Spawner Year	Redds (watershed redd total) [g]	Average female fork length	Estimated number of eggs [c]	Basinwide juvenile estimate	Estimated survival rate egg to juvenile	Watershed smolt production estimate	Mean smolt length (mm)	Mean smolt weight (g)	Estimated survival rate juvenile to smolt	Estimated survival rate egg to smolt	Estimated survival rate smolt to adult [e]	Estimated survival rate juvenile to adult [e]
2002-2003	22[a]	64[b]	51,876	11,926±3,244	23.00%	831±167 [d]	114	15.11	6.97%	1.60%	2.41%	0.17%
2003-2004	107	66.3	279,904	25,857±1,499	9.24%	362±145	116	15.95	1.40%	0.13%	52.49%	0.73%
2004-2005	136	65.7	346,382	29,887±9,974	8.63%	3,793±784	99	10.28	12.69%	1.10%	1.37%	0.17%
2005-2006	10[a]	58.7	18,288	1,793 ±869	9.80%	1,485±206	116	14.72	82.82%	8.12%	0.00%	0.00%
2006-2007	95	65.3	237,652	32,298±4,018	13.59%	2,885±336	111	12.44	8.93%	1.21%	0.97%	0.09%
2007-2008	26	64[b]	61,308	3,328±696	5.43%	4,088±1,041	113	12.87	122.84%	6.67%	1.03%	1.26%
2008-2009	0	64[b]	0	0	0.00%	10 [f]	136	24.06	N/A	N/A	SY2011-12	SY2011-12
2009-2010	14	57.2	23,726	1,736±659	7.32%	1,435±463			82.66%	6.05%	SY2012-13	SY2012-13

[a] Due to poor observer efficiency, the PLD index was used to estimate the Olema mainstem redd count based on two spawners per redd.

[b] Average female length based on female carcass lengths on Olema Creek for spawner years 2003-04 thru 2007-08.

[c] Estimated number of eggs using Shapovalov and Taft (1954) formula based on average female fork length.

[d] The Spawner Year 2003-04 watershed production estimate is artificially low since trapping operations were suspended early due to the capture of Red-legged frog tadpoles.
The actual watershed production estimate was likely four to five times higher based on regional smolt production.estimates
For these reasons, the smolt to adult survival rate is likely artificially high.

[e] Estimated smolt to adult calculated by dividing number of adult spawners (estimated based on 2 times the total watershed redd count (in parentheses))
by the estimated number of outmigrating smolts for previous cohort

[f] Raw count, percent survival assumes raw count is 20% of total population observed, taken from trap efficiencies.

[g] Includes John West Fork redd count