Mean Annual Discharge and Atlantic Salmon

Downloaded on: 2026-11-20, From: https://mjbayly.com/stressor-response/mean-annual-discharge-and-atlantic-salmon-4
Function Updated by leah.egeryhaley on Mon, 06/22/2026 - 20:15.

Species Information

Common Name: Atlantic Salmon
Genus: Salmo salar

Stressor Details

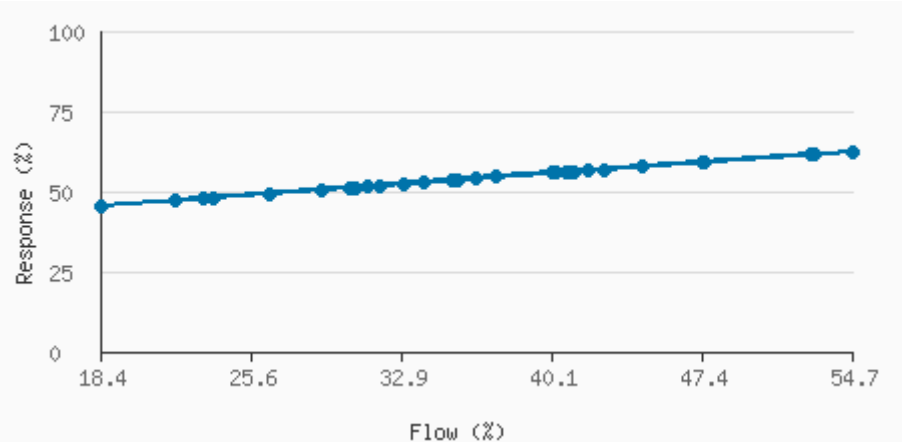
Stressor Name: Flow
Units: %
Metric: Mean Annual Discharge (MAD)
Scale: linear
Function Type: continuous
Vital Rate/Process: Total annual smolt production per 100m2

Life Stage & Context

Life Stages: Smolt
Geography: River Orkla, Norway
Season: Winter

Descriptions

Stressor Response Data



?PERCENT_MAD	Mean System Capacity (%)	SD	low.limit	up.limit
23.33333333	47.7266667	0	0	100
36.5	53.915	0	0	100
44.52083333	57.6847917	0	0	100
30.70833333	51.1929167	0	0	100
31.3125	51.476875	0	0	100
35.35416667	53.3764583	0	0	100
52.875	61.61125	0	0	100
47.54166667	59.1045833	0	0	100
42.6875	56.823125	0	0	100
40.35416667	55.7264583	0	0	100
26.5	49.215	0	0	100

33.0625	52.299375	0	0	100
40.875	55.97125	0	0	100
18.35416667	45.3864583	0	0	100
41.22916667	56.1377083	0	0	100
35.64583333	53.5135417	0	0	100
47.47916667	59.0752083	0	0	100
34	52.74	0	0	100
30.4375	51.065625	0	0	100
41.16666667	56.1083333	0	0	100
22.02083333	47.1097917	0	0	100
41.97916667	56.4902083	0	0	100
52.70833333	61.5329167	0	0	100
31.89583333	51.7510417	0	0	100
54.66666667	62.4533333	0	0	100
37.5	54.385	0	0	100
29.0625	50.419375	0	0	100
23.79166667	47.9420833	0	0	100
40.20833333	55.6579167	0	0	100

Citations

Hvidsten, N.A., Diserud, O.H., Jensen, A.J., Jensas, J.G., Johnsen, B.O., and Ugedal, O. 2015. Water discharge affects Atlantic salmon Salmo salar smolt production: a 27 year study in the River Orkla, Norway. J. Fish. Biol. 86: 92-104.