



Flow Chart for 72in Palmer Bowlus Flume

Head (feet)	MGD	CFS	GPM
0.26			
0.27			
0.28			
0.29			
0.30	0.9146	1.4151	635.15
0.31	0.9688	1.4989	672.75
0.32	1.0239	1.5842	711.04
0.33	1.0800	1.6710	750.00
0.34	1.1371	1.7593	789.64
0.35	1.1951	1.8492	829.96
0.36	1.2542	1.9405	870.95
0.37	1.3142	2.0333	912.6
0.38	1.3751	2.1276	954.9
0.39	1.4370	2.2234	997.9
0.40	1.4999	2.3207	1,041.6
0.41	1.5637	2.4194	1,085.9
0.42	1.6285	2.5196	1,130.9
0.43	1.6942	2.6213	1,176.5
0.44	1.7608	2.7244	1,222.8
0.45	1.8284	2.8289	1,269.7
0.46	1.8969	2.9350	1,317.3
0.47	1.9664	3.0424	1,365.5
0.48	2.0367	3.1513	1,414.4
0.49	2.1080	3.2616	1,463.9
0.50	2.1802	3.3733	1,514.1
0.51	2.2534	3.4865	1,564.9
0.52	2.3274	3.6011	1,616.3
0.53	2.4024	3.7171	1,668.3
0.54	2.4783	3.8345	1,721.0
0.55	2.5551	3.9533	1,774.3
0.56	2.6328	4.0735	1,828.3
0.57	2.7113	4.1951	1,882.9
0.58	2.7908	4.3180	1,938.1
0.59	2.8712	4.4424	1,993.9
0.60	2.9525	4.5682	2,050.3

Head (feet)	MGD	CFS	GPM
0.61	3.0347	4.6953	2,107.4
0.62	3.1177	4.8238	2,165.1
0.63	3.2017	4.9537	2,223.4
0.64	3.2865	5.0849	2,282.3
0.65	3.3722	5.2176	2,341.8
0.66	3.4588	5.3515	2,401.9
0.67	3.5463	5.4869	2,462.7
0.68	3.6346	5.6235	2,524.0
0.69	3.7238	5.7616	2,586.0
0.70	3.8139	5.9010	2,648.5
0.71	3.9049	6.0417	2,711.7
0.72	3.9967	6.1838	2,775.5
0.73	4.0894	6.3272	2,839.8
0.74	4.1829	6.4720	2,904.8
0.75	4.2774	6.6180	2,970.4
0.76	4.3726	6.7655	3,036.5
0.77	4.4688	6.9142	3,103.3
0.78	4.5658	7.0643	3,170.7
0.79	4.6636	7.2157	3,238.6
0.80	4.7623	7.3684	3,307.2
0.81	4.8619	7.5225	3,376.3
0.82	4.9623	7.6778	3,446.0
0.83	5.0636	7.8345	3,516.4
0.84	5.1657	7.9925	3,587.3
0.85	5.2687	8.1518	3,658.8
0.86	5.3725	8.3125	3,730.9
0.87	5.4771	8.4744	3,803.6
0.88	5.5826	8.6376	3,876.8
0.89	5.6890	8.8022	3,950.7
0.90	5.7962	8.9680	4,025.1
0.91	5.9042	9.1352	4,100.2
0.92	6.0131	9.304	4,175.8
0.93	6.1229	9.473	4,252.0
0.94	6.2334	9.645	4,328.8
0.95	6.3448	9.817	4,406.1

- 1) Pipes/channels larger than flume may cause over discharge up to 3% (as noted in chart for upper flow ranges).
- 2) Flow ranges are based on meter capability, freeboard allowances and flow studies. Points beyond these may perform satisfactorily.



