



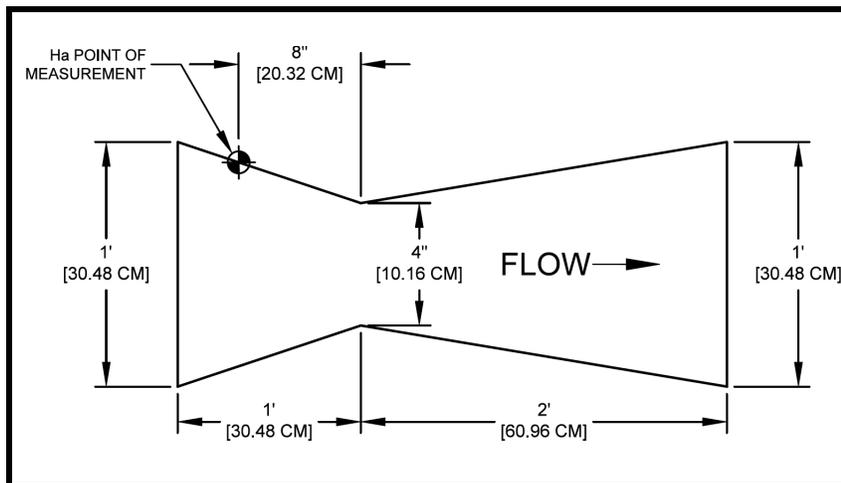
### 36-Inch L x 4-Inch W Cutthroat Flume Discharge Table

65% Submergence Transition ±3% Accuracy

Formulas (H in feet): CFS = 1.459 H<sub>ft</sub><sup>1.84</sup> GPM = 654.8 H<sub>ft</sub><sup>1.84</sup> MGD = 0.9430 H<sub>ft</sub><sup>1.84</sup>  
 Formulas (H in meters): L/S = 367.6 H<sub>m</sub><sup>1.84</sup> M3/HR = 1323 H<sub>m</sub><sup>1.84</sup>

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.01	0.12	0.0030					
0.02	0.24	0.0061					
0.03	0.36	0.0091					
0.04	0.48	0.0122					
0.05	0.60	0.0152					
0.06	0.72	0.0183					
0.07	0.84	0.0213					
0.08	0.96	0.0244					
0.09	1.08	0.0274					
0.10	1.20	0.0305	0.0211	9.465	0.0136	0.5972	2.149
0.11	1.32	0.0335	0.0251	11.28	0.0162	0.7117	2.561
0.12	1.44	0.0366	0.0295	13.24	0.0191	0.8353	3.006
0.13	1.56	0.0396	0.0342	15.34	0.0221	0.9678	3.482
0.14	1.68	0.0427	0.0392	17.58	0.0253	1.109	3.991
0.15	1.80	0.0457	0.0445	19.96	0.0287	1.259	4.531
0.16	1.92	0.0488	0.0501	22.47	0.0324	1.418	5.103
0.17	2.04	0.0518	0.0560	25.13	0.0362	1.586	5.705
0.18	2.16	0.0549	0.0622	27.91	0.0402	1.761	6.338
0.19	2.28	0.0579	0.0687	30.83	0.0444	1.946	7.001
0.20	2.40	0.0610	0.0755	33.88	0.0488	2.138	7.694
0.21	2.52	0.0640	0.0826	37.07	0.0534	2.339	8.416
0.22	2.64	0.0671	0.0900	40.38	0.0581	2.548	9.168
0.23	2.76	0.0701	0.0976	43.82	0.0631	2.765	9.950
0.24	2.88	0.0732	0.1056	47.39	0.0682	2.990	10.76
0.25	3.00	0.0762	0.1138	51.09	0.0736	3.224	11.60
0.26	3.12	0.0792	0.1224	54.91	0.0791	3.465	12.47
0.27	3.24	0.0823	0.1311	58.86	0.0848	3.714	13.36
0.28	3.36	0.0853	0.1402	62.93	0.0906	3.971	14.29
0.29	3.48	0.0884	0.1496	67.13	0.0967	4.236	15.24
0.30	3.60	0.0914	0.1592	71.45	0.1029	4.509	16.22

