OPENCHANNELFLOW

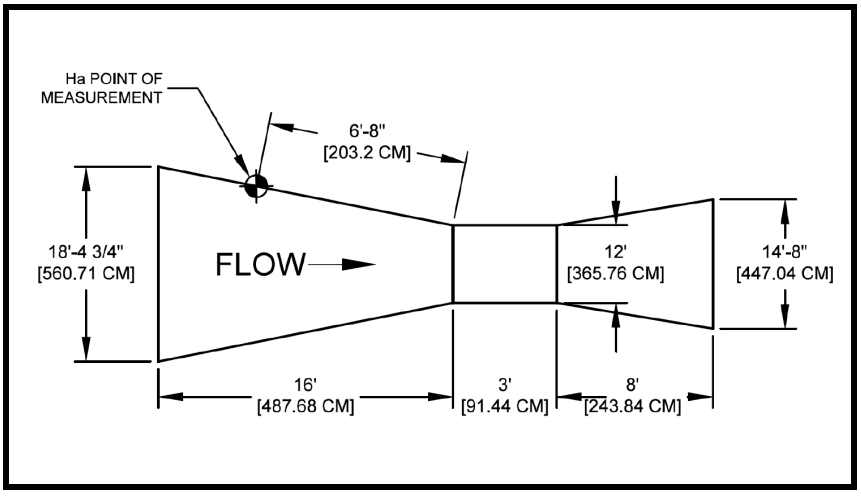
144-Inch Parshall Flume Discharge Table

No Submergence ±3-5% Accuracy

Formulas (H in feet): CFS = 46.75 $H_{ft.}^{1.6}$ GPM = 20981 $H_{ft.}^{1.6}$ MGD = 30.21 $H_{ft.}^{1.6}$

Formulas (H in meters): L/S = 8859 $H_{m}^{1.6}$ M3/HR = 31890 $H_{m}^{1.6}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.01	0.12	0.0030	Excessive error due to fluid-flow properties and boundary conditions				
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					
0.12	1.44	0.0366					
0.13	1.56	0.0396					
0.14	1.68	0.0427					
0.15	1.80	0.0457					
0.16	1.92	0.0488					
0.17	2.04	0.0518					
0.18	2.16	0.0549					
0.19	2.28	0.0579					
0.20	2.40	0.0610					
0.21	2.52	0.0640					
0.22	2.64	0.0671					
0.23	2.76	0.0701					
0.24	2.88	0.0732					
0.25	3.00	0.0762					
0.26	3.12	0.0792					
0.27	3.24	0.0823					
0.28	3.36	0.0853					
0.29	3.48	0.0884					
0.30	3.60	0.0914					



Sources: Water Measurement Manual, 3rd Edition, United States Department of the Interior, Bureau of Reclamation

ASTM D 1941-91 (2007): Standard Test Method for Open Channel Flow Measurement of Water with Parshall Flume

OPENCHANNELFLOW

144-Inch Parshall Flume Discharge Table

No Submergence ±3-5% Accuracy

Formulas (H in feet): $CFS = 46.75\ H_{ft.}^{1.6}$ $GPM = 20981\ H_{ft.}^{1.6}$ $MGD = 30.21\ H_{ft.}^{1.6}$

