



Flow Chart for 21in Palmer Bowlus Flume

Head (feet)	MGD	CFS	GPM
0.06			
0.07			
0.08			
0.09	0.04324	0.06690	30.028
0.10	0.05251	0.08125	36.467
0.11	0.06226	0.09634	43.238
0.12	0.07249	0.11216	50.340
0.13	0.08319	0.12871	57.770
0.14	0.09436	0.14599	65.526
0.15	0.10599	0.16399	73.605
0.16	0.11809	0.18271	82.004
0.17	0.13064	0.20213	90.72
0.18	0.14365	0.22226	99.76
0.19	0.15712	0.24310	109.11
0.20	0.17104	0.26463	118.78
0.21	0.18541	0.28687	128.75
0.22	0.20023	0.30979	139.05
0.23	0.21549	0.33342	149.65
0.24	0.23121	0.35773	160.56
0.25	0.24737	0.38274	171.78
0.26	0.26398	0.40843	183.32
0.27	0.28103	0.43482	195.16
0.28	0.29853	0.46190	207.31
0.29	0.31648	0.48967	219.78
0.30	0.33488	0.51814	232.56
0.31	0.35373	0.54729	245.64
0.32	0.37302	0.57715	259.04
0.33	0.39277	0.60771	272.76
0.34	0.41298	0.63897	286.79
0.35	0.43364	0.67093	301.14
0.36	0.45475	0.70361	315.80
0.37	0.47633	0.73700	330.79
0.38	0.49838	0.77111	346.10
0.39	0.52089	0.80594	361.73
0.40	0.54387	0.84150	377.69
0.41	0.56733	0.87779	393.98
0.42	0.59127	0.91483	410.60
0.43	0.61569	0.9526	427.56
0.44	0.64059	0.9911	444.85
0.45	0.66599	1.0304	462.49

Head (feet)	MGD	CFS	GPM
0.46	0.69188	1.0705	480.47
0.47	0.71827	1.1113	498.80
0.48	0.74517	1.1529	517.48
0.49	0.77258	1.1954	536.51
0.50	0.80050	1.2386	555.90
0.51	0.82895	1.2826	575.66
0.52	0.85792	1.3274	595.78
0.53	0.88742	1.3730	616.27
0.54	0.91746	1.4195	637.13
0.55	0.9480	1.4668	658.37
0.56	0.9792	1.5150	679.99
0.57	1.0109	1.5640	701.99
0.58	1.0431	1.6139	724.38
0.59	1.0759	1.6647	747.17
0.60	1.1093	1.7164	770.35
0.61	1.1433	1.7689	793.94
0.62	1.1778	1.8223	817.93
0.63	1.2129	1.8767	842.32
0.64	1.2487	1.9320	867.13
0.65	1.2850	1.9882	892.35
0.66	1.3219	2.0453	917.99
0.67	1.3594	2.1034	944.06
0.68	1.3976	2.1624	970.5
0.69	1.4364	2.2224	997.5
0.70	1.4757	2.2833	1,024.8
0.71	1.5157	2.3452	1,052.6
0.72	1.5564	2.4081	1,080.8
0.73	1.5977	2.4719	1,109.5
0.74	1.6396	2.5368	1,138.6
0.75	1.6821	2.6026	1,168.1
0.76	1.7253	2.6694	1,198.1
0.77	1.7691	2.7372	1,228.6
0.78	1.8136	2.8060	1,259.4
0.79	1.8587	2.8759	1,290.8
0.80	1.9045	2.9467	1,322.6
0.81	1.9509	3.0185	1,354.8
0.82	1.9980	3.0913	1,387.5
0.83	2.0457	3.1651	1,420.6
0.84	2.0940	3.2399	1,454.2
0.85	2.1430	3.3157	1,488.2

- 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.



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0.86	2.1926	3.3925	1,522.7
0.87	2.2429	3.4703	1,557.6
0.88	2.2938	3.5491	1,592.9
0.89	2.3454	3.6289	1,628.7
0.90	2.3976	3.7096	1,665.0
0.91	2.4504	3.7913	1,701.7
0.92	2.5038	3.8740	1,738.8
0.93	2.5579	3.9576	1,776.3
0.94	2.6125	4.0421	1,814.2
0.95	2.6678	4.1276	1,852.6
0.96	2.7236	4.2140	1,891.4
0.97	2.7800	4.3013	1,930.6
0.98	2.8370	4.3895	1,970.2
0.99	2.8946	4.4786	2,010.1
1.00	2.9527	4.5686	2,050.5
1.01	3.0114	4.6594	2,091.3
1.02	3.0706	4.7510	2,132.4
1.03	3.1304	4.8434	2,173.9
1.04	3.1907	4.9367	2,215.7
1.05	3.2514	5.0307	2,257.9
1.06	3.3127	5.1255	2,300.5
1.07	3.3744	5.2210	2,343.4
1.08	3.4366	5.3173	2,386.6
1.09	3.4993	5.4142	2,430.1
1.10	3.5624	5.5118	2,473.9
1.11	3.6259	5.6101	2,518.0
1.12	3.6898	5.7090	2,562.4
1.13	3.7542	5.8086	2,607.1
1.14	3.8189	5.9087	2,652.0
1.15	3.8839	6.0094	2,697.2
1.16	3.9494	6.1106	2,742.6
1.17	4.0151	6.2123	2,788.3
1.18	4.0812	6.3146	2,834.2
1.19	4.1476	6.4173	2,880.3
1.20	4.2143	6.5205	2,926.6
1.21	4.2813	6.6241	2,973.1
1.22	4.3485	6.7281	3,019.8
1.23	4.4160	6.8326	3,066.7
1.24	4.4837	6.9374	3,113.7
1.25	4.5517	7.0425	3,160.9

*For points listed below please see footnote 1.			
1.26	4.6199	7.1480	3,208.2
1.27	4.6883	7.2538	3,255.7
1.28	4.7569	7.3600	3,303.4
1.29	4.8257	7.4664	3,351.2
1.30	4.8947	7.5732	3,399.1
1.31	4.9638	7.6802	3,447.1
1.32	5.0332	7.7875	3,495.3
1.33	5.1027	7.8951	3,543.5
1.34	5.1724	8.0029	3,592.0
1.35	5.2423	8.1111	3,640.5
1.36	5.3124	8.2195	3,689.2
1.37	5.3827	8.3282	3,738.0
1.38	5.4532	8.4373	3,786.9
1.39	5.5239	8.5467	3,836.0
1.40	5.5948	8.6564	3,885.3
1.41	5.6660	8.7665	3,934.7
1.42	5.7374	8.8771	3,984.3
1.43	5.8092	8.9881	4,034.1
1.44	5.8812	9.0996	4,084.2
1.45	5.9537	9.2117	4,134.5
1.46	6.0265	9.3243	4,185.1
1.47	6.0997	9.4377	4,235.9
1.48	6.1735	9.5518	4,287.1
1.49	6.2478	9.6667	4,338.7
1.50	6.3226	9.783	4,390.7
1.51	6.3982	9.899	4,443.2
1.52	6.4744	10.017	4,496.1
1.53	6.5515	10.137	4,549.6

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