1	100	0	0	0

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