Formulas (H in meters): $L/S = 8859\ H_{m}^{1.6}$ $M3/HR = 31890\ H_{m}^{1.6}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.31	3.72	0.0945					
0.32	3.84	0.0975					
0.33	3.96	0.1006	7.932	3560	5.127	224.6	808.3
0.34	4.08	0.1036	8.320	3734	5.378	235.6	847.9
0.35	4.20	0.1067	8.715	3911	5.633	246.8	888.1
0.36	4.32	0.1097	9.117	4092	5.893	258.2	929.1
0.37	4.44	0.1128	9.526	4275	6.157	269.8	970.7
0.38	4.56	0.1158	9.941	4462	6.425	281.5	1013
0.39	4.68	0.1189	10.36	4651	6.698	293.5	1056
0.40	4.80	0.1219	10.79	4843	6.974	305.6	1100
0.41	4.92	0.1250	11.23	5038	7.256	317.9	1144
0.42	5.04	0.1280	11.67	5236	7.541	330.4	1189
0.43	5.16	0.1311	12.12	5437	7.830	343.1	1235
0.44	5.28	0.1341	12.57	5641	8.123	356.0	1281
0.45	5.40	0.1372	13.03	5848	8.421	369.0	1328
0.46	5.52	0.1402	13.50	6057	8.722	382.2	1375
0.47	5.64	0.1433	13.97	6269	9.028	395.6	1423
0.48	5.76	0.1463	14.45	6484	9.337	409.1	1472
0.49	5.88	0.1494	14.93	6701	9.650	422.9	1521
0.50	6.00	0.1524	15.42	6921	9.967	436.7	1571
0.51	6.12	0.1554	15.92	7144	10.29	450.8	1622
0.52	6.24	0.1585	16.42	7370	10.61	465.0	1673
0.53	6.36	0.1615	16.93	7598	10.94	479.4	1725
0.54	6.48	0.1646	17.44	7828	11.27	494.0	1777
0.55	6.60	0.1676	17.96	8061	11.61	508.7	1830
0.56	6.72	0.1707	18.49	8297	11.95	523.6	1884
0.57	6.84	0.1737	19.02	8536	12.29	538.6	1938
0.58	6.96	0.1768	19.56	8776	12.64	553.8	1993
0.59	7.08	0.1798	20.10	9020	12.99	569.2	2048
0.60	7.20	0.1829	20.65	9266	13.34	584.7	2104
0.61	7.32	0.1859	21.20	9514	13.70	600.3	2160
0.62	7.44	0.1890	21.76	9765	14.06	616.2	2217
0.63	7.56	0.1920	22.32	10018	14.43	632.1	2275
0.64	7.68	0.1951	22.89	10274	14.79	648.3	2333
0.65	7.80	0.1981	23.47	10532	15.17	664.6	2391
0.66	7.92	0.2012	24.05	10792	15.54	681.0	2450
0.67	8.04	0.2042	24.63	11055	15.92	697.6	2510
0.68	8.16	0.2073	25.22	11320	16.30	714.3	2570
0.69	8.28	0.2103	25.82	11588	16.69	731.2	2631
0.70	8.40	0.2134	26.42	11857	17.08	748.2	2692
0.71	8.52	0.2164	27.03	12130	17.47	765.4	2754
0.72	8.64	0.2195	27.64	12404	17.86	782.7	2816
0.73	8.76	0.2225	28.26	12681	18.26	800.2	2879
0.74	8.88	0.2256	28.88	12960	18.66	817.8	2943
0.75	9.00	0.2286	29.50	13241	19.07	835.6	3006
0.76	9.12	0.2316	30.14	13525	19.48	853.4	3071
0.77	9.24	0.2347	30.77	13811	19.89	871.5	3136
0.78	9.36	0.2377	31.41	14099	20.30	889.7	3201
0.79	9.48	0.2408	32.06	14389	20.72	908.0	3267
0.80	9.60	0.2438	32.71	14682	21.14	926.4	3333

Sources: Water Measurement Manual, 3rd Edition, United States Department of the Interior, Bureau of Reclamation

ASTM D 1941-91 (2007): Standard Test Method for Open Channel Flow Measurement of Water with Parshall Flume

OPENCHANNELFLOW

144-Inch Parshall Flume Discharge Table

No Submergence ±3-5% Accuracy

Formulas (H in feet): CFS = 46.75 $H_{ft.}^{1.6}$ GPM = 20981 $H_{ft.}^{1.6}$ MGD = 30.21 $H_{ft.}^{1.6}$

