

Spring Branch Bulverde Family Lions Club's Rain Barrel Instructions

The Spring Branch Bulverde Family Lions Club (SBBLions) has researched many rain barrel plans and they believe this is the most adaptable, effective, simple to make, and cheapest rain barrel available. After you have found a barrel, the rest of the parts and tools can be found at a local hardware store.

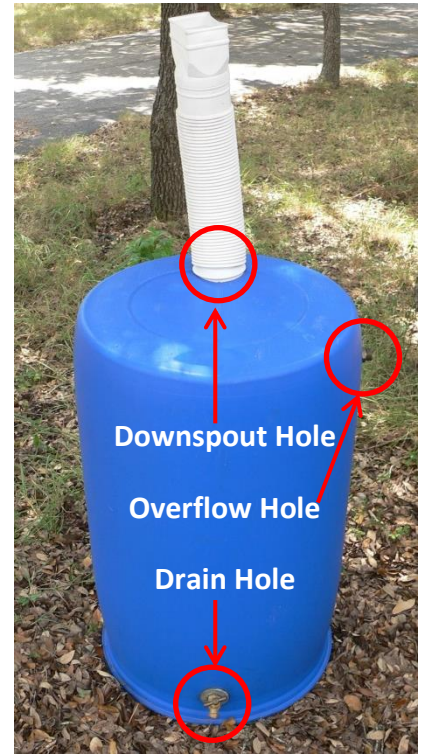
This barrel can be made in about an hour if you have gathered all the parts and have your tools lined up.

We all know that the best way to collect rain water is with a cistern that can hold thousands of gallons of water, rather than a mere 55 gallons. However, not many people would like to spend their time or money to place on a large plastic container in their yard. This is why the Lions are posting this "rain barrel instructions." On the other hand, having a rain barrel forces us to reconsider your daily water use, which is a positive outcome of a large or small rain water collector.

The compression fitting the Lions have designed is superior to many other rain barrels. Other rain barrels use glue to hold the hose bib (spigot) in place, or they only tap the threads of the hose bib into the plastic wall of the barrel, which will certainly wear out and leak. The SBBLions use a pre-existing hole in the barrel to access the rear of the hose bib to tighten it securely. This system does not have leaks, and if any leaks do ever develop, you could always tighten the connections or replace them. With this design the SBBLions have never had a customer come back saying that their barrel started to leak.

Another advantage to this design is that it is easily repairable if a part ever wears out or leaks. The barrels do not let in sun or mosquitos because it is comprised of a closed system. Debris may settle in the bottom of the barrel over time, but this will happen with any barrel. The barrel can easily be cleaned by tipping it over and spraying it out with a hose.

Follow these instructions and you will be happy with your rain barrel.



For this guide, the Lions used one blue HDPE 55 gallon barrel that has two screw plugs in the end/top. This is the most common type of barrel and it is usually the cheapest to buy. Finding a barrel can be the hardest part of making a rain barrel—a food-grade barrel is best. Try searching Craigslist; this is often the easiest way to find a barrel. Generally around Comal County, people commonly sell them for \$15 to \$25. Check what was stored in them before you buy them. They should not have had any toxic chemicals stored in them that could harm your plants. The SBBLions use former soap barrels to build their rain barrels; soap helps treat for bugs and does not harm plants. Note that the barrel to the left will be turned over; the plug holes will be facing down.

Tools that you need include:

- Silicone Caulk
- Large Adjustable Wrench
- 1" Forstner Bit
- 4" Hole Saw
- Long Screw Driver
- Barrel Plug Wrench (Costs about \$50, can use a screw driver and hammer instead)
- Drill



Materials for the barrel (about \$25 + the barrel) include:

- 2" x 3" flexible downspout adapter
- 1" washer
- 3/4" brass hose bib
- 3/4" MHT x 3/4" MIP x 1/2" MP brass adapter
- 3/4" black iron 90 degree elbow

All of the materials can be found at a local hardware store, but if you are going to make a lot of them, check at a large plumbing store for discounts on bulk orders.



Step 1: the 1st Hole – Drain Hole

The way this should work out after you drill these holes is that there will be a spout in the barrel at the base which will face outward from your house, an overflow which comes out to the right side from the top of the barrel, and a downspout adapter at the back top of the barrel which backs up to the wall of your house. Use the 1" Forstner bit to drill a hole about 4 inches from the bottom (plug hole end) of the barrel on the side wall so that it will line up with one of the barrel plugs. It is critical that it lines up with the barrel plug. This hole will be for the drain spout.

Forstner bit hole about 4 inches from the top of the barrel on the side wall. This hole will be for the overflow adapter.

Step 2: the 2nd Hole – Overflow Hole

Turn the barrel ¼ turn clockwise and drill a 1"



Step 3: the 3rd Hole – Drain Spout Hole

Switch out the Forstner drill bit for the 4" hole saw and drill a hole in the top of the barrel, toward the backside of it. Hold on to the drill!

Ideally, the drain spout hole at the bottom should be at the front side of the barrel and this 4" hole in the top should be at the back of the top, because this 4" hole will back up to your house. You should drill your hole toward the back side of the top so that when you place the barrel beside your house, the downspout will feed into it. The exact location is not critical.

