

Rainwater Harvesting with Rain Barrels

A "TAKE CARE OF TEXAS" GUIDE

What Is Rainwater Harvesting?

Rainwater harvesting is the collecting and storing of rainwater. You can collect rainwater from a roof, which is the most common method, and store it in catchment tanks, such as rain barrels.

A Brief History of Rainwater Harvesting

Before there were public water utilities, many American households harvested rainwater. With the development of large, reliable water treatment and distribution systems, the appeal of rainwater harvesting diminished.

However, as the environmental and economic costs of providing centralized water escalate, a new

interest in rainwater harvesting has emerged. The easiest way to begin harvesting rainwater for your home is to use a rain barrel to provide water for irrigating your lawn.

Reasons for Harvesting Rainwater

Benefits

- The water is free.
- Rainwater is better for plants than chemically treated water.

- Rainwater harvesting can help reduce flow to storm water drains and reduce stream pollution.
- Using stored rainwater can reduce utility bills.

Other Incentives

Texas Tax Code 151.355 exempts rainwater harvesting equipment from sales tax. To download the Texas Sales and Use Tax Exemption Certificate, visit <www.window.state.tx.us/taxinfo/taxforms/01-339.pdf>.

HOW TO CONSTRUCT A RAIN BARREL

Materials

- 55-gallon polyethylene plastic barrel
- 3/4-inch hose spigot
- 3/4-inch pipe coupling
- window screen
- Teflon cement
- water hose (optional)
- bricks or concrete blocks (optional)

Tools

- drill with 15/16-inch bit
- saber saw

Instructions

1. **Inflow.** Use the saber saw to cut a hole in the top of the barrel approximately the same diameter as your gutter downspout.
2. **Spigot.** Measure 3 to 4 inches from the bottom of the barrel and drill a 15/16-inch hole. Screw the spigot halfway into the barrel, apply some Teflon cement to the exposed threads, and continue to twist until tight.
3. **Overflow.** Measure 3 to 4 inches from the top of the barrel and drill a 15/16-inch hole. Twist in the pipe coupling about one-quarter of the way, apply Teflon cement to the exposed threads in the middle portion of the coupling, and continue to screw it in, leaving 1 inch of thread exposed.
Connect the hose to the pipe coupling overflow spigot at the top of the barrel. You can run this hose into another barrel or to a soaker hose (which will automatically water your garden).
4. **Downspout.** Place the barrel directly below the downspout. You will need to reconfigure the downspout to flow into the hole. If you like, place the barrel on concrete blocks or bricks. Raising the barrel will allow you to get a bucket under the spigot, and will facilitate leveling the area where your barrel will sit.
Cover the hole on the top of the barrel with the window screen, to prevent sticks, rocks, or dirt from getting into your barrel. You can glue or nail this screen down or secure it with a few bricks or rocks to keep it from blowing away.