Formulas (H in meters): L/S = 8859 $H_{m}^{1.6}$ M3/HR = 31890 $H_{m}^{1.6}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.81	9.72	0.2469	33.37	14977	21.57	945.0	3400
0.82	9.84	0.2499	34.03	15273	21.99	963.8	3468
0.83	9.96	0.2530	34.70	15573	22.43	982.7	3536
0.84	10.08	0.2560	35.37	15874	22.86	1002	3604
0.85	10.20	0.2591	36.05	16177	23.30	1021	3673
0.86	10.32	0.2621	36.73	16483	23.74	1040	3742
0.87	10.44	0.2652	37.41	16791	24.18	1060	3812
0.88	10.56	0.2682	38.10	17100	24.63	1079	3883
0.89	10.68	0.2713	38.80	17412	25.07	1099	3953
0.90	10.80	0.2743	39.50	17726	25.53	1119	4025
0.91	10.92	0.2774	40.20	18043	25.98	1139	4097
0.92	11.04	0.2804	40.91	18361	26.44	1159	4169
0.93	11.16	0.2835	41.63	18681	26.90	1179	4242
0.94	11.28	0.2865	42.34	19004	27.37	1199	4315
0.95	11.40	0.2896	43.07	19328	27.83	1220	4388
0.96	11.52	0.2926	43.79	19655	28.30	1240	4463
0.97	11.64	0.2957	44.53	19983	28.78	1261	4537
0.98	11.76	0.2987	45.26	20314	29.25	1282	4612
0.99	11.88	0.3018	46.00	20647	29.73	1303	4688
1.00	12.00	0.3048	46.75	20981	30.21	1324	4764
1.01	12.12	0.3078	47.50	21318	30.70	1345	4840
1.02	12.24	0.3109	48.25	21657	31.19	1367	4917
1.03	12.36	0.3139	49.01	21998	31.68	1388	4995
1.04	12.48	0.3170	49.78	22340	32.17	1410	5072
1.05	12.60	0.3200	50.55	22685	32.67	1431	5151
1.06	12.72	0.3231	51.32	23032	33.17	1453	5229
1.07	12.84	0.3261	52.09	23380	33.67	1475	5308
1.08	12.96	0.3292	52.88	23731	34.17	1497	5388
1.09	13.08	0.3322	53.66	24083	34.68	1520	5468
1.10	13.20	0.3353	54.45	24438	35.19	1542	5549
1.11	13.32	0.3383	55.25	24794	35.71	1565	5630
1.12	13.44	0.3414	56.04	25153	36.22	1587	5711
1.13	13.56	0.3444	56.85	25513	36.74	1610	5793
1.14	13.68	0.3475	57.65	25875	37.26	1633	5875
1.15	13.80	0.3505	58.47	26239	37.79	1656	5958
1.16	13.92	0.3536	59.28	26605	38.31	1679	6041
1.17	14.04	0.3566	60.10	26973	38.84	1702	6124
1.18	14.16	0.3597	60.92	27343	39.38	1725	6208
1.19	14.28	0.3627	61.75	27715	39.91	1749	6293
1.20	14.40	0.3658	62.59	28088	40.45	1772	6377
1.21	14.52	0.3688	63.42	28464	40.99	1796	6463
1.22	14.64	0.3719	64.26	28841	41.53	1820	6548
1.23	14.76	0.3749	65.11	29220	42.08	1844	6634
1.24	14.88	0.3780	65.96	29601	42.63	1868	6721
1.25	15.00	0.3810	66.81	29984	43.18	1892	6808
1.26	15.12	0.3840	67.67	30369	43.73	1916	6895
1.27	15.24	0.3871	68.53	30755	44.29	1941	6983
1.28	15.36	0.3901	69.39	31144	44.85	1965	7071
1.29	15.48	0.3932	70.26	31534	45.41	1990	7160
1.30	15.60	0.3962	71.14	31926	45.98	2015	7249

Sources: Water Measurement Manual, 3rd Edition, United States Department of the Interior, Bureau of Reclamation

ASTM D 1941-91 (2007): Standard Test Method for Open Channel Flow Measurement of Water with Parshall Flume

