



770.664.6513 (V) 770.664.6565 (F)

## Discharge Table For 24" W x 108" L Cutthroat Flume

Document: C-24-108-D-T Rev.: 0 Date: March 24, 2000 By: Jon Wachter

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
0.01	0.12			
0.02	0.24			
0.03	0.36			
0.04	0.48			
0.05	0.60			
0.06	0.72			
0.07	0.84			
0.08	0.96			
0.09	1.08			
0.10	1.20			
0.11	1.32			
0.12	1.44			
0.13	1.56			
0.14	1.68			
0.15	1.80			
0.16	1.92			
0.17	2.04			
0.18	2.16			
0.19	2.28			
0.20	2.40	0.58	259.6	0.374
0.21	2.52	0.62	280.1	0.403
0.22	2.64	0.67	301.2	0.434
0.23	2.76	0.72	322.8	0.465
0.24	2.88	0.77	345.0	0.497
0.25	3.00	0.82	367.7	0.529
0.26	3.12	0.87	390.9	0.563
0.27	3.24	0.92	414.6	0.597
0.28	3.36	0.98	438.8	0.632
0.29	3.48	1.03	463	0.667
0.30	3.60	1.09	489	0.704
0.31	3.72	1.15	514	0.741
0.32	3.84	1.20	540	0.778
0.33	3.96	1.26	567	0.816
0.34	4.08	1.32	594	0.855
0.35	4.20	1.38	621	0.895
0.36	4.32	1.45	649	0.935
0.37	4.44	1.51	678	0.976
0.38	4.56	1.57	707	1.017
0.39	4.68	1.64	736	1.059
0.40	4.80	1.71	765	1.102
0.41	4.92	1.77	795	1.145
0.42	5.04	1.84	826	1.189
0.43	5.16	1.91	857	1.234
0.44	5.28	1.98	888	1.279
0.45	5.40	2.05	920	1.324
0.46	5.52	2.12	952	1.371
0.47	5.64	2.19	984	1.417
0.48	5.76	2.27	1017	1.465
0.49	5.88	2.34	1050	1.513
0.50	6.00	2.42	1084	1.561

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
0.51	6.12	2.49	1118	1.610
0.52	6.24	2.57	1152	1.660
0.53	6.36	2.65	1187	1.710
0.54	6.48	2.72	1222	1.760
0.55	6.60	2.80	1258	1.811
0.56	6.72	2.88	1294	1.863
0.57	6.84	2.96	1330	1.915
0.58	6.96	3.04	1366	1.968
0.59	7.08	3.13	1403	2.021
0.60	7.20	3.21	1441	2.075
0.61	7.32	3.29	1478	2.129
0.62	7.44	3.38	1516	2.184
0.63	7.56	3.46	1555	2.239
0.64	7.68	3.55	1593	2.294
0.65	7.80	3.64	1632	2.351
0.66	7.92	3.72	1672	2.407
0.67	8.04	3.81	1711	2.464
0.68	8.16	3.90	1751	2.522
0.69	8.28	3.99	1792	2.580
0.70	8.40	4.08	1832	2.639
0.71	8.52	4.17	1873	2.698
0.72	8.64	4.27	1915	2.757
0.73	8.76	4.36	1956	2.817
0.74	8.88	4.45	1998	2.878
0.75	9.00	4.55	2041	2.939
0.76	9.12	4.64	2083	3.000
0.77	9.24	4.74	2126	3.062
0.78	9.36	4.83	2169	3.124
0.79	9.48	4.93	2213	3.187
0.80	9.60	5.03	2257	3.250
0.81	9.72	5.13	2301	3.313
0.82	9.84	5.23	2345	3.377
0.83	9.96	5.33	2390	3.442
0.84	10.08	5.43	2435	3.507
0.85	10.20	5.53	2481	3.572
0.86	10.32	5.63	2526	3.638
0.87	10.44	5.73	2572	3.704
0.88	10.56	5.83	2618	3.771
0.89	10.68	5.94	2665	3.838
0.90	10.80	6.04	2712	3.905
0.91	10.92	6.15	2759	3.973
0.92	11.04	6.25	2806	4.042
0.93	11.16	6.36	2854	4.110
0.94	11.28	6.47	2902	4.179
0.95	11.40	6.57	2951	4.249
0.96	11.52	6.68	2999	4.319
0.97	11.64	6.79	3048	4.389
0.98	11.76	6.90	3097	4.460
0.99	11.88	7.01	3147	4.531
1.00	12.00	7.12	3196	4.603



