

Bulletproof Your Water Stockpile

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How to Store Your Water

You have to notice how well you are storing water in your home. You have to store your water correctly while ensuring that you have enough for yourself and anyone else who is in your home.

The greatest threat that might come in your life could be a water emergency where you are. You might come across a problem where you don't have enough safe sources for water. This could be due to a local water source being contaminated. There's also the risk that the power in your area might go out, thus making it harder for you to get enough safe water. The traditional filtration system you use at your home and any other safe methods you have for gathering water might be shut down due to a power-related issue.

The threat that comes with not getting enough water can be dangerous. You could be at risk of being dehydrated or unclean. The physical and mental risks of not having enough water can become dramatic after a while.

As a result, water storage solutions are popping up around homes all over the world. Various large-scale storage spaces have been established in many spaces. An excellent example of this is the Underground Parthenon in Japan, a space that is part of a large underground waterway setup in the country. The design of the tank can pump out about 200 tons of water in a second. But you don't need something that big for your property to take advantage of a water storage layout.

You can get a convenient water storage space ready for your home, but it is a necessity to see how well something can work for you. Are you aware of how well you're getting the water in your home stored the right way? You can use many standards for finding ways to store your water with care and control. But it is also important to notice how well you're going to secure your water and how much you will need to carry.

This guide will help you with understanding how water storage is to work and how you can get various types of water containers ready for your needs. You will also learn in this guide about how you can collect and store rainwater. The process is extensive and requires a bit of effort, but it can work if you plan everything right and you have the right materials on hand for your work needs.

Get Enough Stored For Your Life

To start, you will need to look at how well you're going to store water and make it work for your daily life. The water at your home is vital to your daily life. You'll need water for many intentions, from washing clothes to taking a shower and everything else in between. You'll have to keep your water stored the right way. You can secure your water with one of various containers for your demands.

You have many options for water containers and storage, but it helps to see what's around when finding a choice that fits the demands you have. You'll need more than enough water for your daily living demands.

The Red Cross recommends that each home stores about one gallon per person per day. But it may also be difficult for you to handle only one gallon in a day. You will need to find a solution that makes it easier for you to get the water you need for all your living demands. The fact is that everyone has different needs for using water. You have to figure out what you require when finding a way to store water.

Considerations For Storing Water

Let's look at a few standards surrounding how you need to store water:

1. You might be in a space where the weather requires you to consume more water.

People who are in hot environments require more water. Their bodies might lose their water contents faster in these spaces. Meanwhile, people in cold areas during the winter months also need added water because the body will not absorb as much water during this time.

2. Some people require added water for their fitness needs.

You'll need to get about 1.3 gallons of water every day if they sweat regularly. This could entail sweating from physical exercise or from working outdoors for a while.

3. Various people might have certain physical needs and require extra water.

Certain people have specific needs that go beyond the basic eight glasses of water that one needs to consume every day. Women who are nursing need to get extra water every day to support their children. A woman can figure out about two-thirds of her body weight and then drink that amount in ounces of water every day. Meanwhile, infants will need about a third of their body weights in extra water every day. Children should also have about 1.33 ounces of water for every pound of body weight each day.

4. You may also require more water based on how high up you live.

You'll need more water if you live at a spot higher in elevation. Those who live 5,000 feet above sea level or greater will particularly need more water. This is due to the reduced amount of oxygen and the low humidity in the area. You'd have to consume about an additional liter of water per day if you are 5,000 feet above sea level. The extra total would increase if you're up even higher.

5. You'll need about half a gallon of water per day for hygiene purposes.

The water you use for hygiene-related activities can include water for showering, brushing your teeth, and other daily functions.

Everyone has different needs for their storage demands. You'll have to plan your efforts for finding storage materials the right way while ensuring you have enough water.

The Reasons For Getting More Storage Materials

You'll need to get plenty of storage materials to ensure you have enough water. There's always the chance that there might be a water emergency in your area that makes it difficult for you to get access to water. The threats that come with such an emergency can be significant. You may develop dehydration after a while, as you can only go for about three days without water before you experience the effects of dehydration.