OPENCHANNELFLOW

144-Inch Parshall Flume Discharge Table

No Submergence ±3-5% Accuracy

Formulas (H in feet): CFS = 46.75 $H_{ft.}^{1.6}$ GPM = 20981 $H_{ft.}^{1.6}$ MGD = 30.21 $H_{ft.}^{1.6}$

Formulas (H in meters): L/S = 8859 $H_{m}^{1.6}$ M3/HR = 31890 $H_{m}^{1.6}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
1.31	15.72	0.3993	72.01	32320	46.54	2039	7338
1.32	15.84	0.4023	72.90	32715	47.11	2064	7428
1.33	15.96	0.4054	73.78	33113	47.68	2089	7518
1.34	16.08	0.4084	74.67	33512	48.26	2115	7609
1.35	16.20	0.4115	75.56	33913	48.84	2140	7700
1.36	16.32	0.4145	76.46	34316	49.42	2165	7791
1.37	16.44	0.4176	77.36	34721	50.00	2191	7883
1.38	16.56	0.4206	78.27	35127	50.59	2217	7976
1.39	16.68	0.4237	79.18	35535	51.17	2242	8068
1.40	16.80	0.4267	80.09	35945	51.76	2268	8161
1.41	16.92	0.4298	81.01	36357	52.36	2294	8255
1.42	17.04	0.4328	81.93	36770	52.95	2320	8349
1.43	17.16	0.4359	82.86	37185	53.55	2346	8443
1.44	17.28	0.4389	83.78	37602	54.15	2373	8538
1.45	17.40	0.4420	84.72	38021	54.75	2399	8633
1.46	17.52	0.4450	85.65	38441	55.36	2426	8728
1.47	17.64	0.4481	86.59	38864	55.97	2452	8824
1.48	17.76	0.4511	87.54	39287	56.58	2479	8920
1.49	17.88	0.4542	88.49	39713	57.19	2506	9017
1.50	18.00	0.4572	89.44	40140	57.80	2533	9114
1.51	18.12	0.4602	90.40	40569	58.42	2560	9211
1.52	18.24	0.4633	91.35	41000	59.04	2587	9309
1.53	18.36	0.4663	92.32	41432	59.67	2614	9407
1.54	18.48	0.4694	93.29	41867	60.29	2642	9506
1.55	18.60	0.4724	94.26	42302	60.92	2669	9605
1.56	18.72	0.4755	95.23	42740	61.55	2697	9704
1.57	18.84	0.4785	96.21	43179	62.18	2725	9804
1.58	18.96	0.4816	97.19	43620	62.82	2752	9904
1.59	19.08	0.4846	98.18	44063	63.45	2780	10004
1.60	19.20	0.4877	99.17	44507	64.09	2808	10105
1.61	19.32	0.4907	100.2	44953	64.73	2837	10207
1.62	19.44	0.4938	101.2	45400	65.38	2865	10308
1.63	19.56	0.4968	102.2	45850	66.03	2893	10410
1.64	19.68	0.4999	103.2	46300	66.68	2922	10512
1.65	19.80	0.5029	104.2	46753	67.33	2950	10615
1.66	19.92	0.5060	105.2	47207	67.98	2979	10718
1.67	20.04	0.5090	106.2	47663	68.64	3008	10822
1.68	20.16	0.5121	107.2	48120	69.30	3036	10926
1.69	20.28	0.5151	108.2	48580	69.96	3065	11030
1.70	20.40	0.5182	109.3	49040	70.62	3095	11135
1.71	20.52	0.5212	110.3	49503	71.29	3124	11240
1.72	20.64	0.5243	111.3	49967	71.96	3153	11345
1.73	20.76	0.5273	112.4	50432	72.63	3182	11451
1.74	20.88	0.5304	113.4	50899	73.30	3212	11557
1.75	21.00	0.5334	114.5	51368	73.97	3241	11663
1.76	21.12	0.5364	115.5	51839	74.65	3271	11770
1.77	21.24	0.5395	116.6	52311	75.33	3301	11877
1.78	21.36	0.5425	117.6	52785	76.01	3331	11985
1.79	21.48	0.5456	118.7	53260	76.70	3361	12093
1.80	21.60	0.5486	119.7	53737	77.38	3391	12201