770.664.6513 (V) 770.664.6906 (F)

**Discharge Table  
For  
24" W x 108" L Cutthroat Flume**

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
1.01	12.12	7.23	3246	4.675
1.02	12.24	7.35	3297	4.747
1.03	12.36	7.46	3347	4.820
1.04	12.48	7.57	3398	4.893
1.05	12.60	7.69	3449	4.967
1.06	12.72	7.80	3501	5.041
1.07	12.84	7.91	3552	5.115
1.08	12.96	8.03	3604	5.190
1.09	13.08	8.15	3656	5.265
1.10	13.20	8.26	3709	5.341
1.11	13.32	8.38	3761	5.417
1.12	13.44	8.50	3814	5.493
1.13	13.56	8.62	3868	5.570
1.14	13.68	8.74	3921	5.647
1.15	13.80	8.86	3975	5.724
1.16	13.92	8.98	4029	5.802
1.17	14.04	9.10	4083	5.880
1.18	14.16	9.22	4138	5.959
1.19	14.28	9.34	4193	6.038
1.20	14.40	9.47	4248	6.117
1.21	14.52	9.59	4303	6.197
1.22	14.64	9.71	4359	6.277
1.23	14.76	9.84	4415	6.358
1.24	14.88	9.96	4471	6.438
1.25	15.00	10.09	4527	6.520
1.26	15.12	10.21	4584	6.601
1.27	15.24	10.34	4641	6.683
1.28	15.36	10.47	4698	6.765
1.29	15.48	10.60	4755	6.848
1.30	15.60	10.72	4813	6.931
1.31	15.72	10.85	4871	7.014
1.32	15.84	10.98	4929	7.098
1.33	15.96	11.11	4987	7.182
1.34	16.08	11.24	5046	7.266
1.35	16.20	11.37	5105	7.351
1.36	16.32	11.51	5164	7.436
1.37	16.44	11.64	5223	7.522
1.38	16.56	11.77	5283	7.608
1.39	16.68	11.90	5343	7.694
1.40	16.80	12.04	5403	7.780
1.41	16.92	12.17	5463	7.867
1.42	17.04	12.31	5524	7.954
1.43	17.16	12.44	5584	8.042
1.44	17.28	12.58	5645	8.130
1.45	17.40	12.72	5707	8.218
1.46	17.52	12.85	5768	8.307
1.47	17.64	12.99	5830	8.396
1.48	17.76	13.13	5892	8.485
1.49	17.88	13.27	5954	8.574
1.50	18.00	13.41	6017	8.664

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
1.51	18.12	13.55	6079	8.755
1.52	18.24	13.69	6142	8.845
1.53	18.36	13.83	6205	8.936
1.54	18.48	13.97	6269	9.028
1.55	18.60	14.11	6332	9.119
1.56	18.72	14.25	6396	9.211
1.57	18.84	14.39	6460	9.303
1.58	18.96	14.54	6525	9.396
1.59	19.08	14.68	6589	9.489
1.60	19.20	14.83	6654	9.582
1.61	19.32	14.97	6719	9.676
1.62	19.44	15.12	6784	9.770
1.63	19.56	15.26	6850	9.864
1.64	19.68	15.41	6915	9.958
1.65	19.80	15.56	6981	10.053
1.66	19.92	15.70	7047	10.149
1.67	20.04	15.85	7114	10.244
1.68	20.16	16.00	7180	10.340
1.69	20.28	16.15	7247	10.436
1.70	20.40	16.30	7314	10.533
1.71	20.52	16.45	7381	10.629
1.72	20.64	16.60	7449	10.727
1.73	20.76	16.75	7516	10.824
1.74	20.88	16.90	7584	10.922
1.75	21.00	17.05	7652	11.020
1.76	21.12	17.20	7721	11.118
1.77	21.24	17.36	7789	11.217
1.78	21.36	17.51	7858	11.316
1.79	21.48	17.66	7927	11.415
1.80	21.60	17.82	7996	11.515
1.81	21.72	17.97	8066	11.615
1.82	21.84	18.13	8135	11.715
1.83	21.96	18.28	8205	11.816
1.84	22.08	18.44	8275	11.917
1.85	22.20	18.59	8345	12.018
1.86	22.32	18.75	8416	12.119
1.87	22.44	18.91	8486	12.221
1.88	22.56	19.07	8557	12.323
1.89	22.68	19.23	8628	12.426
1.90	22.80	19.38	8700	12.528
1.91	22.92	19.54	8771	12.631
1.92	23.04	19.70	8843	12.735
1.93	23.16	19.86	8915	12.838
1.94	23.28	20.03	8987	12.942
1.95	23.40	20.19	9060	13.046
1.96	23.52	20.35	9132	13.151
1.97	23.64	20.51	9205	13.256
1.98	23.76	20.67	9278	13.361
1.99	23.88	20.84	9351	13.466
2.00	24.00	21.00	9425	13.572