The effects of not having enough water can be dramatic. Your brain will not be as active as usual. Your critical thinking abilities may be impacted because your brain is slowing down. Your skin can also become dry after a while.

The risk of not having water cannot be ignored. You'll need to get enough water storage materials ready at your property to ensure you can retain the water you demand. But as you'll see in the next section of this guide, you need to keep your water stores arranged accordingly.

The Two Forms of Water

You will come across two types of water for your daily needs:

1. Drinkable/Potable

Water is potable when it is safe to drink. Water has to be filtered often to ensure it is potable.

2. Non-potable

Non-potable water is for use in a washing machine, a dishwasher, a bathroom and other spaces around your home. This is the water that is not for drinking or cooking.

The water you store in a rain barrel may be non-potable because it has not been treated, for instance.

You can get your water stored in either of these two ways. But how are you going to collect that water? That's where the types of containers you could use can come in play.

The Basic Types of Water Storage Containers

You've got plenty of options to work with when finding water storage containers. Let's look at a few of the best choices that you can work with when finding ways to keep your water in check.

1. Plastic

A plastic container is the most common type of water storage vessel that you can use. Beverage companies use plastic containers for their water products all the time.

But you'll have to look at the type of plastic you're using if you want to get a plastic container ready. Bisphenol A, or BPA, can be found in many plastic containers. The compound is a plastic that can contaminate your water if you expose the plastic to heat or sunlight. A treated plastic material is best for when you're trying to find an appropriate container for your use.

2. Metal

Metal can be useful for keeping your water secure. The metal surface can keep the area inside a container dark, thus ensuring the water will not be at risk of developing bacteria.

You'll have to watch for the metal that you use though. Avoid aluminum, as that material is toxic.

Stainless steel can also be useful, although you should not treat the water with chlorine or other chemicals. Such compounds may attack the steel surface.

3. Glass

You have many glass bottle options to consider. Your water may taste better if you store it in a glass, what with the glass materials not shedding off any compounds like what you'd get in a plastic bottle. You can also find glass bottles for cheap. Still, glass bottles are fragile and heavy.

4. Ceramic

Ceramic containers may also work in that water can evaporate through the clay surface. The evaporation ensures that the water on the inside remains cool.

Safety Considerations For Storage

You'll have to watch how you're going to store your water so you will not be at risk of sizeable problems relating to how you're storing the water.

1. Make sure your container has an opening.

You need to use a small opening or spigot to help you with collecting water. You can use the spigot to dispense the water in your container. This is much safer than dipping your glass into the container. More importantly, you will keep the water storage space covered so your water won't be exposed to anything dirty.

2. Do not use any containers that were used for other things in the past.

Any water storage container you use should be new and sterilized. Anything that was used for storing other stuff could be dangerous due to all those chemicals that might get stuck space.

3. Your containers should also be easy to clean off.

You can find many containers that can be cleaned with soap and water or with a diluted chlorine solution. You'll have to clean off your containers on occasion to ensure whatever you have is treated right.

How Much Water Should Be Stored?

The best rule of thumb is to store about one gallon of water for each family member in your house every day. Keep at least two weeks' worth of water on hand as well. This should be good enough for ensuring that you'll have enough water for everyone. Don't forget to consider the special needs that people have for consuming water as mentioned earlier in this guide.

On a related note, do not ever ration your water if your supply is running low. You should look to find more water that you can utilize if possible. This might require you having to filter, boil, or do something else to keep the water clean. But the key is that you should keep the water that you take in safe and that everyone consumes the water right.

How Often Should You Replace Your Water?

You should replace your water supply every six months for the best results. This is to ensure the water that you consume is safe and will not have developed anything.

Storing Rainwater the Right Way

The best way how you can store water is by collecting it from the sky. That is, you can get rainwater for your cleaning and sanitation needs. The process of gathering rainwater requires an extra bit of effort. You'll have to ensure you use the right items for collecting the water while also filtering the water accordingly.