Excessive error due to fluid-flow properties and boundary conditions



Note: Discharge is calculated to top of flume

Sources: Cutthroat Flume Discharge Relations, Water Management Technical Paper No. 16, Colorado State University, AER71-72RSB6, March 1972  
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### 36-Inch L x 4-Inch W Cutthroat Flume Discharge Table

65% Submergence Transition ±3% Accuracy

Formulas (H in feet): CFS = 1.459 H<sub>ft</sub><sup>1.84</sup> GPM = 654.8 H<sub>ft</sub><sup>1.84</sup> MGD = 0.9430 H<sub>ft</sub><sup>1.84</sup>  
 Formulas (H in meters): L/S = 367.6 H<sub>m</sub><sup>1.84</sup> M3/HR = 1323 H<sub>m</sub><sup>1.84</sup>

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.31	3.72	0.0945	0.1691	75.90	0.1093	4.789	17.23
0.32	3.84	0.0975	0.1793	80.46	0.1159	5.077	18.27
0.33	3.96	0.1006	0.1897	85.15	0.1226	5.373	19.33
0.34	4.08	0.1036	0.2004	89.96	0.1295	5.676	20.42
0.35	4.20	0.1067	0.2114	94.88	0.1366	5.987	21.54
0.36	4.32	0.1097	0.2227	99.93	0.1439	6.306	22.69
0.37	4.44	0.1128	0.2342	105.1	0.1513	6.632	23.86
0.38	4.56	0.1158	0.2460	110.4	0.1590	6.965	25.06
0.39	4.68	0.1189	0.2580	115.8	0.1667	7.306	26.29
0.40	4.80	0.1219	0.2703	121.3	0.1747	7.655	27.54
0.41	4.92	0.1250	0.2829	126.9	0.1828	8.011	28.82
0.42	5.04	0.1280	0.2957	132.7	0.1911	8.374	30.13
0.43	5.16	0.1311	0.3088	138.6	0.1996	8.744	31.46
0.44	5.28	0.1341	0.3221	144.6	0.2082	9.122	32.82
0.45	5.40	0.1372	0.3357	150.7	0.2170	9.507	34.21
0.46	5.52	0.1402	0.3496	156.9	0.2259	9.900	35.62
0.47	5.64	0.1433	0.3637	163.2	0.2350	10.30	37.06
0.48	5.76	0.1463	0.3780	169.7	0.2443	10.71	38.52
0.49	5.88	0.1494	0.3927	176.2	0.2538	11.12	40.01
0.50	6.00	0.1524	0.4075	182.9	0.2634	11.54	41.53
0.51	6.12	0.1554	0.4227	189.7	0.2732	11.97	43.07
0.52	6.24	0.1585	0.4380	196.6	0.2831	12.40	44.64
0.53	6.36	0.1615	0.4537	203.6	0.2932	12.85	46.23
0.54	6.48	0.1646	0.4695	210.7	0.3035	13.30	47.84
0.55	6.60	0.1676	0.4856	218.0	0.3139	13.75	49.49
0.56	6.72	0.1707	0.5020	225.3	0.3245	14.22	51.16
0.57	6.84	0.1737	0.5186	232.8	0.3352	14.69	52.85
0.58	6.96	0.1768	0.5355	240.3	0.3461	15.17	54.57
0.59	7.08	0.1798	0.5526	248.0	0.3572	15.65	56.31
0.60	7.20	0.1829	0.5700	255.8	0.3684	16.14	58.08
0.61	7.32	0.1859	0.5876	263.7	0.3797	16.64	59.87
0.62	7.44	0.1890	0.6054	271.7	0.3913	17.15	61.69
0.63	7.56	0.1920	0.6235	279.8	0.4030	17.66	63.54
0.64	7.68	0.1951	0.6418	288.1	0.4148	18.18	65.40
0.65	7.80	0.1981	0.6604	296.4	0.4268	18.70	67.30
0.66	7.92	0.2012	0.6792	304.8	0.4390	19.24	69.21
0.67	8.04	0.2042	0.6983	313.4	0.4513	19.78	71.16
0.68	8.16	0.2073	0.7176	322.1	0.4638	20.32	73.12
0.69	8.28	0.2103	0.7371	330.8	0.4764	20.88	75.11
0.70	8.40	0.2134	0.7569	339.7	0.4892	21.44	77.13
0.71	8.52	0.2164	0.7769	348.7	0.5021	22.00	79.17
0.72	8.64	0.2195	0.7972	357.8	0.5152	22.58	81.23
0.73	8.76	0.2225	0.8177	367.0	0.5284	23.16	83.32
0.74	8.88	0.2256	0.8384	376.3	0.5418	23.74	85.43
0.75	9.00	0.2286	0.8593	385.7	0.5554	24.34	87.57
0.76	9.12	0.2316	0.8805	395.2	0.5691	24.94	89.73
0.77	9.24	0.2347	0.9020	404.8	0.5830	25.54	91.91
0.78	9.36	0.2377	0.9237	414.5	0.5970	26.16	94.12
0.79	9.48	0.2408	0.9456	424.4	0.6111	26.78	96.35
0.80	9.60	0.2438	0.9677	434.3	0.6254	27.41	98.61

