Even though we are seeing some relief from drought, we are almost surely going to see hot, dry weather later this growing season.

Here is one way to capture high-quality water for watering flowers or garden beds with a barrel and parts from local hardware stores.

**Photo 1.** Start with a 55-gallon plastic, food-grade barrel. It is important a used barrel hasn’t contained any toxic chemicals, especially pesticides or other toxic fluids. We found a good source to be a local carwash soap supplier. You might check at other businesses in your community. You also may purchase used food-grade plastic barrels at www.arizonabarrels.com.

**Photo 2.** Trace a line to act as a guide for cutting the hole for a floor drain that will go into the top of the barrel. It is all right if this hole is a little larger than the bottom of the drain as the top of the drain has a lip that overlaps.

**Photo 3.** Cut the hole in the top of the barrel. The hole can be cut around one of the existing bungs, or, it can be cut in a smooth area on top of the barrel.

**Photo 4.** Next, put a section of screen over the top of the drain and secure a hose clamp or large rubber band around it just under the lip. The screen will help keep out debris and egg-laying mosquitoes.

**Photo 5.** Next, trace around the threaded end of the PVC adapter 2 to 3 inches below the top of the barrel to create the hole for the overflow (remember to consider which side you want the overflow on!). If using a 1.75-inch adapter, simply drill this hole with a 2-inch hole saw. You may want to turn the barrel on its side and sit on it to make this easier.

**Photo 6.** Once the hole for the threaded adapter is cut, screw in the threaded end, then seal around the outside with waterproof caulk or aquarium glue. This will prevent overflow water from leaking down the side of the barrel.

**Photo 7.** After the glue or caulk is ready, put one end of the PVC elbow over the threaded adapter. A 2-inch elbow over a 1.75-inch adapter will work, though it may require wiggling the elbow a bit. Make sure the other end of the elbow points downward.

**Photo 8.** Drill the hole for the spigot near the bottom of the barrel. Remember to consider whether or not the barrel will be set on cinder blocks because you’ll need to get a hose or watering can under the spigot. For a ¾-inch threaded spigot, use a 1-inch hole saw.

Wrap the threaded back end of the spigot with Teflon tape to create a seal and screw the spigot into place making sure the end for the hose attachment points downward. You might also want to use caulk to seal around the end threaded into the barrel.

Here’s one way to build a rain barrel for when...
**Mother Nature opens the faucet**

**Photo 9.** With the other PVC elbow attached to the bottom of the PVC pipe, stand the pipe against the barrel and mark a spot on the pipe where, when cut, it can be inserted into the upper elbow with the other elbow resting on the ground. Again, if the barrel will be on cinder blocks, you will want to sit it on its blocks before marking the pipe for this cut. Cut the pipe (a handsaw will work), and, if you wish, insert the remaining pipe in the end of the lower elbow.

**Photo 10.** Your completed barrel should look something like this. If you wish, paint the barrel with outdoor plastic spray paint (it should take about two to three cans to completely cover the barrel). Now, you’re ready to collect free rainwater from your roof and conserve valuable drinking water!

**Hardware list**

- 55-gallon, food-grade barrel, rinsed clean
- 4-inch utility drain cover, piece of screen door mesh large enough to wrap around drain
- 1.75-inch threaded PVC adapter
- 2-inch PVC elbows
- 1 section of PVC pipe 3 to 4 inches long
- Standard ¾-inch garden hose spigot with 1-inch male threads on backside
- Teflon tape, aquarium glue, or waterproof silicone caulk

*Carrie Wiese is the former water outreach coordinator for the city of Laramie; Trish Penny is the education outreach coordinator at the Laramie Rivers Conservation District. Trish can be reached at trish.penny@wy.nacdnet.net when she’s not thinking of ways to help Wyoming residents save water.*