Sources: Water Measurement Manual, 3rd Edition, United States Department of the Interior, Bureau of Reclamation

ASTM D 1941-91 (2007): Standard Test Method for Open Channel Flow Measurement of Water with Parshall Flume

OPENCHANNELFLOW

144-Inch Parshall Flume Discharge Table

No Submergence ±3-5% Accuracy

Formulas (H in feet): CFS = 46.75 $H_{ft.}^{1.6}$ GPM = 20981 $H_{ft.}^{1.6}$ MGD = 30.21 $H_{ft.}^{1.6}$

Formulas (H in meters): L/S = 8859 $H_{m}^{1.6}$ M3/HR = 31890 $H_{m}^{1.6}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
1.81	21.72	0.5517	120.8	54215	78.07	3421	12310
1.82	21.84	0.5547	121.9	54695	78.76	3451	12419
1.83	21.96	0.5578	122.9	55177	79.46	3482	12528
1.84	22.08	0.5608	124.0	55660	80.15	3512	12638
1.85	22.20	0.5639	125.1	56145	80.85	3543	12748
1.86	22.32	0.5669	126.2	56631	81.55	3574	12858
1.87	22.44	0.5700	127.3	57119	82.26	3604	12969
1.88	22.56	0.5730	128.4	57609	82.96	3635	13080
1.89	22.68	0.5761	129.5	58100	83.67	3666	13192
1.90	22.80	0.5791	130.6	58592	84.38	3697	13303
1.91	22.92	0.5822	131.7	59086	85.09	3728	13416
1.92	23.04	0.5852	132.8	59582	85.80	3760	13528
1.93	23.16	0.5883	133.9	60079	86.52	3791	13641
1.94	23.28	0.5913	135.0	60578	87.24	3823	13754
1.95	23.40	0.5944	136.1	61079	87.96	3854	13868
1.96	23.52	0.5974	137.2	61581	88.68	3886	13982
1.97	23.64	0.6005	138.3	62084	89.40	3918	14096
1.98	23.76	0.6035	139.5	62589	90.13	3949	14211
1.99	23.88	0.6066	140.6	63096	90.86	3981	14326
2.00	24.00	0.6096	141.7	63604	91.59	4013	14441
2.01	24.12	0.6126	142.9	64113	92.33	4046	14557
2.02	24.24	0.6157	144.0	64624	93.06	4078	14673
2.03	24.36	0.6187	145.1	65137	93.80	4110	14789
2.04	24.48	0.6218	146.3	65651	94.54	4143	14906
2.05	24.60	0.6248	147.4	66167	95.28	4175	15023
2.06	24.72	0.6279	148.6	66684	96.03	4208	15141
2.07	24.84	0.6309	149.7	67203	96.78	4241	15258
2.08	24.96	0.6340	150.9	67723	97.53	4273	15376
2.09	25.08	0.6370	152.1	68245	98.28	4306	15495
2.10	25.20	0.6401	153.2	68768	99.03	4339	15614
2.11	25.32	0.6431	154.4	69293	99.79	4372	15733
2.12	25.44	0.6462	155.6	69819	100.5	4406	15852
2.13	25.56	0.6492	156.7	70346	101.3	4439	15972
2.14	25.68	0.6523	157.9	70876	102.1	4472	16092
2.15	25.80	0.6553	159.1	71406	102.8	4506	16213
2.16	25.92	0.6584	160.3	71938	103.6	4539	16334
2.17	26.04	0.6614	161.5	72472	104.4	4573	16455
2.18	26.16	0.6645	162.7	73007	105.1	4607	16576
2.19	26.28	0.6675	163.9	73544	105.9	4641	16698
2.20	26.40	0.6706	165.1	74082	106.7	4675	16820
2.21	26.52	0.6736	166.3	74621	107.5	4709	16943
2.22	26.64	0.6767	167.5	75162	108.2	4743	17066
2.23	26.76	0.6797	168.7	75705	109.0	4777	17189
2.24	26.88	0.6828	169.9	76248	109.8	4811	17312
2.25	27.00	0.6858	171.1	76794	110.6	4846	17436
2.26	27.12	0.6888	172.3	77341	111.4	4880	17560
2.27	27.24	0.6919	173.5	77889	112.2	4915	17685
2.28	27.36	0.6949	174.8	78439	113.0	4950	17809
2.29	27.48	0.6980	176.0	78990	113.8	4984	17935
2.30	27.60	0.7010	177.2	79542	114.5	5019	18060

