



## 2 Inch 45-Degree WSC (No. 4) Trapezoidal Flume Discharge Table

80% Submergence Transition

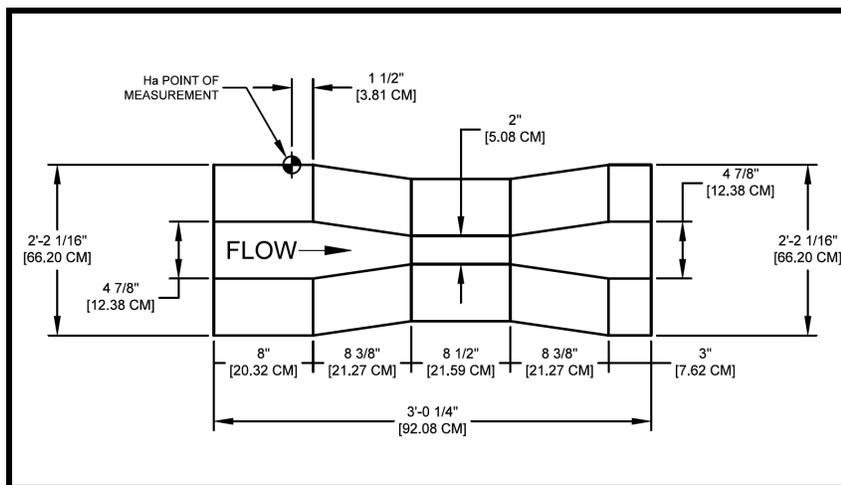
Formulas (H in feet):  $CFS = 3.32 H_{ft}^{2.32}$

$GPM = 1490 H_{ft}^{2.32}$

$MGD = 2.146 H_{ft}^{2.32}$

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					
0.11	1.32	0.0335	0.0277	12.43	0.0179	0.7845	2.823
0.12	1.44	0.0366	0.0328	14.72	0.0212	0.9289	3.342
0.13	1.56	0.0396	0.0383	17.19	0.0248	1.085	3.903
0.14	1.68	0.0427	0.0443	19.88	0.0286	1.255	4.514
0.15	1.80	0.04572	0.0508	22.80	0.0328	1.439	5.177
0.16	1.92	0.0488	0.0577	25.90	0.0373	1.634	5.880
0.17	2.04	0.0518	0.0652	29.26	0.0421	1.846	6.644
0.18	2.16	0.0549	0.0731	32.81	0.0472	2.070	7.449
0.19	2.28	0.0579	0.0816	36.62	0.0527	2.311	8.315
0.20	2.40	0.0610	0.0906	40.66	0.0586	2.566	9.232
0.21	2.52	0.0640	0.1001	44.92	0.0647	2.835	10.20
0.22	2.64	0.0671	0.1102	49.46	0.0712	3.121	11.23
0.23	2.76	0.0701	0.1208	54.22	0.0781	3.421	12.31
0.24	2.88	0.0732	0.1320	59.24	0.0853	3.738	13.45
0.25	3.00	0.0762	0.1438	64.54	0.0929	4.072	14.65
0.26	3.12	0.0792	0.1562	70.10	0.1010	4.424	15.92
0.27	3.24	0.0823	0.1692	75.94	0.1094	4.792	17.24
0.28	3.36	0.0853	0.1828	82.04	0.1181	5.177	18.63
0.29	3.48	0.0884	0.1971	88.5	0.1274	5.582	20.08
0.30	3.60	0.0914	0.2120	95.1	0.1370	6.004	21.60