Step 4: Screw in the Overflow Adapter

Manually insert the brass adapter piece into the 1" Overflow Hole drilled near the top of the barrel, being careful to thread the pipe thread end (not the garden hose end) as close to horizontal as possible. Use an adjustable wrench to fully tighten the adapter all the way into the barrel. Do not overtighten!



Step 5: Silicone Caulk

Spread silicone caulk on the washer and place it on the hose bib, with the caulk facing the barrel.

Step 6: Inside the Barrel

Turn the barrel upside down and using the barrel wrench remove the screw plug which is nearest to the 1" spout hole in the barrel. Place the 90 degree black iron fitting on your left index finger and insert it into the plug hole so that the threads are visible from the outside, and lined up with the spout hole.



Step 7: Screw in the Hose Bib

This is the most important part of the guide to do correctly, but it should not be too difficult if you are patient and follow the instructions. Using your right hand to hold the hose bib and your left to hold the 90 degree fitting, carefully twist the hose bib into place making sure to align the threads straight. Once the threads have caught, hand-tighten the hose bib.

Step 8: Tighten the Fittings

Insert the screw driver into the exposed end of the 90 degree fitting, inside of the barrel, and use the large adjustable wrench to tighten the hose bib until it is positioned correctly. The Lions usually only have to make 3 or 4 turns with the wrench until the washer has bent in slightly. Do not over-tighten or the threads of the brass hose bib can shear off. If you will not be placing your barrel on an elevated surface such as blocks, the spigot's hose connector end could face to the side to easily connect a drain hose.



This part is really what the Lions are most proud of about their rain barrels. Many people have asked how we connect the hose bib and what keeps it on so tight. The secret is in the spigot, washer, silicone, and 90 degree elbow.



Step 9: Clean up

Wipe off any excess silicone that has squirted out of the sides of the washer; then replace and tighten the screw plug using the barrel wrench.

Step 10: Flexible Downspout Adapter

Pop in the flexible down spout adapter into the top of the barrel and you are done!

Step 11: Installation and Rationale

To install the rain barrel, you just have to place it on a minimum of two cinder blocks (you can stack several more), measure the height of your

downspout adapter to the downspouts on your house, trim your house's downspouts to meet the barrel adapter, then slide the adapter over your downspout. Hook up garden hoses to the spout and overflow adapter and the barrel is ready to go.



Using the downspout adapter, multiple barrels can be linked together. The downspout adapter is placed at the top of the barrel in order to allow one barrel to completely fill up before filling the next one. This creates the water pressure that will push water through your hose.

The Lions do not use a screen in their barrels because it is a closed system rain barrel that prohibits mosquitos from entering the barrel once everything is hooked up properly. You can clean the barrel by turning it over and spraying it with a hose. If you need a screen, you can cut out a piece of window screen and sandwich it between your barrel and your downspout.

A gutter strainer placed in the downspout opening will keep leaves and other debris out of your rain barrel.



SBBLions Public Service Project

Lions' Rain Barrel Water Conservation Project

Don't have time to make a catchment barrel?

Club builds these rain catchment barrels and sells them to the general public for \$65 per barrel conversion. Presently, the Lions do not install them and you must pick up your ready-to-install rain barrel in Bulverde. Money raised in this project helps support Lion community projects such as St. Jude's Ranch for Children, Texas Lions Camp, Bulverde Spring Branch's Day of Services, and the Blue Lion Train.

How much do complete SBBLions Rain Barrels cost?

55 gallon rain barrel conversion _____ **\$65**
(Includes: installed flex downspout adapter, overflow hose fitting, washer, and drain spigot)

Cleaned 55 gallon barrel only _____ **\$25**
(Barrel only; no conversion, contains minor soap residue;-while supplies last)

U-wash 55 gallon barrel only _____ **\$20**
(Barrel only; no conversion, contains soap residue;-while supplies last)

Conversion kit (parts only - no barrel) _____ **\$25**
(Includes: flex downspout adapter, overflow hose fitting, 1" washer, and drain spigot)

For further information see the link on the Spring Branch-Bulverde Family Lions Club website at www.SBBLions.com or, to place an order, mail an order to 2376 Bulverde Road, Suite 104, Bulverde, TX 78163; email your order to info@SBBLions.com or you can call **210.519.6980** with credit card information.

100% of money raised by the Spring Branch-Bulverde Lions Club helps support local community programs:

- Texas Lions Camp, a free residential camping experience for local children with debilitating physical disabilities, type 1 diabetes, severe burns, autism, and cancer.
- Early Childhood Vision Screening
- Bulverde Area Humane Society
- Christmas toy and food boxes
- Curing preventable blindness
- St. Jude's Ranch for Children
- Eyeglasses for the needy
- Texas Lions Foundation
- Eyeglass contributions
- Holiday food baskets
- College scholarships
- Diabetic awareness
- Park development
- Leader Dog School
- Lone Star Eye Bank
- Drug education
- **Bulverde Car Show**
Last Saturday in March



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... LOCALLY**