Note: Check on the rules in your area to see if you can legally collect rainwater. There are some states, particularly the states of Utah, Colorado, and Washington, that have prohibited people from gathering rainwater. The rainfall in these states technically belongs to governmental entities.

Getting the Proper Tank

You'll need to find an appropriate tank that you can store your rainwater in. A tank will provide a firm and safe space for you to store your water in. The tank will be the spot that water enters.

You can choose to keep your tank above ground or underwater. Here's a look at how the two options differ from one another.

1. Above-Ground

An above-ground tank is a model that is easy to secure, but it can also be risky. An above-ground tank like a rain barrel might be at risk of developing contamination from dust, pests from outside, and various other threats. You'd have to get a secure lid on your tank to ensure the unit will not be exposed to outside threats. A gutter guard may also work above the tank to ensure the unit will not be as exposed to leaves or other concerns.

An above-ground tank works best for appliances like washing machines and dishwashers. You can get the tank to directly link up to any of these items in your home.

2. Underground

An underground tank is best if you have a small amount of space to work with. You can use the tank for when you need to keep your tank secured and hidden from others. You can also use this if need a sizeable amount of water.

Make sure the underground tank you use is secured in a spot where pedestrian foot traffic will not be a problem. Avoid adding your tank in a space where heavy loads can come around or else the tank will be at risk of shifting and not working properly.

Also, the underground tank should be secured in a spot where the soil is firm and secure. This includes ensuring that the soil will stay healthy without worrying about

the tank shifting around. The excavation process for getting the tank in its place might take a while, what with the tank possibly being large.

The tank must also be fully enclosed so it will not collect any waste materials from around the area. Also, the tank should work for non-potable needs like for bathroom use or a washing machine. You also have the option to treat your water when it comes out so it may be used for drinking purposes, but the process for making that work might take a while.

Filter Your Water the Right Way

The most important point to consider for storing rainwater is to get a filter so the water that you do store will be fully clean. You cannot assume that the rainwater that comes in your space is safe to consume right away. The pollutants in the air can cause the water you take in to become dirty. The rainwater on your roof may be even worse. The water may collect stuff like particles from your roof tiles, dead bugs, lead, and other dangerous items.

A water filtration system can help you with keeping your rainwater safe. The filter will collect the harmful particles that might get in the way of your water. You can use a large screen on your container to filter the water, although a slow-operating sand filter may also be used by allowing sand to collect the pathogens and other items in your water.

Managing the Pipes and Pumps

The pipes that you use in your water storage setup are critical to the success of your work. You need to get the pipes for your tank prepared so water can safely move from the tank to your plumbing system.

You also need a pump or two for your storage space. A pump will assist you with moving the water out from your tank.

The ways how your pipes and pumps will be installed will vary based on the tank solution you utilize. But there are a few things that can be done to help you with getting these parts ready for your use:

1. Use a drying material to defrost any pipes around your installation.

A hairdryer is useful for plastic pipes. A propane torch works for metal and copper pipes.

2. Add a fiberglass insulation material around the pipes and pumps.

Fiberglass helps with keeping the temperature of the water in check so it will not be too hot or cold as it moves through.

3. Add heat tapes around pipes or pumps that are susceptible to freezing conditions.

4. You can consider adding a hand pump to your space if desired.

A hand pump can be utilized to help you with manually activating the pump and making it easier for the unit to keep working in your space. But you would also have to watch for how well the hand pump operates in cold weather conditions. You might have to prime the hand pump during such a situation.

Extra Plans For Your Water Storage Solution

As useful as your water storage container will be, you have to look carefully at how you're going to use it. The following section entails many points that have to be reviewed if you want to make the most out of your work:

1. What will the purpose be for your water?

Are you going to use the water for drinking or food preparation needs? You will have to use a purifier or other cleaning material to help make the water safe for consumption.

You could also consider using your storage tank with gardening or car washing in mind. You could add a tap to your tank in this case. A pipe may help you to handle your water.

2. What area are you going to get the storage space installed?

Look at how you're going to get the installation process taken care of. The installation should be at a spot where rainwater will be likely to flow accordingly.

