

## Engineering Flow Rate Chart

Discharge flow rate is based on the following formula:

		<u>WEIR</u>
F(Cubic Feet / Second)	= 0.50 H <sup>2.5</sup>	22.5 <sup>0</sup>
	= 0.67 H <sup>2.5</sup>	30 <sup>0</sup>
	= 1.03 H <sup>2.5</sup>	45 <sup>0</sup>
	= 1.43 H <sup>2.5</sup>	60 <sup>0</sup>
	= 2.48	90 <sup>0</sup>

HEAD "H"		DISCHARGE OVER WIER – GALLONS PER MINUTE				
		V-Notch WEIR ANGLE				
INCHES	10TH OF FOOT	22.5 <sup>0</sup>	30 <sup>0</sup>	45 <sup>0</sup>	60 <sup>0</sup>	90 <sup>0</sup>
1	0.083	0.4	0.5	0.8	1.2	2
1.25	0.104	0.8	1	1.6	2.2	3.9
1.5	0.125	1.2	1.7	2.6	3.5	6.1
1.75	0.146	1.8	2.4	3.8	5.2	9.1
2	0.167	2.6	3.4	5.3	7.3	12.7
2.25	0.188	3.4	4.6	7.1	9.8	17.1
2.5	0.208	4.4	5.9	9.1	12.7	22
2.75	0.229	5.6	7.5	11.6	16.1	27.9
3	0.25	7	9.4	14.4	20.1	34.8
3.25	0.271	8.7	11.4	17.9	24.9	43.1
3.5	0.292	10.3	13.8	21.3	29.6	51.3
3.75	0.313	12.3	16.4	25.3	35.2	61
4	0.333	14.4	19.2	29.6	41.1	71.2
4.25	0.354	16.7	22.3	34.5	47.8	83
4.5	0.375	19.3	25.8	39.8	55.3	95.8
4.75	0.396	22.1	29.5	45.6	63.3	109.9
5	0.417	25.2	33.6	51.8	71.9	124.8
5.25	0.437	28.3	37.8	58.4	81.1	140.6
5.5	0.458	31.9	42.5	65.6	91.1	158
5.75	0.479	35.6	47.4	73.3	101.7	176.4
6	0.5	39.7	53	81.8	113.6	196.9