

# Water Pump

## Water Pump

Looking to treat larger communities in need of cleaner water, AguaClara has been rising its effluent flow rate considerably. Plants with higher flow rates will require larger chemical stock tanks and thus better methods of bringing clean water from the sedimentation tanks to the fill the stock tanks than a bucket. The purpose of the water pump research is to design a manual water pump and pumping system that can be used by an operator to lift water five to eight feet to the chemical stock tanks optimally.

### Current Research

We have brainstormed various pump designs including a lever piston pump, treadle pump, and diaphragm pump and we are currently calculating our pump design dimensions. After calculating the proper parameters and dimensions of our pumps we will construct and test them for ease of use, upkeep, discharge rate, ease of construction and cost. We will compare our results to hand pumps that may be purchased off the market.

### More Information

[Mathcad Worksheet](#)

[2008 CDC](#)  
[2009 Rapid Mix](#)

See also:

[http://www.akvo.org/wiki/index.php/EMAS\\_pump](http://www.akvo.org/wiki/index.php/EMAS_pump)

### Members

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Documents

	Challenges	Tasks	Teach-In	Presentation
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### Past Research

None.