

Top 7 Tips For Buying A Manual Water Pump

Most off-gridders that have secured land or are planning to set up their own homestead have already given some thought to generating power and ensuring a steady supply of water. Unfortunately, many people stop at buying an electric pump or simply figure that they can rely on ponds or other natural water features found on the property.

Without having manual water pumps on hand, you will set yourself up for a water crisis regardless of what is going on in the rest of society. If civilization collapses, you may not be able to obtain or build a manual pump in time to resolve your problems.

Taking time now to find the best manual pump will be of immense benefit for you, your family, and any livestock that may depend on the water from a well or other underground water source.

1. Fluctuations in the Water Table

If you have never lived far away from city or town water, then you may not realize how quickly the water table can fluctuate in your local area. Most people that decide to use manual pumps also do not dig or drill deep enough wells to ensure a steady supply of water all year round.

Before buying a manual pump, make sure that you know as much as possible about the routine water table fluctuations in the area where you will be maintaining a well. You can gain information from local geological surveys for the state and county, or try using this [USGS \(U.S. Geological Survey\)](#) link to find out more about data they have gathered about wells in the area.

<http://water.usgs.gov/ogw/basics.html#wl>

It is also very important to consider the potential for seasonal pollutants that may cause shallow wells to be useless. This includes:

- Pesticide and herbicide runoff from nearby farms or other installations,
- Salt contamination from rising ocean levels,
- Pathogen contamination from old septic systems or new ones that are too close to underground water pathways,
- Increased water usage up the line from your well by other settlers or larger communities that place increased pressure on aquifers and other underground water sources.

2. Geography of Land between the Well and Delivery Site

Consider a situation where you found a valley like impression with plenty of access to a high water table. At the same time, you decided to locate your main residence and livestock up on a hill. Needless to say, you will not be happy with lugging buckets of water up a hill each day for yourself, your family, and the livestock.

On the other hand, even if you buy a solar or wind powered manual pump, it will still be much harder to move the water to your home on a regular basis. In this scenario, you would be much better served by using a ram pump as opposed to a more conventional pump with a handle on it.

3. Water Usage Estimate

When calculating water usage for survival needs, never take a chance and hope that water from a nearby pond or other resource can be used on a routine basis. Aside from the risks posed by droughts, pollutants and fallout from various warfare agents can leave you without water.

During the process of buying a manual pump, make sure that you choose a model that will enable to gather enough water each day for all your needs. This includes water for livestock and any seasonal increases in water needs. The last thing you will want to do is have a manual pump on hand that only allows you to retrieve 30 gallons per day when you actually need over 300.

Remember that disease risk, animal loss, or other resources destroyed because of insufficient water may not be buyable after social collapse.

Overestimating water needs and buying a suitable manual pump to meet that demand will be well worth the effort. In this instance, you may want to focus on pumps that can be driven by a windmill or even animals harnessed to some type of torque delivery system.

There are also solar powered manual pumps that may be of interest if you have enough sunlight in the area surrounding the well.

4. Projected Expansions of Water Usage

As time goes by, you are bound to find an increased need for water. For example, as survivors begin to network again, people will marry, have children, and engage in other activities that require increasing amounts of water. Needless to say, as [you become more confident as a homesteader](#), increasing food production and expanding livestock herds will also require more water.

Once you know your current water needs, double, or even triple that amount as your projection for the next 10 to 20 years. In many cases, you may find that you need to purchase multiple manual pumps and then have several wells set aside as reserve for the future.

At the very least, if you are ready for expansion, you will

also be more prepared for any emergency that takes out your main well, or makes it impossible to use the pump attached to it.

5. Type of Manual Pump to Buy

There are basically two types of manual pumps to choose from.

The first type is a conventional hand driven pump. You can purchase or adapt models that have different handles to accommodate everything from windmills to animals harnessed in a ring. These pumps are best used in areas where temperatures go below freezing. Since they are durable and do not require priming, you can always rely on having a steady supply of water on hand.

When purchasing a hand driven pump, keep in mind that there are two types. The first is a shallow well pump that will not deliver water if the table drops below 20 to 40 feet. While these pumps will provide decades of service, simply extending the pipe deeper into the well will not be of any use. If the water table in the area drops below 20 feet, you will be well served by purchasing a hand pump that will pull water up from 125 – 300 feet down.

If you are going to pump water from a pond, or even an underground dug well, a ram pump may be of interest. These pumps are especially useful if you need to deliver water through pipes to a location up on a hill.

Even though these pumps require far less work than a hand pump, they also need to be primed if freezing or something else causes the pump to stop.

Make sure that you know how much water is required to get the pump started in an emergency, and always keep that amount on hand for that purpose.

Video first seen on [Grant Thompson – “The King of Random”](#)

6. Other Pumps in the System

Are you planning to only have a few people and animals living on the homestead? If you do the math, you will soon realize that even two people and [a few chickens](#) can use quite a lot of water. Under these circumstances, you will most likely have at least one electrical pump for primary usage.

Depending on the situation, you may not want to remove the electric pump from the well, let alone go through the hassle of drilling another well just so you can use a manual water pump.

Many of the newer manual water pumps are designed to work right alongside an electric pump. Choosing these models and installing them now can save you a good bit of time and frustration when an emergency arises.

When combined with alternative power options, you may even decide to switch between the two systems on a routine basis in order to take advantage of other power sources.

7. Underground Well Dug or Drilled

No matter how hard you try to be 110% prepared for an emergency, there may come a time when you will need to dig a new well. If you do not have drilling equipment available, the landscape of the well itself will be very different.

In some cases, hand pumps may not be able to pull water effectively from a hand dug well. Therefore, you should choose at least one pump that can operate in this type of well, and then simply keep it on hand for use as the need arises.

Alternatively, you can choose manual pumps that will work in either well type.

On the surface, manual water pumps look very simple and easy to buy. As you do more research, you are likely to find that simply buying the cheapest model hand pump or ram pump will

not be of much use in a crisis situation.

Taking the time now to calculate estimated water needs and learning about underground water features will be of immense benefit.

At the very least, you will have a better chance of choosing the right manual pump to meet a wide range of survival needs instead of one that simply takes up space and will fail to deliver water when you need it most.

**Secret NASA method helps you
get survival fortress for \$300**

Watch the video



*This article has been written by **Carmela Tyrell** for [Survivopedia](#).*