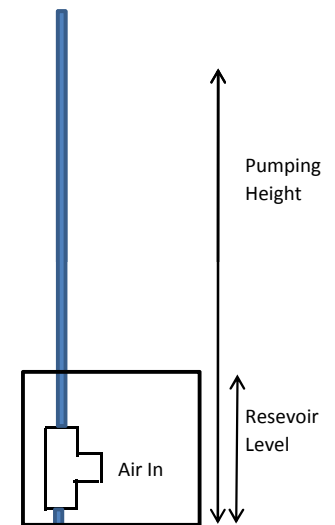
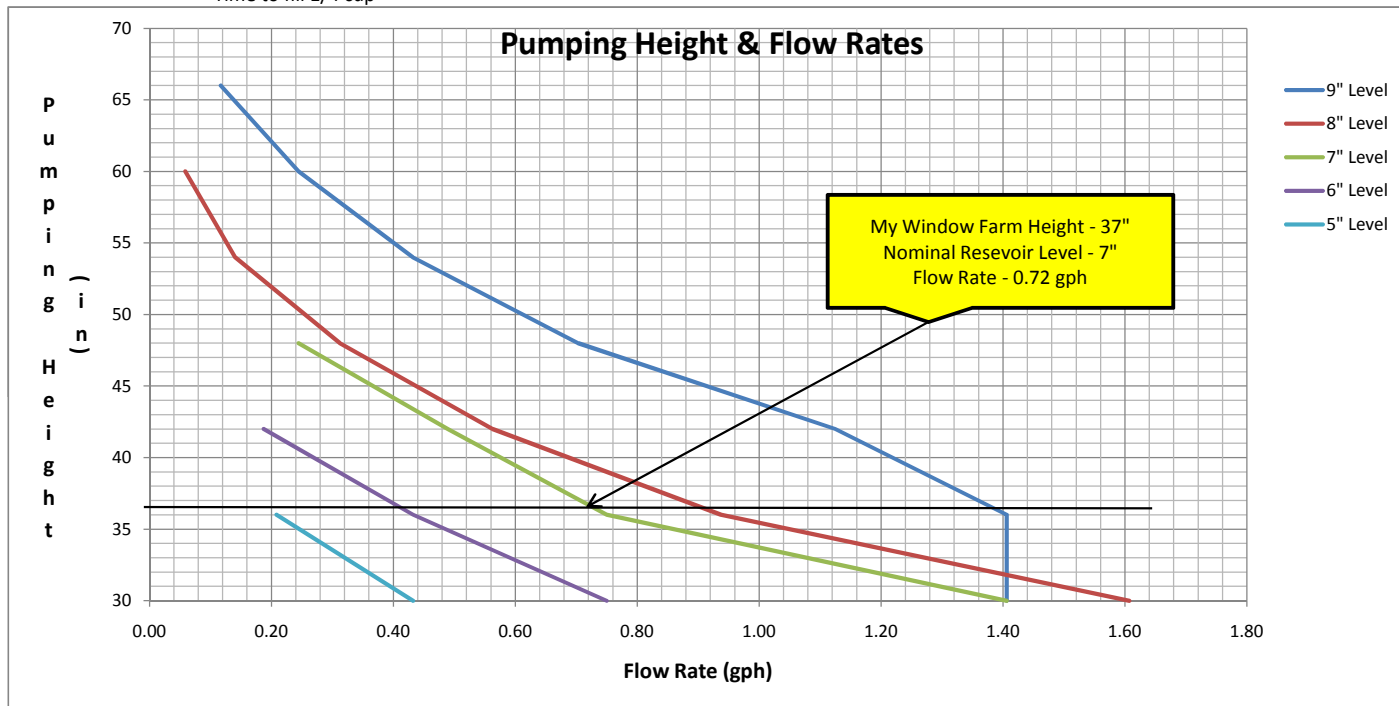


Pumping heights and rates for various resevoir levels for an Aqua Culture MK-1501 120vac 2.0 watts air pump with approximately 0.7 psi

Resevoir Level (In)	5	5	6	6	7	7	8	8	9	9
Pumping Height (in)	Observed Time(sec) *	Calculated Rate (gph)	Observed Time(sec) *	Calculated Rate (gph)	Observed Time(sec) *	Calculated Rate (gph)	Observed Time(sec) *	Calculated Rate (gph)	Observed Time(sec) *	Calculated Rate (gph)
30	130	0.43	75	0.75	40	1.41	35	1.61	40	1.41
36	270	0.21	130	0.43	75	0.75	60	0.94	40	1.41
42			300	0.19	115	0.49	100	0.56	50	1.13
48					230	0.24	180	0.31	80	0.70
54							400	0.14	130	0.43
60							960	0.06	230	0.24
66									480	0.12

* Time to fill 1/4 cup



General results for an air pump

To pump higher, you need a deeper resevoir, but the flow rate will go down.

To increase the pumping rate, you need a deeper resevoir or pump to a lower height.

If you resevoir level goes down due to evaporation or plant usage, the pump may stop working if it goes down too far.