Flow Chart for 72in Palmer Bowlus Flume

0.96	6.4571	9.991	4,484.1
0.97	6.5702	10.166	4,562.6
0.98	6.6841	10.342	4,641.7
0.99	6.7989	10.519	4,721.4
1.00	6.9145	10.698	4,801.7
1.01	7.0310	10.878	4,882.6
1.02	7.1482	11.060	4,964.1
1.03	7.2664	11.243	5,046.1
1.04	7.3854	11.427	5,128.7
1.05	7.5052	11.612	5,211.9
1.06	7.6258	11.799	5,295.7
1.07	7.7473	11.987	5,380.1
1.08	7.8696	12.176	5,465.0
1.09	7.9928	12.367	5,550.6
1.10	8.1168	12.559	5,636.7
1.11	8.2417	12.752	5,723.4
1.12	8.3674	12.946	5,810.7
1.13	8.4939	13.142	5,898.5
1.14	8.6213	13.339	5,987.0
1.15	8.7495	13.537	6,076.0
1.16	8.8786	13.737	6,165.7
1.17	9.0085	13.938	6,255.9
1.18	9.1393	14.141	6,346.7
1.19	9.2709	14.344	6,438.1
1.20	9.403	14.549	6,530.1
1.21	9.537	14.755	6,622.6
1.22	9.671	14.963	6,715.8
1.23	9.806	15.172	6,809.6
1.24	9.942	15.382	6,903.9
1.25	10.078	15.593	6,998.8
1.26	10.216	15.806	7,094.4
1.27	10.354	16.020	7,190.5
1.28	10.494	16.236	7,287.2
1.29	10.634	16.453	7,384.5
1.30	10.775	16.671	7,482.4
1.66	16.439	25.434	11,416
1.67	16.613	25.704	11,537
1.68	16.788	25.975	11,658
1.69	16.964	26.247	11,781
1.70	17.141	26.521	11,904

1.31	10.917	16.890	7,580.9
1.32	11.059	17.111	7,680.0
1.33	11.203	17.333	7,779.7
1.34	11.347	17.557	7,880.1
1.35	11.493	17.782	7,981.0
1.36	11.639	18.008	8,082.5
1.37	11.786	18.235	8,184.6
1.38	11.934	18.464	8,287.3
1.39	12.083	18.694	8,390.7
1.40	12.232	18.926	8,494.6
1.41	12.383	19.159	8,599.1
1.42	12.534	19.393	8,704.3
1.43	12.687	19.629	8,810.1
1.44	12.840	19.866	8,916.5
1.45	12.994	20.104	9,023.5
1.46	13.149	20.344	9,131.1
1.47	13.305	20.585	9,239.3
1.48	13.461	20.828	9,348.2
1.49	13.619	21.072	9,458
1.50	13.778	21.317	9,568
1.51	13.937	21.564	9,679
1.52	14.097	21.812	9,790
1.53	14.259	22.061	9,902
1.54	14.421	22.312	10,014
1.55	14.584	22.565	10,128
1.56	14.748	22.818	10,242
1.57	14.913	23.074	10,356
1.58	15.079	23.330	10,471
1.59	15.245	23.588	10,587
1.60	15.413	23.848	10,704
1.61	15.582	24.108	10,821
1.62	15.751	24.371	10,938
1.63	15.922	24.634	11,057
1.64	16.093	24.900	11,176
1.65	16.265	25.166	11,295
2.01	23.118	35.769	16,054
2.02	23.327	36.093	16,200
2.03	23.538	36.418	16,346
2.04	23.749	36.745	16,492
2.05	23.961	37.074	16,640

- 1) Pipes/channels larger than flume may cause over discharge up to 3% (as noted in chart for upper flow ranges).
- 2) Flow ranges are based on meter capability, freeboard allowances and flow studies. Points beyond these may perform satisfactorily.



Flow Chart for 72in Palmer Bowlus Flume

1.71	17.319	26.797	12,027
1.72	17.498	27.074	12,151
1.73	17.678	27.352	12,276
1.74	17.859	27.632	12,402
1.75	18.041	27.913	12,528
1.76	18.224	28.196	12,655
1.77	18.407	28.480	12,783
1.78	18.592	28.766	12,911
1.79	18.778	29.054	13,040
1.80	18.965	29.343	13,170
1.81	19.152	29.633	13,300
1.82	19.341	29.925	13,431
1.83	19.531	30.218	13,563
1.84	19.721	30.513	13,695
1.85	19.913	30.810	13,829
1.86	20.106	31.108	13,962
1.87	20.299	31.408	14,097
1.88	20.494	31.709	14,232
1.89	20.690	32.012	14,368
1.90	20.887	32.316	14,505
1.91	21.084	32.622	14,642
1.92	21.283	32.930	14,780
1.93	21.483	33.239	14,919
1.94	21.684	33.550	15,058
1.95	21.885	33.862	15,198
1.96	22.088	34.176	15,339
1.97	22.292	34.491	15,481
1.98	22.497	34.808	15,623
1.99	22.703	35.127	15,766
2.00	22.910	35.447	15,910

