COMPUTING SIZE OF PUMP NEEDED FOR WATERFALL

1. Fill a one-gallon bucket with water.
2. Time the number of seconds required to empty the bucket for the desired flow over the waterfall.
3. Divide 60 by the number of seconds for the gallons per minute and then multiply by 60 for the number of gallons per hour (GPH) required to produce the desired flow.
4. Measure the height of the waterfall from the location of the pump in the pool. Round up to the nearest whole foot. Add an additional foot for every 10 feet of hosing that will be required to reach top of waterfall. This is the lift required of the pump.
5. Find the lift in feet on the chart below and follow down that column to match with the desired GPH. If the required GPH is not listed, select the pump at the next-highest GPH. Since most water gardening pumps are sized by the GPH at one foot of lift, the one-foot lift column will be the size of the pump. Larger sump pumps are sized by horsepower ratings.

LIFTS	1′	3′	5′	10′	15′	20′
	120	70				
	170	140	100			
GHP	205	168	120			
	300	255	205	70		
	325	300	270	130		
	500	435	337	210	65	
	600	580	517	414	230	90
	710	690	670	580	380	150
	810	790	745	613	415	173
	1200	1170	1100	1000	840	520
1/6 HP				900	690	480
0.3 HP				2750	1750	750
0.4 HP				3250	2500	1550