Sources: Cutthroat Flume Discharge Relations, Water Management Technical Paper No. 16, Colorado State University, AER71-72RSB6, March 1972  
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### 36-Inch L x 4-Inch W Cutthroat Flume Discharge Table

65% Submergence Transition ±3% Accuracy

Formulas (H in feet): CFS = 1.459 H<sub>ft.</sub><sup>1.84</sup> GPM = 654.8 H<sub>ft.</sub><sup>1.84</sup> MGD = 0.9430 H<sub>ft.</sub><sup>1.84</sup>  
 Formulas (H in meters): L/S = 367.6 H<sub>m</sub><sup>1.84</sup> M3/HR = 1323 H<sub>m</sub><sup>1.84</sup>

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.81	9.72	0.2469	0.9901	444.3	0.6399	28.04	100.9
0.82	9.84	0.2499	1.013	454.5	0.6545	28.68	103.2
0.83	9.96	0.2530	1.036	464.7	0.6693	29.33	105.5
0.84	10.08	0.2560	1.059	475.1	0.6842	29.98	107.9
0.85	10.20	0.2591	1.082	485.6	0.6992	30.64	110.2
0.86	10.32	0.2621	1.105	496.1	0.7144	31.31	112.6
0.87	10.44	0.2652	1.129	506.8	0.7298	31.98	115.1
0.88	10.56	0.2682	1.153	517.6	0.7453	32.66	117.5
0.89	10.68	0.2713	1.177	528.4	0.7610	33.34	120.0
0.90	10.80	0.2743	1.202	539.4	0.7768	34.04	122.5
0.91	10.92	0.2774	1.227	550.5	0.7927	34.74	125.0
0.92	11.04	0.2804	1.251	561.7	0.8088	35.44	127.5
0.93	11.16	0.2835	1.277	573.0	0.8251	36.15	130.1
0.94	11.28	0.2865	1.302	584.3	0.8415	36.87	132.7
0.95	11.40	0.2896	1.328	595.8	0.8580	37.60	135.3
0.96	11.52	0.2926	1.353	607.4	0.8747	38.33	137.9
0.97	11.64	0.2957	1.379	619.1	0.8916	39.07	140.6
0.98	11.76	0.2987	1.406	630.9	0.9085	39.81	143.2
0.99	11.88	0.3018	1.432	642.8	0.9257	40.56	145.9
1.00	12.00	0.3048	1.459	654.8	0.9430	41.32	148.7

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