# Embeddedness and Chinook Fry Density (Winter)


Function Updated by stobias on Tue, 11/19/2024 - 22:10.

## Species Information

**Common Name:** Chinook Salmon
**Genus:** Oncorhynchus tshawytscha

## Stressor Details

**Stressor Name:** Sedimentation
**Units:** % of cobbles and boulders embedded by added fine sediment
**Metric:** Fine Sediment
**Scale:** linear
**Function Type:** continuous
**Vital Rate/Process:** Density

## Life Stage & Context

**Life Stages:** Fry
**Season:** Winter

## Descriptions

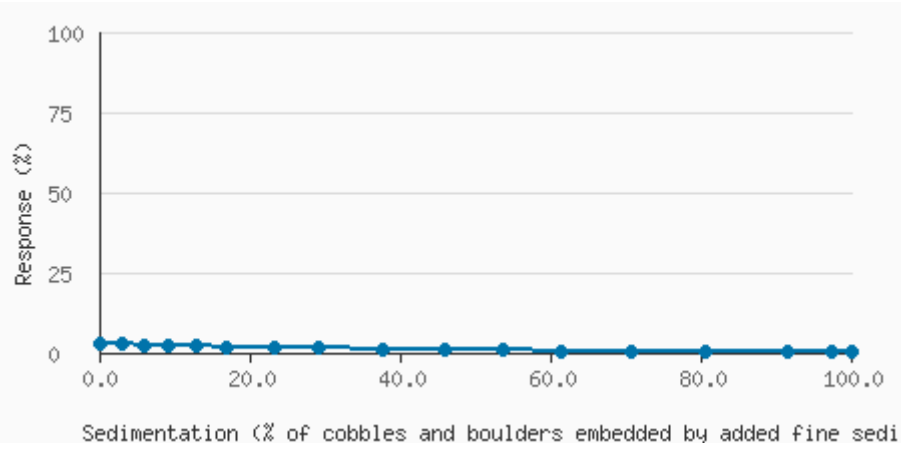
### Overview

> Densities of age 0 chinook salmon remaining in laboratory stream channels after 5 d during winter and summer tests to evaluate the effects of sedimentation. The channels had alternative pool-riffle configurations; fine sediments (

### Function Derivation

> laboratory experiment

## Stressor Response Data




| Stressor (X) | Mean System Capacity (%) | SD | low.limit | up.limit |
|---|---|---|---|---|
| 0.00 | 2.75 | 0.00 | 2.75 | 2.75 |
| 2.96 | 2.55 | 0.00 | 2.55 | 2.55 |
| 5.93 | 2.36 | 0.00 | 2.36 | 2.36 |
| 9.26 | 2.15 | 0.00 | 2.15 | 2.15 |
| 12.96 | 1.97 | 0.00 | 1.97 | 1.97 |

| | | | | |
|---|---|---|---|---|
| 17.04 | 1.76 | 0.00 | 1.76 | 1.76 |
| 23.33 | 1.51 | 0.00 | 1.51 | 1.51 |
| 29.26 | 1.27 | 0.00 | 1.27 | 1.27 |
| 37.78 | 1.02 | 0.00 | 1.02 | 1.02 |
| 45.93 | 0.81 | 0.00 | 0.81 | 0.81 |
| 53.70 | 0.66 | 0.00 | 0.66 | 0.66 |
| 61.48 | 0.53 | 0.00 | 0.53 | 0.53 |
| 70.74 | 0.40 | 0.00 | 0.40 | 0.40 |
| 80.74 | 0.31 | 0.00 | 0.31 | 0.31 |
| 91.48 | 0.22 | 0.00 | 0.22 | 0.22 |
| 97.41 | 0.20 | 0.00 | 0.20 | 0.20 |
| 100.00 | 0.20 | 0.00 | 0.20 | 0.20 |

## Citations

Bjornn, T. C., & Reiser, D. W. (1991). Habitat requirements of salmonids in streams. American Fisheries Society Special Publication, 19(837), 104.

## References

https://www.for.gov.bc.ca/hfd/LIBRARY/FFIP/Bjornn_TC1991.pdf -
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