Turbidity and Steelhead Habitat Density Scalar (0.5mm)

Function Updated by stobias on Mon, 12/16/2024 - 00:31.

Species Information

Common Name: Steelhead Trout
Genus: Oncorhynchus mykiss

Stressor Details

Stressor Name: Turbidity
Units: NTU
Metric: Turbidity (by riffle depth) at 0.5m
Scale: linear
Function Type: continuous
Vital Rate/Process: Density

Life Stage & Context

Life Stages: Parr

Descriptions

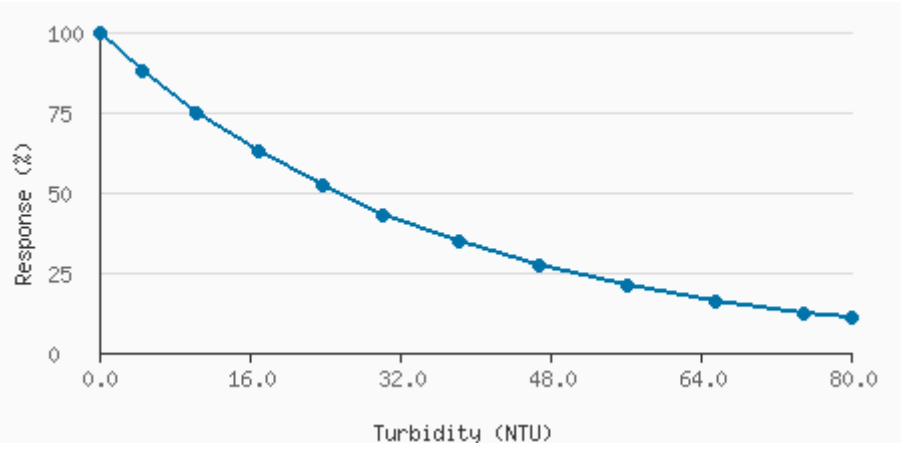
Overview

> 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	100	0	0	100
4.52	88	0	0	100
10.32	75	0	0	100
17.01	63	0	0	100
23.71	52	0	0	100
30.23	43	0	0	100

38.19	35	0	0	100
46.88	27	0	0	100
56.29	21	0	0	100
65.7	16	0	0	100
74.93	12	0	0	100
80	11	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