How to Read a Staff Gage

Staff gages are used for a quick visual indication of the surface level in reservoirs, rivers and streams. A staff gage is similar to the typical household yard stick but with measurements displayed both to the nearest foot (one foot intervals) and to the nearest tenth of a foot. A typical staff gage associated with Project 184 is a Style C enamel gage plate that is 2.5 inches wide by 3.33 inches long. The gage plates are stacked with various lengths depending on the depth of water. The measurements are graduated to hundredth of a foot with the larger numbers marking the nearest one foot intervals and the smaller numbers marking the tenth of a foot interval (see graphic 1).

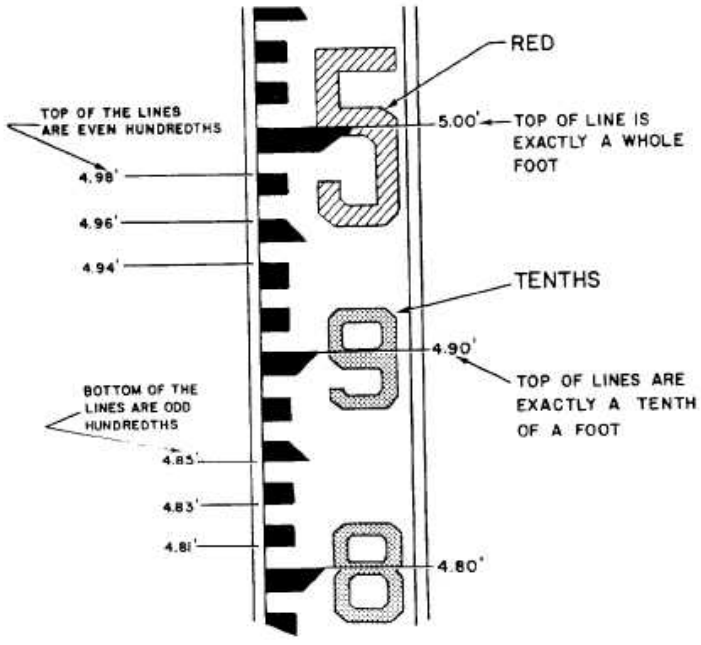
Some staff gages are placed in stilling wells so the water level remains constant. If the water level fluctuates, take the reading at the mid-point range between the high and low water levels.

How to Read a Rating Table

The rating tables can be used to convert the staff gage reading to cfs. The vertical axis under ght (gage height) corresponds to tenth of a foot interval (e.g., 2.4, 2.5, 2.6 etc.) and the horizontal axis corresponds to hundredth of a foot interval (e.g., .00, .01, etc.). In the example below, a staff gage reading of 2.43 (yellow) corresponds to 1.24 cfs (in blue).

ght	.00	.01	.02	.03	.04	.05
2.4	1.08*	1.13	1.18	1.24	1.29	1.35

Example data, each table is different.



