

# Mean Annual Discharge and Steelhead

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Function Updated by jrosenfeld on Tue, 02/24/2026 - 21:28.

## Species Information

**Common Name:** Steelhead

**Genus:** *Oncorhynchus mykiss irideus*

## Stressor Details

**Stressor Name:** Flow

**Units:** %

**Metric:** Mean Annual Discharge (MAD)

**Scale:** linear

**Function Type:** continuous

**Vital Rate/Process:** Over-summer survival

## Life Stage & Context

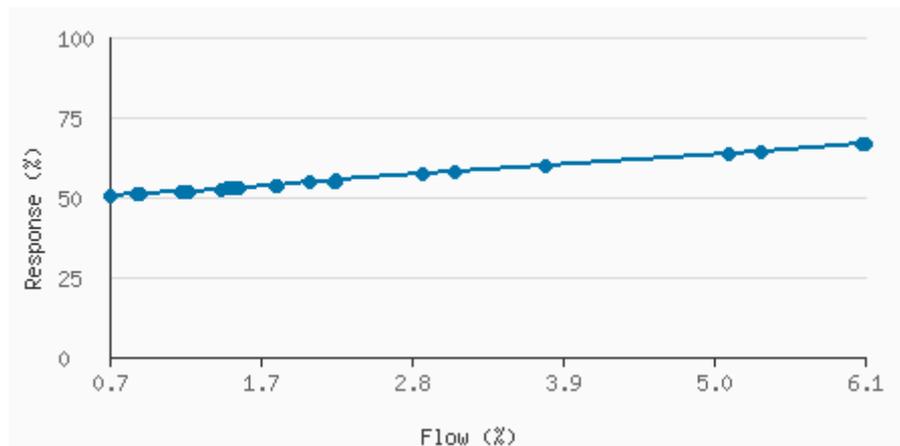
**Life Stages:** Juvenile

**Geography:** Maacama Creek, Mark West Creek, Santa Rosa Creek, Green Valley Creek. California, USA

**Season:** Summer

## Descriptions

## Stressor Response Data



?PERCENT_MAD	Mean System Capacity (%)	SD	low.limit	up.limit
0.6601	50.043305	0	0	100
0.6631	50.052455	0	0	100
0.66987	50.0731035	0	0	100
0.85964	50.651902	0	0	100
0.86415	50.6656575	0	0	100
0.86663	50.6732215	0	0	100
0.86666	50.673313	0	0	100
0.87754	50.706497	0	0	100
0.88402	50.726261	0	0	100
1.17291	51.6073755	0	0	100
1.18126	51.632843	0	0	100

1.18134	51.633087	0	0	100
1.18268	51.637174	0	0	100
1.18697	51.6502585	0	0	100
1.23652	51.801386	0	0	100
1.45809	52.4771745	0	0	100
1.50269	52.6132045	0	0	100
1.50298	52.614089	0	0	100
1.51016	52.635988	0	0	100
1.51021	52.6361405	0	0	100
1.51662	52.655691	0	0	100
1.57039	52.8196895	0	0	100
1.5719	52.824295	0	0	100
1.57312	52.828016	0	0	100
1.58179	52.8544595	0	0	100
1.59	52.8795	0	0	100
1.85929	53.7008345	0	0	100
1.86198	53.709039	0	0	100
1.86456	53.716908	0	0	100
2.09807	54.4291135	0	0	100
2.10072	54.437196	0	0	100
2.10146	54.439453	0	0	100
2.10238	54.442259	0	0	100
2.10317	54.4446685	0	0	100
2.2719	54.959295	0	0	100
2.27529	54.9696345	0	0	100
2.27551	54.9703055	0	0	100
2.28156	54.988758	0	0	100
2.28408	54.996444	0	0	100
2.28562	55.001141	0	0	100
2.2909	55.017245	0	0	100
2.91219	56.9121795	0	0	100
2.91456	56.919408	0	0	100
2.91459	56.9194995	0	0	100
2.91576	56.923068	0	0	100
3.14616	57.625788	0	0	100
3.14741	57.6296005	0	0	100
3.15263	57.6455215	0	0	100
3.15278	57.645979	0	0	100
3.79367	59.6006935	0	0	100
3.79446	59.603103	0	0	100
3.79593	59.6075865	0	0	100
5.11091	63.6182755	0	0	100

5.1153	63.631665	0	0	100
5.11649	63.6352945	0	0	100
5.11654	63.635447	0	0	100
5.34772	64.340546	0	0	100
5.34893	64.3442365	0	0	100
5.34915	64.3449075	0	0	100
5.35076	64.349818	0	0	100
5.35363	64.3585715	0	0	100
6.0774	66.56607	0	0	100
6.0808	66.57644	0	0	100
6.08455	66.5878775	0	0	100
6.0877	66.597485	0	0	100
6.08791	66.5981255	0	0	100
6.08823	66.5991015	0	0	100
6.09181	66.6100205	0	0	100
6.09193	66.6103865	0	0	100
6.09551	66.6213055	0	0	100

## Citations

Grantham, T.E., Newburn, D.A., McCarthy, M.A., and Merenlender, A.M. 2012. The role of streamflow and land use in limiting oversummer survival of juvenile steelhead in California streams. *Trans. Am. Fish. Soc.* 141:585-598.