

# Solar Pump proposal for community dam Burrandong, Bowl, Outback

Keith's recommendations for suitable system.

Brief outline:

The concrete storage tank has a capacity of 20,000 litres. The proposed solar system would be able to pump approximately 8,000 litres per day average. This should be sufficient to meet demand but it can easily and economically be upgraded to supply more if necessary.

If there is agreement from majority of water users to adopt this proposal, Keith is willing and able to order the components and to install the system on the dam and then a working bee would be needed to run the pipe up to the tank.

Since there is a probability of slashing and burning along this route, it is preferable that the pipe should be entrenched.

Some commitment to fund the proposal is needed.

## Technical details and pricing:

Recommended pump is a diaphragm pressure pump. This is more energy efficient than a centrifugal pump and since it generates high pressure, a simple float valve can be used at the top of the concrete tank. The pump will turn off automatically once the tank is full.

Suggested pump: **Jabsco ParMax 6.0 24V 20 Litres/min**      \$459

<https://waterpumpsnow.com.au/jabsco-parmax-6-0-24v-detail>

Solar panels 2 off 185 Watt (on special in Port Macquarie at \$149 each) \$298

<https://www.gumtree.com.au/s-ad/port-macquarie/other-tools-diy/brand-new-185w-high-quality-trina-mono-solar-panel/1162757373>

Solar Maximiser (needed to control pump)      \$59

[https://www.ledsales.com.au/index.php?main\\_page=product\\_info&cPath=142\\_288&products\\_id=1983](https://www.ledsales.com.au/index.php?main_page=product_info&cPath=142_288&products_id=1983)

(Only available in kit form – to be built by Keith)

Racking and miscellaneous hardware including intake filter etc.      \$100

1 inch polypipe to run from dam to concrete tank \$400

**Total cost \$1316**