2.06	24.175	37.404	16,788
2.07	24.389	37.736	16,937
2.08	24.605	38.069	17,087
2.09	24.821	38.404	17,237
2.10	25.039	38.741	17,388
2.11	25.258	39.079	17,540
2.12	25.478	39.420	17,693
2.13	25.698	39.761	17,846
2.14	25.920	40.105	18,000
2.15	26.144	40.450	18,155
2.16	26.368	40.797	18,311
2.17	26.593	41.146	18,467
2.18	26.820	41.496	18,625
2.19	27.047	41.848	18,783
2.20	27.276	42.202	18,941
2.21	27.506	42.557	19,101
2.22	27.736	42.915	19,261
2.23	27.968	43.273	19,422
2.24	28.201	43.634	19,584
2.25	28.436	43.997	19,747
2.26	28.671	44.361	19,910
2.27	28.908	44.727	20,075
2.28	29.145	45.094	20,240
2.29	29.384	45.464	20,405
2.30	29.624	45.835	20,572
2.31	29.865	46.208	20,739
2.32	30.107	46.582	20,908
2.33	30.350	46.959	21,077
2.34	30.595	47.337	21,246
2.35	30.840	47.717	21,417

- 1) Pipes/channels larger than flume may cause over discharge up to 3% (as noted in chart for upper flow ranges).
- 2) Flow ranges are based on meter capability, freeboard allowances and flow studies. Points beyond these may perform satisfactorily.



Flow Chart for 72in Palmer Bowlus Flume

2.36	31.087	48.099	21,588
2.37	31.335	48.483	21,760
2.38	31.584	48.868	21,933
2.39	31.834	49.255	22,107
2.40	32.086	49.644	22,282
2.41	32.338	50.035	22,457
2.42	32.592	50.428	22,633
2.43	32.847	50.822	22,810
2.44	33.103	51.218	22,988
2.45	33.360	51.616	23,167
2.46	33.619	52.016	23,346
2.47	33.878	52.418	23,527
2.48	34.139	52.821	23,708
2.49	34.401	53.227	23,890
2.50	34.664	53.634	24,072
2.51	34.929	54.043	24,256
2.52	35.194	54.453	24,440
2.53	35.461	54.866	24,626
2.54	35.729	55.281	24,812
2.55	35.998	55.697	24,999
2.56	36.268	56.115	25,186
2.57	36.540	56.535	25,375
2.58	36.812	56.957	25,564
2.59	37.086	57.381	25,754
2.60	37.361	57.806	25,945
2.61	37.638	58.234	26,137
2.62	37.915	58.663	26,330
2.63	38.194	59.094	26,523
2.64	38.474	59.527	26,718
2.65	38.755	59.962	26,913
2.66	39.037	60.399	27,109
2.67	39.320	60.838	27,306
2.68	39.605	61.278	27,503
2.69	39.891	61.720	27,702
2.70	40.178	62.165	27,901

2.71	40.466	62.611	28,102
2.72	40.756	63.059	28,303
2.73	41.047	63.508	28,505
2.74	41.338	63.960	28,707
2.75	41.632	64.414	28,911
2.76	41.926	64.869	29,115
2.77	42.221	65.326	29,320
2.78	42.518	65.785	29,527
2.79	42.816	66.246	29,733
2.80	43.115	66.709	29,941
2.81	43.416	67.174	30,150
2.82	43.717	67.641	30,359
2.83	44.020	68.109	30,569
2.84	44.324	68.579	30,781
2.85	44.629	69.052	30,993
2.86	44.936	69.526	31,205
2.87	45.243	70.002	31,419
2.88	45.552	70.479	31,633
2.89	45.862	70.959	31,849
2.90	46.173	71.441	32,065
2.91	46.486	71.924	32,282
2.92	46.799	72.409	32,499
2.93	47.114	72.896	32,718
2.94	47.430	73.385	32,938
2.95	47.747	73.876	33,158
2.96	48.066	74.369	33,379
2.97	48.385	74.863	33,601
2.98	48.706	75.359	33,824
2.99	49.028	75.857	34,047
3.00	49.351	76.357	34,272
3.01	49.675	76.859	34,497
3.02	50.001	77.363	34,723
3.03	50.328	77.868	34,950
3.04	50.655	78.376	35,177
3.05	50.984	78.885	35,406

- 1) Pipes/channels larger than flume may cause over discharge up to 3% (as noted in chart for upper flow ranges).
- 2) Flow ranges are based on meter capability, freeboard allowances and flow studies. Points beyond these may perform satisfactorily.