Source: Design and Calibration of Submerged Open Channel Flow Measurement Structures, Part 3: Cutthroat Flumes, Utah Water Research Laboratory, April 1967.



770.664.6513 (V) 770.664.6565 (F)

**Discharge Table  
For  
24" W x 108" L Cutthroat Flume**

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
2.01	24.12	21.16	9498	13.678
2.02	24.24	21.33	9572	13.784
2.03	24.36	21.49	9646	13.891
2.04	24.48	21.66	9720	13.998
2.05	24.60	21.82	9795	14.105
2.06	24.72	21.99	9869	14.212
2.07	24.84	22.16	9944	14.320
2.08	24.96	22.32	10019	14.428
2.09	25.08	22.49	10094	14.537
2.10	25.20	22.66	10170	14.645
2.11	25.32	22.83	10246	14.754
2.12	25.44	23.00	10321	14.863
2.13	25.56	23.17	10397	14.973
2.14	25.68	23.34	10474	15.083
2.15	25.80	23.51	10550	15.193
2.16	25.92	23.68	10627	15.303
2.17	26.04	23.85	10704	15.414
2.18	26.16	24.02	10781	15.525
2.19	26.28	24.19	10858	15.636
2.20	26.40	24.37	10935	15.748
2.21	26.52	24.54	11013	15.859
2.22	26.64	24.71	11091	15.972
2.23	26.76	24.89	11169	16.084
2.24	26.88	25.06	11247	16.197
2.25	27.00	25.24	11326	16.310
2.26	27.12	25.41	11404	16.423
2.27	27.24	25.59	11483	16.536
2.28	27.36	25.76	11562	16.650
2.29	27.48	25.94	11641	16.764
2.30	27.60	26.12	11721	16.878
2.31	27.72	26.29	11800	16.993
2.32	27.84	26.47	11880	17.108
2.33	27.96	26.65	11960	17.223
2.34	28.08	26.83	12040	17.339
2.35	28.20	27.01	12121	17.454
2.36	28.32	27.19	12201	17.570
2.37	28.44	27.37	12282	17.687
2.38	28.56	27.55	12363	17.803
2.39	28.68	27.73	12444	17.920
2.40	28.80	27.91	12525	18.037
2.41	28.92	28.09	12607	18.154
2.42	29.04	28.27	12688	18.272
2.43	29.16	28.45	12770	18.390
2.44	29.28	28.64	12852	18.508
2.45	29.40	28.82	12935	18.627
2.46	29.52	29.00	13017	18.745
2.47	29.64	29.19	13100	18.864
2.48	29.76	29.37	13183	18.984
2.49	29.88	29.56	13266	19.103
2.50	30.00	29.74	13349	19.223

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
2.51	30.12	29.93	13432	19.343
2.52	30.24	30.12	13516	19.464
2.53	30.36	30.30	13599	19.584
2.54	30.48	30.49	13683	19.705
2.55	30.60	30.68	13768	19.826
2.56	30.72	30.86	13852	19.948
2.57	30.84	31.05	13936	20.069
2.58	30.96	31.24	14021	20.191
2.59	31.08	31.43	14106	20.313