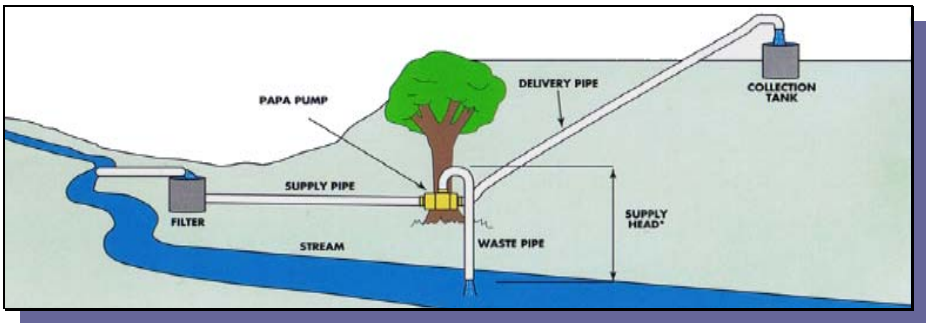
The Pumpmasters Eco Pump represents a new concept in **FUEL FREE** pumping.

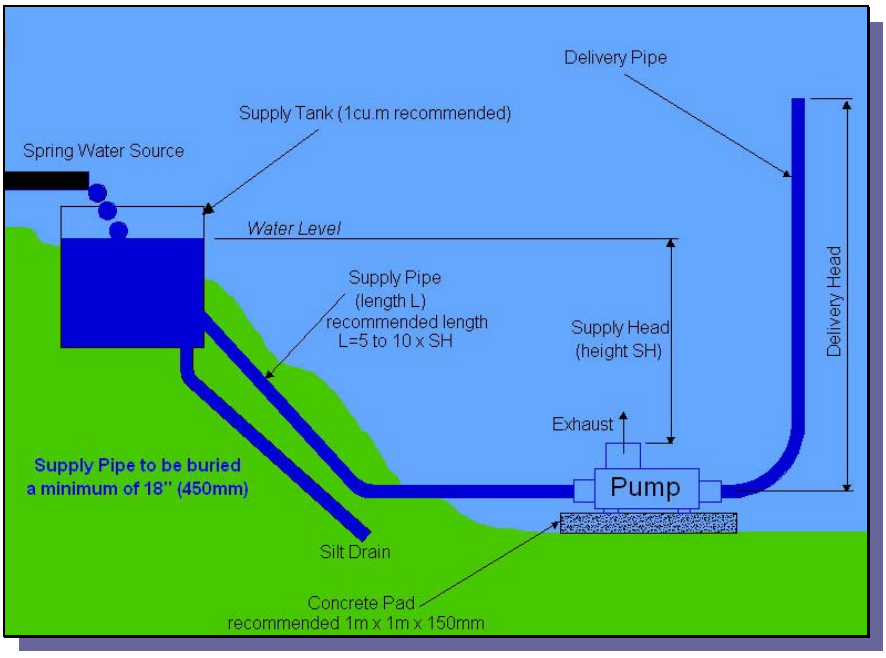
Operated entirely from the ***Natural Energy*** of flowing water, our Eco pump will deliver the water from your spring, stream or river to higher levels, providing a valuable and continuous flow of water without using costly fuels or electric using a hydraulic phenomenon commonly known as the ***"Ram"*** effect.



The gradient in the Supply Pipe causes water to accelerate through the pump via an exhaust valve and port, from where it is dumped at low pressure. At a certain velocity the Main Valve which acts as an exhaust valve, closes and directs the water through the Obturator Valve, and into the delivery pipe. As the pressure in the supply pipe reduces, the Main Valve reopens and the cycle begins again. The amount of water delivered depends on the relationship between the energy of water supplied and the height of the delivery head.

How much pressure/flow is produced?

This is dependent on a number of factors, such as the size of Supply pipe, Supply Head, and volume of water flowing. Using the chart overleaf you can work this out, or complete one of our questionnaires and we will calculate this out for you.



Pump Output Guide

Supply Head (Feet)	(Delivery Head in Metres)												Supply Head (Metres)
	6	7.5	9	12	15	23	31	46	62	77	92	123	
100											20%	17.5%	31
75		Note: All figures quoted are percentages of flow rates that can be achieved.								20%	17.5%	13%	23
50								20%	17.5%	14%	12%	9%	15
40								19%	14%	11%	9.5%	7%	12
35								17%	12%	9.5%	8%	6%	11
30							19%	14%	10.5%	8%	7%	5%	9
25						20%	18%	12%	9%	7%	5.5%	4%	
20						17%	14%	9%	7%	5.5%	4.5%	4%	5
15					17%	13%	10%	6.5%	4.5%	3.5%	3%	2%	
10			20%	16%	13%	8%	6%	3.5%	2.5%	2%	1.5%	1%	3
9			18%	14%	11%	7%	5%	3%	2%	1.5%	1.5%		
8		20%	16%	12%	9%	6%	4%	2.5%	2%	1.5%	1%		
7		17%	14%	10%	8%	5%	3.5%	2%	1.5%	1%	1%		
6	18%	14%	11%	8%	6%	4%	3%	2%	1.5%	1%			2
5	14%	12%	9%	6%	5%	3%	2%	1.5%	1%				
4	10%	7.5%	5.5%	4.5%	3%	2%	1.5%	1%					
3	6%	5%	4%	3%	2%	1%	0.5%						1
2	4%	2.5%	2%	1.5%	1%	0.5%							
	20	25	30	40	50	75	100	150	200	250	300	400	
	Delivery Head in Feet												

* Shaded area indicates metallic pipes should be used.

PUMPMASTERS
FLUID HANDLING ENGINEERS

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