Flow Chart for 72in Palmer Bowlus Flume

3.06	51.315	79.396	35,635
3.07	51.646	79.908	35,865
3.08	51.979	80.423	36,096
3.09	52.312	80.939	36,328
3.10	52.647	81.457	36,560
3.11	52.983	81.977	36,794
3.12	53.320	82.499	37,028
3.13	53.659	83.022	37,263
3.14	53.998	83.547	37,499
3.15	54.339	84.074	37,735
3.16	54.681	84.603	37,973
3.17	55.023	85.134	38,211
3.18	55.367	85.666	38,450
3.19	55.713	86.200	38,689
3.20	56.059	86.736	38,930
3.21	56.406	87.274	39,171
3.22	56.755	87.813	39,413
3.23	57.105	88.354	39,656
3.24	57.455	88.897	39,900
3.25	57.807	89.441	40,144
3.26	58.160	89.987	40,389
3.27	58.514	90.535	40,635
3.28	58.869	91.084	40,882
3.29	59.226	91.636	41,129
3.30	59.583	92.189	41,377
3.31	59.941	92.743	41,626
3.32	60.301	93.299	41,876
3.33	60.662	93.857	42,126
3.34	61.023	94.417	42,377
3.35	61.386	94.978	42,629
3.36	61.750	95.541	42,882
3.37	62.114	96.105	43,135
3.38	62.480	96.671	43,389
3.39	62.847	97.24	43,644
3.40	63.215	97.81	43,899

3.41	63.584	98.38	44,156
3.42	63.954	98.95	44,413
3.43	64.325	99.53	44,670
3.44	64.697	100.10	44,928
3.45	65.070	100.68	45,188
3.46	65.444	101.26	45,447
3.47	65.819	101.84	45,708
3.48	66.195	102.42	45,969
3.49	66.572	103.00	46,231
3.50	66.950	103.59	46,493
3.51	67.329	104.17	46,756
3.52	67.709	104.76	47,020
3.53	68.090	105.35	47,284
3.54	68.471	105.94	47,550
3.55	68.854	106.53	47,815
3.56	69.238	107.13	48,082
3.57	69.622	107.72	48,349
3.58	70.008	108.32	48,617
3.59	70.394	108.92	48,885
3.60	70.782	109.52	49,154
3.61	71.170	110.12	49,424
3.62	71.559	110.72	49,694
3.63	71.949	111.32	49,965
3.64	72.340	111.93	50,236
3.65	72.732	112.53	50,508
3.66	73.124	113.14	50,781
3.67	73.518	113.75	51,054
3.68	73.912	114.36	51,328
3.69	74.307	114.97	51,602
3.70	74.703	115.58	51,877
3.71	75.100	116.20	52,153
3.72	75.498	116.81	52,429
3.73	75.896	117.43	52,706
3.74	76.296	118.05	52,983
3.75	76.696	118.67	53,261

- 1) Pipes/channels larger than flume may cause over discharge up to 3% (as noted in chart for upper flow ranges).
- 2) Flow ranges are based on meter capability, freeboard allowances and flow studies. Points beyond these may perform satisfactorily.



Flow Chart for 72in Palmer Bowlus Flume

3.76	77.097	119.29	53,539
3.77	77.498	119.91	53,818
3.78	77.901	120.53	54,098
3.79	78.304	121.15	54,378
3.80	78.708	121.78	54,658
3.81	79.113	122.41	54,939
3.82	79.518	123.03	55,221
3.83	79.924	123.66	55,503
3.84	80.331	124.29	55,785
3.85	80.739	124.92	56,069
3.86	81.147	125.55	56,352
3.87	81.556	126.19	56,636
3.88	81.966	126.82	56,921
3.89	82.376	127.46	57,206
3.90	82.787	128.09	57,491
3.91	83.199	128.73	57,777
3.92	83.612	129.37	58,064
3.93	84.025	130.01	58,351
3.94	84.439	130.65	58,638
3.95	84.853	131.29	58,926
3.96	85.268	131.93	59,214
3.97	85.684	132.57	59,503
3.98	86.100	133.22	59,792
3.99	86.517	133.86	60,081
4.00	86.934	134.51	60,371
4.01	87.352	135.15	60,661
4.02	87.771	135.80	60,952
4.03	88.190	136.45	61,243
4.04	88.610	137.10	61,535
4.05	89.031	137.75	61,827
4.06	89.452	138.40	62,119
4.07	89.873	139.05	62,412
4.08	90.295	139.71	62,705
4.09	90.718	140.36	62,998
4.10	91.141	141.02	63,292