Sources: Water Measurement Manual, 3rd Edition, United States Department of the Interior, Bureau of Reclamation

ASTM D 1941-91 (2007): Standard Test Method for Open Channel Flow Measurement of Water with Parshall Flume

OPENCHANNELFLOW

144-Inch Parshall Flume Discharge Table

No Submergence ±3-5% Accuracy

Formulas (H in feet): CFS = 46.75 $H_{ft.}^{1.6}$ GPM = 20981 $H_{ft.}^{1.6}$ MGD = 30.21 $H_{ft.}^{1.6}$

Formulas (H in meters): L/S = 8859 $H_{m}^{1.6}$ M3/HR = 31890 $H_{m}^{1.6}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
2.31	27.72	0.7041	178.5	80097	115.3	5054	18186
2.32	27.84	0.7071	179.7	80652	116.1	5089	18312
2.33	27.96	0.7102	180.9	81209	116.9	5124	18438
2.34	28.08	0.7132	182.2	81767	117.8	5160	18565
2.35	28.20	0.7163	183.4	82327	118.6	5195	18692
2.36	28.32	0.7193	184.7	82888	119.4	5230	18820
2.37	28.44	0.7224	185.9	83451	120.2	5266	18948
2.38	28.56	0.7254	187.2	84015	121.0	5301	19076
2.39	28.68	0.7285	188.5	84581	121.8	5337	19204
2.40	28.80	0.7315	189.7	85148	122.6	5373	19333
2.41	28.92	0.7346	191.0	85716	123.4	5409	19462
2.42	29.04	0.7376	192.3	86286	124.3	5445	19591
2.43	29.16	0.7407	193.5	86857	125.1	5481	19721
2.44	29.28	0.7437	194.8	87430	125.9	5517	19851
2.45	29.40	0.7468	196.1	88004	126.7	5553	19981
2.46	29.52	0.7498	197.4	88579	127.6	5589	20112
2.47	29.64	0.7529	198.7	89156	128.4	5626	20243
2.48	29.76	0.7559	199.9	89734	129.2	5662	20374
2.49	29.88	0.7590	201.2	90314	130.1	5699	20506
2.50	30.00	0.7620	202.5	90895	130.9	5736	20638
2.51	30.12	0.7650	203.8	91477	131.7	5772	20770
2.52	30.24	0.7681	205.1	92061	132.6	5809	20902
2.53	30.36	0.7711	206.4	92646	133.4	5846	21035
2.54	30.48	0.7742	207.7	93233	134.3	5883	21168
2.55	30.60	0.7772	209.0	93821	135.1	5920	21302
2.56	30.72	0.7803	210.4	94410	136.0	5957	21436
2.57	30.84	0.7833	211.7	95001	136.8	5995	21570
2.58	30.96	0.7864	213.0	95593	137.7	6032	21704
2.59	31.08	0.7894	214.3	96186	138.5	6070	21839
2.60	31.20	0.7925	215.6	96781	139.4	6107	21974
2.61	31.32	0.7955	217.0	97378	140.2	6145	22110
2.62	31.44	0.7986	218.3	97975	141.1	6182	22245
2.63	31.56	0.8016	219.6	98574	142.0	6220	22381
2.64	31.68	0.8047	221.0	99175	142.8	6258	22518
2.65	31.80	0.8077	222.3	99776	143.7	6296	22654
2.66	31.92	0.8108	223.7	100380	144.6	6334	22791
2.67	32.04	0.8138	225.0	100984	145.4	6372	22928
2.68	32.16	0.8169	226.4	101590	146.3	6410	23066
2.69	32.28	0.8199	227.7	102197	147.2	6449	23204
2.70	32.40	0.8230	229.1	102806	148.0	6487	23342
2.71	32.52	0.8260	230.4	103415	148.9	6526	23480
2.72	32.64	0.8291	231.8	104027	149.8	6564	23619
2.73	32.76	0.8321	233.2	104639	150.7	6603	23758
2.74	32.88	0.8352	234.5	105253	151.6	6642	23898
2.75	33.00	0.8382	235.9	105869	152.5	6680	24037
2.76	33.12	0.8412	237.3	106485	153.3	6719	24177
2.77	33.24	0.8443	238.6	107103	154.2	6758	24318
2.78	33.36	0.8473	240.0	107722	155.1	6797	24458
2.79	33.48	0.8504	241.4	108343	156.0	6837	24599
2.80	33.60	0.8534	242.8	108965	156.9	6876	24741