Graphic 1

EL DORADO IRRIGATION DISTRICT

#A-9 SILVER LAKE OUTLET NEAR KIRKWOOD, CA. 2007 WY

Rating Table 28 from 10/01/2002 00:00 Scale Offset = 2.00

Changed skeletal point 4.20from 74 to 76cfs and added point 4.□

DISCHARGE IN CUBIC FEET PER SECOND

ght	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	1st diff	2nd diff
2.4	1.08*	1.13	1.18	1.24	1.29	1.35	1.41	1.47	1.53	1.59	.570	
2.5	1.65*	1.71	1.78	1.85	1.92	1.99	2.06	2.13	2.20	2.27	.700	.130
2.6	2.35*	2.45	2.55	2.66	2.77	2.88	3.00	3.11	3.23	3.35	1.13	.430
2.7	3.48*	3.60	3.73	3.86	4.00	4.13	4.27	4.41	4.55	4.70	1.37	.240
2.8	4.85*	5.00	5.16	5.32	5.48	5.65	5.82	5.99	6.16	6.34	1.67	.302
2.9	6.52	6.71	6.89	7.08	7.28	7.47	7.67	7.87	8.08	8.29	1.98	.307
3.0	8.50*	8.71	8.92	9.13	9.34	9.56	9.78	10.0	10.2	10.5	2.20	.221
3.1	10.7	10.9	11.2	11.4	11.7	11.9	12.2	12.4	12.7	12.9	2.50	.302
3.2	13.2*	13.5	13.8	14.0	14.3	14.6	14.9	15.2	15.5	15.8	2.91	.408
3.3	16.1	16.4	16.7	17.1	17.4	17.7	18.0	18.4	18.7	19.0	3.26	.353
3.4	19.4	19.7	20.1	20.4	20.8	21.1	21.5	21.9	22.2	22.6	3.63	.366
3.5	23.0*	23.4	23.8	24.2	24.6	25.0	25.4	25.8	26.2	26.7	4.08	.456
3.6	27.1	27.5	28.0	28.4	28.8	29.3	29.7	30.2	30.6	31.1	4.50	.411
3.7	31.6	32.1	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	4.92	.424
3.8	36.5*	37.0	37.5	38.0	38.6	39.1	39.6	40.2	40.7	41.2	5.28	.363
3.9	41.8	42.3	42.9	43.5	44.0	44.6	45.2	45.7	46.3	46.9	5.72	.434
4.0	47.5*	48.7	49.9	51.1	52.4	53.7	55.0	56.3	57.6	59.0	12.9	7.20
4.1	60.4	61.9	63.3	64.8	66.3	67.9	69.4	71.0	72.7	74.3	15.6	2.66
4.2	76.0*	78.5	81.2	83.9	86.6	89.5	92.4	95.4	98.5	101.7	29.0	13.4
4.3	105.0*	108.0	111.0	114.2	117.4	120.7	124.0	127.5	131.0	134.6	33.3	4.25
4.4	138.3	142.0	145.9	149.8	153.8	158.0	162.2	166.5	170.9	175.4	41.7	8.50
4.5	180.0*	183.8	187.6	191.5	195.4	199.4	203.5	207.6	211.8	216.1	40.5	-1.27
4.6	220.5	224.9	229.4	234.0	238.6	243.3	248.1	253.0	257.9	262.9	47.5	7.04
4.7	268.0*	271.8	275.6	279.5	283.4	287.4	291.4	295.4	299.5	303.6	39.7	-7.79
4.8	307.7	311.9	316.2	320.5	324.8	329.1	333.6	338.0	342.5	347.1	43.9	4.18
4.9	351.6	356.3	360.9	365.7	370.4	375.2	380.1	385.0	390.0	395.0	48.4	4.45
5.0	400.0*	404.3	408.7	413.1	417.6	422.0	426.6	431.1	435.7	440.3	44.9	-3.45
5.1	444.9	449.6	454.3	459.0	463.8	468.6	473.5	478.4	483.3	488.2	48.3	3.37
5.2	493.2	498.2	503.3	508.4	513.5	518.7	523.9	529.1	534.4	539.7	51.8	3.51
5.3	545.0*	549.5	554.1	558.6	563.2	567.8	572.5	577.2	581.8	586.6	46.3	-5.51
5.4	591.3	596.1	600.8	605.6	610.5	615.3	620.2	625.1	630.1	635.0	48.7	2.42
5.5	640.0*	645.0	650.0	655.0	660.1	665.2	670.3	675.4	680.5	685.7	50.9	2.22
5.6	690.9	696.2	701.4	706.7	712.0	717.3	722.7	728.0	733.5	738.9	53.4	2.49
5.7	744.3	749.8	755.3	760.9	766.4	772.0	777.6	783.2	788.9	794.6	56.0	2.54
5.8	800.3	806.0	811.8	817.6	823.4	829.2	835.1	841.0	846.9	852.9	58.5	2.59
5.9	858.8	864.8	870.8	876.9	883.0	889.1	895.2	901.4	907.6	913.8	61.2	2.64
6.0	920.0*	925.8	931.7	937.6	943.5	949.4	955.4	961.4	967.3	973.4	59.4	-1.76
6.1	979.4	985.5	991.6	997.7	1,004	1,010	1,016	1,022	1,029	1,035	61.7	2.27
6.2	1,041	1,047	1,054	1,060	1,066	1,073	1,079	1,086	1,092	1,099	64.0	2.29
6.3	1,105	1,112	1,118	1,125	1,131	1,138	1,145	1,151	1,158	1,165	66.3	2.32
6.4	1,171	1,178	1,185	1,192	1,199	1,205	1,212	1,219	1,226	1,233	68.6	2.35
6.5	1,240*	1,246	1,253	1,259	1,265	1,272	1,278	1,285	1,291	1,298	64.3	-4.36
6.6	1,304	1,311	1,317	1,324	1,331	1,337	1,344	1,350	1,357	1,364	66.1	1.84
6.7	1,370	1,377	1,384	1,391	1,397	1,404	1,411	1,418	1,425	1,432	68.0	1.85
6.8	1,438	1,445	1,452	1,459	1,466	1,473	1,480	1,487	1,494	1,501	69.9	1.87
6.9	1,508	1,515	1,522	1,530	1,537	1,544	1,551	1,558	1,566	1,573	71.7	1.88
7.0	1,580*	1,587	1,594	1,601	1,608	1,615	1,622	1,629	1,636	1,643	69.6	-2.11
7.1	1,650	1,657	1,664	1,671	1,678	1,685	1,692	1,699	1,706	1,714	71.2	1.63
7.2	1,721	1,728	1,735	1,743	1,750	1,757	1,764	1,772	1,779	1,786	72.9	1.63
7.3	1,794	1,801	1,809	1,816	1,823	1,831	1,838	1,846	1,853	1,861	74.5	1.64

ght	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	1st diff	2nd diff
7.4	1,868	1,876	1,883	1,891	1,899	1,906	1,914	1,921	1,929	1,937	76.2	1.64
7.5	1,944	1,952	1,960	1,968	1,975	1,983	1,991	1,999	2,007	2,014	77.8	1.65
7.6	2,022	2,030	2,038	2,046	2,054	2,062	2,070	2,078	2,086	2,094	79.5	1.65
7.7	2,102	2,110	2,118	2,126	2,134	2,142	2,150	2,158	2,166	2,175	81.1	1.66
7.8	2,183	2,191	2,199	2,207	2,216	2,224	2,232	2,241	2,249	2,257	82.8	1.66
7.9	2,266	2,274	2,282	2,291	2,299	2,308	2,316	2,324	2,333	2,341	84.4	1.67
8.0	2,350*											

* skeletal rating point