3. Can your roof handle the water collection process?

Your roof should be checked to see how well it can handle the ongoing flow of water to your storage container. Check on any materials that might put the water at risk. This includes any paint materials that might be on your roof. Also, a roof that has asbestos fibers on it would be unsafe. Asbestos was used for years on older homes and is not used in today's homes, but this is a concern to note on older homes.

4. Are you legally allowed to get a storage container ready?

You might not be legally allowed to get a new storage container set up at your property. The issue may be due to your local neighborhood having rules surrounding the use of water storage containers. Don't forget that some parts of the country prohibit people from collecting rainwater for their use.

5. What will the cost of your storage space be?

The cost of your barrel may vary based on factors like how big the tank is, the installation effort required, and whether any digging is required at your space. The

cost will surely increase when you have to complete lots of digging or the storage space is expensive.

6. How are you going to install the storage container?

The installation process itself should be planned accordingly. All the pipes, fittings, and other feature around the container should be fitted while being light-proof so algae will not grow. Algae are a threat that can develop when light shines on the water.

You also have the option to get many containers stored together and linked to one another. Any connections you use between these barrels should be designed to where the water can flow evenly between those said barrels.

How Can You Connect Storage Spaces?

You have the option to connect multiple storage spaces with one another. This works in that one container will link to the next with a separate hose. You would have to use a garden hose or another pipe to connect them both. The water would enter one storage spot and then move into the second one after the water in the first space is high end. There is a potential that the water levels in the two storage containers will not be evenly, but the connection does improve upon how much water you can store. This may work if you're unable to get a much larger single storage unit for use.

Cleaning Your Storage Materials

Your water containers will have to be cleaned on occasion. The cleaning process will entail ensuring that your vessels are safe for use and that nothing will enter your water supply.

There are a few things you can do for maintaining your storage vessel:

1. Review the sides and bottom of your storage container to see if any sludge has developed around the body.

Check the container every few months to see if there are any buildings inside your storage container. The space will need to be drained and then cleaned out if you notice anything.

2. Analyze the roof catchments that bring the water to your storage space.

The roofing space should be inspected regularly to see that there's nothing like fecal matter from animals getting in the way. All spots should be cleaned accordingly. You can add some animal-proofing materials around your roof to reduce the risk.

3. Clean the gutter and tank inlet regularly.

Cleaning these spaces reduces the risk of buildups coming along.

4. Test your water on occasion to see how safe the water is.

Test the water to see if the filtration effort you're putting in for your storage needs is working. You might need to get a new filter ready depending on what's happening.

5. Check any pumps that you're using.

You have the option to use a pump to help you with circulating water. The pump should be inspected regularly to see that it is working.

6. Replace the roofing materials as necessary.

You will have to get newer and safer roofing materials if your current roof is too old or worn.

7. You can talk with a tank cleaning company if your tank is underground and you cannot get easy access to it.

A cleaning specialist may help you in identifying how well the tank cleaning process works. The cleaner may assist you with clearing out materials as well as possible.

Handling Freezing Conditions

Another thing to notice about storing your water is to look at how your storage container can work in cold conditions. There are a few things that can be done to keep your container safe for use when it is freezing out:

1. Keep enough insulating materials on hand for your pipes. You can also add heat tape to your materials to keep them warm.
2. Keep the water running when it is freezing out. This ensures that the lines are active.
3. Review the fiberglass insulation you install around your pump or apply an incandescent light or another gentle heat source on the area.

What If Your Pipes Are Frozen?

Finally, you have to take a look at what can be done if the pipes for your setup do freeze. You can unfreeze your water pipes with a few steps:

1. Use a hair dryer or heat gun to ease the pipes.
2. Add salt to any drains that link to the pipes. The salt may help with breaking down the ice.
3. Apply hot towels around the pipes to relax their bodies.

4. Keep the faucets in your home open by a small bit. Keeping them open ensures the pipes will not become hard.

A Final Word

The water storage plans that you plan should be considered carefully. You can get your water storage in many spaces, but it helps to watch for how well you're going to make the space work. You might be impressed with how well the setup works for your needs.