Sources: Water Measurement Manual, 3rd Edition, United States Department of the Interior, Bureau of Reclamation

ASTM D 1941-91 (2007): Standard Test Method for Open Channel Flow Measurement of Water with Parshall Flume

OPENCHANNELFLOW

144-Inch Parshall Flume Discharge Table

No Submergence ±3-5% Accuracy

Formulas (H in feet): $CFS = 46.75\ H_{ft.}^{1.6}$ $GPM = 20981\ H_{ft.}^{1.6}$ $MGD = 30.21\ H_{ft.}^{1.6}$

Formulas (H in meters): $L/S = 8859\ H_{m}^{1.6}$ $M3/HR = 31890\ H_{m}^{1.6}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
2.81	33.72	0.8565	244.2	109588	157.8	6915	24882
2.82	33.84	0.8595	245.6	110213	158.7	6955	25024
2.83	33.96	0.8626	247.0	110839	159.6	6994	25166
2.84	34.08	0.8656	248.4	111466	160.5	7034	25308
2.85	34.20	0.8687	249.8	112095	161.4	7073	25451
2.86	34.32	0.8717	251.2	112725	162.3	7113	25594
2.87	34.44	0.8748	252.6	113356	163.2	7153	25738
2.88	34.56	0.8778	254.0	113989	164.2	7193	25881
2.89	34.68	0.8809	255.4	114623	165.1	7233	26025
2.90	34.80	0.8839	256.8	115258	166.0	7273	26169
2.91	34.92	0.8870	258.2	115895	166.9	7313	26314
2.92	35.04	0.8900	259.7	116532	167.8	7353	26459
2.93	35.16	0.8931	261.1	117172	168.7	7394	26604
2.94	35.28	0.8961	262.5	117812	169.7	7434	26749
2.95	35.40	0.8992	263.9	118454	170.6	7475	26895
2.96	35.52	0.9022	265.4	119097	171.5	7515	27041
2.97	35.64	0.9053	266.8	119742	172.4	7556	27187
2.98	35.76	0.9083	268.2	120387	173.4	7597	27334
2.99	35.88	0.9114	269.7	121034	174.3	7637	27481
3.00	36.00	0.9144	271.1	121683	175.2	7678	27628
3.01	36.12	0.9174	272.6	122332	176.2	7719	27776
3.02	36.24	0.9205	274.0	122983	177.1	7760	27923
3.03	36.36	0.9235	275.5	123635	178.0	7802	28071
3.04	36.48	0.9266	276.9	124289	179.0	7843	28220
3.05	36.60	0.9296	278.4	124944	179.9	7884	28368
3.06	36.72	0.9327	279.9	125600	180.9	7926	28517
3.07	36.84	0.9357	281.3	126257	181.8	7967	28667
3.08	36.96	0.9388	282.8	126916	182.8	8009	28816
3.09	37.08	0.9418	284.3	127576	183.7	8050	28966
3.10	37.20	0.9449	285.7	128237	184.7	8092	29116
3.11	37.32	0.9479	287.2	128899	185.6	8134	29267
3.12	37.44	0.9510	288.7	129563	186.6	8176	29417
3.13	37.56	0.9540	290.2	130228	187.5	8218	29568
3.14	37.68	0.9571	291.7	130895	188.5	8260	29720
3.15	37.80	0.9601	293.1	131562	189.5	8302	29871
3.16	37.92	0.9632	294.6	132231	190.4	8344	30023
3.17	38.04	0.9662	296.1	132901	191.4	8386	30175
3.18	38.16	0.9693	297.6	133573	192.4	8429	30328
3.19	38.28	0.9723	299.1	134245	193.3	8471	30480
3.20	38.40	0.9754	300.6	134919	194.3	8514	30633
3.21	38.52	0.9784	302.1	135595	195.3	8556	30787
3.22	38.64	0.9815	303.6	136271	196.2	8599	30940
3.23	38.76	0.9845	305.1	136949	197.2	8642	31094
3.24	38.88	0.9876	306.7	137628	198.2	8685	31248
3.25	39.00	0.9906	308.2	138308	199.2	8727	31403
3.26	39.12	0.9936	309.7	138990	200.2	8770	31558
3.27	39.24	0.9967	311.2	139672	201.1	8814	31713
3.28	39.36	0.9997	312.7	140357	202.1	8857	31868
3.29	39.48	1.0028	314.3	141042	203.1	8900	32024
3.30	39.60	1.0058	315.8	141728	204.1	8943	32179