4.11	91.564	141.67	63,586
4.12	91.988	142.33	63,881
4.13	92.413	142.98	64,176
4.14	92.838	143.64	64,471
4.15	93.264	144.30	64,767
4.16	93.690	144.96	65,063
4.17	94.117	145.62	65,359
4.18	94.544	146.28	65,655
4.19	94.971	146.94	65,952
4.20	95.399	147.60	66,250
*For points listed below please see footnote 1.			
4.21	95.828	148.27	66,547
4.22	96.257	148.93	66,845
4.23	96.686	149.60	67,143
4.24	97.116	150.26	67,442
4.25	97.55	150.93	67,740
4.26	97.98	151.59	68,039
4.27	98.41	152.26	68,339
4.28	98.84	152.93	68,638
4.29	99.27	153.60	68,938
4.30	99.70	154.26	69,239
4.31	100.14	154.93	69,539
4.32	100.57	155.60	69,840
4.33	101.00	156.27	70,141
4.34	101.44	156.95	70,442
4.35	101.87	157.62	70,744
4.36	102.31	158.29	71,046
4.37	102.74	158.96	71,348
4.38	103.18	159.64	71,650
4.39	103.61	160.31	71,953
4.40	104.05	160.99	72,256
4.41	104.49	161.66	72,559
4.42	104.92	162.34	72,863
4.43	105.36	163.02	73,166
4.44	105.80	163.69	73,470

1) Pipes/channels larger than flume may cause over discharge up to 3% (as noted in chart for upper flow ranges).
 2) Flow ranges are based on meter capability, freeboard allowances and flow studies. Points beyond these may perform satisfactorily.



Flow Chart for 72in Palmer Bowlus Flume

4.45	106.24	164.37	73,774
4.46	106.67	165.05	74,079
4.47	107.11	165.73	74,384
4.48	107.55	166.41	74,689
4.49	107.99	167.09	74,994
4.50	108.43	167.77	75,299
4.51	108.87	168.45	75,605
4.52	109.31	169.13	75,911
4.53	109.75	169.81	76,217
4.54	110.19	170.50	76,524
4.55	110.64	171.18	76,830
4.56	111.08	171.86	77,137
4.57	111.52	172.55	77,445
4.58	111.96	173.23	77,752
4.59	112.41	173.92	78,060
4.60	112.85	174.60	78,368
4.61	113.29	175.29	78,676
4.62	113.74	175.98	78,985
4.63	114.18	176.67	79,293
4.64	114.63	177.36	79,603
4.65	115.07	178.04	79,912
4.66	115.52	178.73	80,222
4.67	115.97	179.43	80,532
4.68	116.41	180.12	80,842
4.69	116.86	180.81	81,152
4.70	117.31	181.50	81,463
4.71	117.76	182.19	81,774
4.72	118.20	182.89	82,086
4.73	118.65	183.58	82,398
4.74	119.10	184.28	82,710
4.75	119.55	184.97	83,022
4.76	120.00	185.67	83,335
4.77	120.45	186.37	83,648
4.78	120.90	187.07	83,962
4.79	121.36	187.77	84,275
4.80	121.81	188.47	84,590

4.81	122.26	189.17	84,904
4.82	122.72	189.87	85,219
4.83	123.17	190.57	85,535
4.84	123.62	191.28	85,850
4.85	124.08	191.98	86,167
4.86	124.54	192.69	86,483
4.87	124.99	193.39	86,801
4.88	125.45	194.10	87,118
4.89	125.91	194.81	87,436
4.90	126.37	195.52	87,755
4.91	126.83	196.23	88,074
4.92	127.29	196.94	88,393
4.93	127.75	197.65	88,713
4.94	128.21	198.37	89,034
4.95	128.67	199.08	89,355
4.96	129.13	199.80	89,677
4.97	129.60	200.52	89,999
4.98	130.06	201.24	90,322
4.99	130.53	201.96	90,646
5.00	131.00	202.68	90,970
5.01	131.46	203.41	91,295
5.02	131.93	204.13	91,620
5.03	132.40	204.86	91,947
5.04	132.87	205.59	92,274
5.05	133.35	206.32	92,601
5.06	133.82	207.05	92,930
5.07	134.29	207.78	93,259
5.08	134.77	208.52	93,589

- 1) Pipes/channels larger than flume may cause over discharge up to 3% (as noted in chart for upper flow ranges).
- 2) Flow ranges are based on meter capability, freeboard allowances and flow studies. Points beyond these may perform satisfactorily.