

# Dissolved Oxygen and Length of Steelhead Fry

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Function Updated by mbayly on Thu, 04/24/2025 - 19:03.

## Species Information

**Common Name:** Steelhead Trout  
**Genus:** *Oncorhynchus mykiss*

## Stressor Details

**Stressor Name:** Dissolved Oxygen  
**Units:** mg/L  
**Metric:** Dissolved Oxygen Concentration  
**Scale:** linear  
**Function Type:** continuous  
**Vital Rate/Process:** Growth

## Life Stage & Context

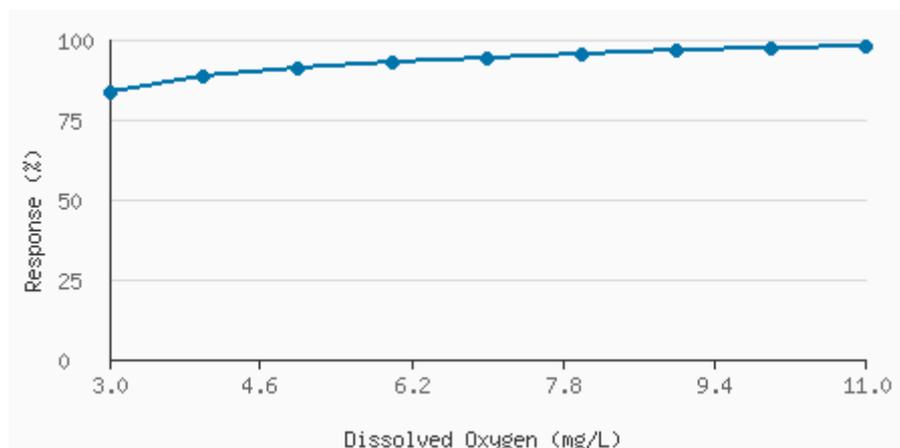
**Life Stages:** Fry

## Descriptions

### Overview

Relationship between mean length of steelhead sac fry when hatched and dissolved oxygen concentration at which the embryos were incubated, for several water velocities during incubation and a temperature of 9.5 C. Newly hatched steelhead alevins were smaller and weaker when they had been incubated as embryos at low and intermediate DO concentrations than when they were incubated at higher concentrations. 100% of steelhead length is assumed to be 20mm.

## Stressor Response Data



Stressor (X)	Mean System Capacity (%)	SD	low.limit	up.limit
3	83.15	0	0	0
4	88.2	0	0	0
5	90.75	0	0	0
6	92.75	0	0	0
7	94.35	0	0	0
8	95.55	0	0	0

9	96.5	0	0	0
10	97.05	0	0	0
11	98.1	0	0	0

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## Citations

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

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## References

[https://www.for.gov.bc.ca/hfd/LIBRARY/FFIP/Bjornn\\_TC1991.pdf](https://www.for.gov.bc.ca/hfd/LIBRARY/FFIP/Bjornn_TC1991.pdf) -  
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