Excessive error due to fluid-flow properties and boundary conditions



Note: Formulas fit data within 1% of full scale

Source: [Isco Open Channel Flow Measurement Handbook](#), 8th Edition



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FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.31	3.72	0.0945	0.2275	102.1	0.1470	6.443	23.18
0.32	3.84	0.0975	0.2438	109.4	0.1576	6.904	24.84
0.33	3.96	0.1006	0.2607	117.0	0.1685	7.383	26.57
0.34	4.08	0.1036	0.2782	124.9	0.1798	7.879	28.35
0.35	4.20	0.1067	0.2965	133.1	0.1916	8.397	30.21
0.36	4.32	0.1097	0.3155	141.6	0.2039	8.935	32.15
0.37	4.44	0.1128	0.3352	150.4	0.2166	9.493	34.16
0.38	4.56	0.1158	0.3556	159.6	0.2298	10.07	36.24
0.39	4.68	0.1189	0.3768	169.1	0.2435	10.67	38.40
0.40	4.80	0.1219	0.3987	178.9	0.2577	11.29	40.63
0.41	4.92	0.1250	0.4214	189.1	0.2724	11.93	42.94
0.42	5.04	0.1280	0.4448	199.6	0.2875	12.60	45.33
0.43	5.16	0.1311	0.4690	210.5	0.3031	13.28	47.79
0.44	5.28	0.1341	0.4940	221.7	0.3193	13.99	50.34
0.45	5.40	0.1372	0.5199	233.3	0.3360	14.72	52.98
0.46	5.52	0.1402	0.5465	245.3	0.3532	15.48	55.69
0.47	5.64	0.1433	0.5739	257.6	0.3709	16.25	58.48
0.48	5.76	0.1463	0.6022	270.3	0.3892	17.05	61.36
0.49	5.88	0.1494	0.6313	283.3	0.4080	17.88	64.33
0.50	6.00	0.1524	0.6612	296.7	0.4273	18.73	67.38
0.51	6.12	0.1554	0.6920	310.6	0.4472	19.60	70.51
0.52	6.24	0.1585	0.7273	326.4	0.4701	20.60	74.11
0.53	6.36	0.1615	0.7562	339.4	0.4887	21.42	77.06
0.54	6.48	0.1646	0.7896	354.4	0.5103	22.36	80.46
0.55	6.60	0.1676	0.8239	369.8	0.5325	23.33	83.96
0.56	6.72	0.1707	0.8591	385.6	0.5552	24.33	87.54
0.57	6.84	0.1737	0.8953	401.8	0.5786	25.35	91.23
0.58	6.96	0.1768	0.9323	418.4	0.6025	26.40	95.00
0.59	7.08	0.1798	0.9703	435.5	0.6271	27.48	98.87
0.60	7.20	0.1829	1.009	452.8	0.6521	28.57	102.8
0.61	7.32	0.1859	1.049	470.8	0.6780	29.71	106.9
0.62	7.44	0.1890	1.090	489.2	0.7045	30.87	111.1
0.63	7.56	0.1920	1.132	508.0	0.7316	32.06	115.4
0.64	7.68	0.1951	1.174	526.9	0.7588	33.25	119.6
0.65	7.80	0.1981	1.218	546.6	0.7872	34.49	124.1
0.66	7.92	0.2012	1.263	566.8	0.8163	35.77	128.7
0.67	8.04	0.2042	1.308	587.0	0.8454	37.04	133.3
0.68	8.16	0.2073	1.355	608.1	0.8757	38.37	138.1
0.69	8.28	0.2103	1.403	629.7	0.9068	39.73	143.0
0.70	8.40	0.2134	1.451	651.2	0.9378	41.09	147.9
0.71	8.52	0.2164	1.501	673.6	0.9701	42.51	153.0
0.72	8.64	0.2195	1.552	696.5	1.003	43.95	158.1
0.73	8.76	0.2225	1.604	719.9	1.037	45.43	163.4
0.74	8.88	0.2256	1.656	743.2	1.070	46.90	168.7
0.75	9.00	0.2286	1.710	767.4	1.105	48.43	174.2
0.76	9.12	0.2316	1.765	792.1	1.141	49.98	179.9
0.77	9.24	0.2347	1.821	817.3	1.177	51.57	185.6
0.78	9.36	0.2377	1.878	842.8	1.214	53.18	191.4
0.79	9.48	0.2408	1.937	869.3	1.252	54.86	197.4
0.80	9.60	0.2438	1.996	895.8	1.290	56.53	203.4



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GPM = 1490 H<sub>ft.</sub><sup>2.32</sup>

MGD = 2.146 H<sub>ft.</sub><sup>2.32</sup>

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.81	9.72	0.2469	2.056	922.7	1.329	58.23	209.5
0.82	9.84	0.2499	2.118	950.6	1.369	59.98	215.8
0.83	9.96	0.2530	2.180	978.4	1.409	61.74	222.1