Sources: Water Measurement Manual, 3rd Edition, United States Department of the Interior, Bureau of Reclamation

ASTM D 1941-91 (2007): Standard Test Method for Open Channel Flow Measurement of Water with Parshall Flume

OPENCHANNELFLOW

144-Inch Parshall Flume Discharge Table

No Submergence ±3-5% Accuracy

Formulas (H in feet): CFS = 46.75 $H_{ft.}^{1.6}$ GPM = 20981 $H_{ft.}^{1.6}$ MGD = 30.21 $H_{ft.}^{1.6}$

Formulas (H in meters): L/S = 8859 $H_{m}^{1.6}$ M3/HR = 31890 $H_{m}^{1.6}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
3.31	39.72	1.0089	317.3	142416	205.1	8987	32336
3.32	39.84	1.0119	318.9	143105	206.1	9030	32492
3.33	39.96	1.0150	320.4	143795	207.1	9074	32649
3.34	40.08	1.0180	321.9	144487	208.1	9117	32806
3.35	40.20	1.0211	323.5	145180	209.1	9161	32963
3.36	40.32	1.0241	325.0	145874	210.1	9205	33121
3.37	40.44	1.0272	326.6	146569	211.1	9249	33278
3.38	40.56	1.0302	328.1	147266	212.1	9293	33437
3.39	40.68	1.0333	329.7	147963	213.1	9337	33595
3.40	40.80	1.0363	331.2	148662	214.1	9381	33754
3.41	40.92	1.0394	332.8	149362	215.1	9425	33913
3.42	41.04	1.0424	334.4	150064	216.1	9469	34072
3.43	41.16	1.0455	335.9	150767	217.1	9514	34232
3.44	41.28	1.0485	337.5	151470	218.1	9558	34391
3.45	41.40	1.0516	339.1	152176	219.1	9603	34551
3.46	41.52	1.0546	340.6	152882	220.2	9647	34712
3.47	41.64	1.0577	342.2	153590	221.2	9692	34872
3.48	41.76	1.0607	343.8	154298	222.2	9736	35033
3.49	41.88	1.0638	345.4	155008	223.2	9781	35195
3.50	42.00	1.0668	347.0	155720	224.2	9826	35356

Sources: Water Measurement Manual, 3rd Edition, United States Department of the Interior, Bureau of Reclamation

ASTM D 1941-91 (2007): Standard Test Method for Open Channel Flow Measurement of Water with Parshall Flume