# How to Start A Home Rain Barrel Project

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Water is precious and becoming more scarce. Try a rain barrel in your yard to use 'free' water for irrigation and limit what you run from the tap.



A rain barrel not only provides you with a renewable source of water, it adds a rustic charm to your garden. (Photo: ravik694/Flickr)

Rainfall is considered greywater — unsuitable for human consumption without further processing, but immediately useful for a variety of garden and household needs. Plants love rainwater, thanks to its softness and lack of chlorine treatment. So let's start there, with a simple and inexpensive system designed to take a little load off your water bill while keeping your garden green.

As we prepare for April's gentle showers, there's one thing that's certain: we'll need that rainwater once the weather warms up.

For most of us, it's easy to take water for granted. Turn on the tap, and it's there — usually. But shifting climate patterns and populations are challenging municipal water systems around the world. Australia is just emerging from one its most brutal summers in living memory. The U.S. Southwest is struggling through a multi-year drought, and big cites such as Atlanta have come perilously close to draining their taps dry.

Part of the problem is that virtually every drop of water you'll use today is treated drinking water, from your morning coffee to the stuff you use in the yard. But we can take a little stress off the system by collecting rain whenever it's available.

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## Remember rain barrels?

Your grandparents may have kept a rain barrel. They're one of humanity's oldest means of storing fresh water. Rain barrels have seen something of a revival in recent years, thanks to modern construction techniques and better consumer awareness of the need to conserve water. While you can spend more for a large commercially produced system, setting up a basic rain barrel system is the kind of project you can complete in an afternoon for less than \$100. Since even a light rain can produce several hundred gallons of rooftop runoff, you'll have little trouble filling your barrel. An inch of rain on a 1,000 square-foot roof will put over 600 gallons into a gutter system — much more than most people collect. Ready to have some free water at the ready? Let's go shopping!

### Modern rain barrels

A contemporary rain barrel system is a simple affair. They're also getting easier to find. Your local home improvement store is likely to have a couple ready-to-install models to choose from, and there are dozens of varieties available online. A typical setup is a diversion line which runs from your rain gutter downspout, a length of tubing, and one or more barrels with a cover. The barrel will be mounted with a spigot or hose fitting at the bottom for water withdrawal. You can also buy free-standing systems designed to collect rainwater on their own.

The barrel itself must be pretty sturdy: a 50 gallon unit will weigh over 400 pounds when full, more than enough to burst something like a plastic garbage can. You can buy them up to about 80 gallons in a variety of shapes, and it's possible to daisy chain several together.

Clean Air Gardening and Aaron's Rain Barrels both have broad selections of commercial rain barrels and related gear. If you'd prefer to homebrew a more traditional looking system,

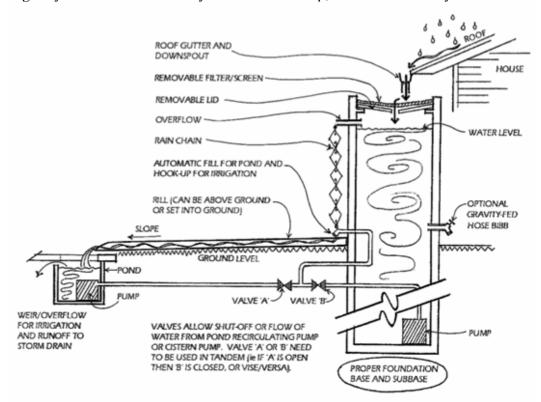
Kentucky Whiskey Barrels is a great source of handmade oak barrels retired from the Bourbon industry. In either case, you're looking for a unit with a screen for excluding debris and insects (crucial in mosquito-prone areas), and a secure lid to keep out animals and curious children. Plastic barrels should feature opaque coloring to discourage algae growth, and UV-resistant

## **Setting up your barrel**

plastic.

Barrels should be elevated to ease watering. Cinder blocks are a popular and cheap way to do this. If you've got pets or children, you'll want to be sure your barrel is located close to where you'll eventually want water, but away from foot traffic. A tipped-over rainbarrel could easily injure or kill someone. Against a wall is a good choice. Use straps to secure the barrel if you have any questions about its security.

<u>NaturalRainWater.com</u> — a comprehensive rain barrel resource — has a gallery of installations to give you some ideas. Once your barrel is set up, it should be nearly maintenance free.



While we've primarily discussed above-ground rainbarrels, it is also possible to construct much larger, below-ground systems. This is a considerably more expensive option, requiring pumps to extract the water and sometimes featuring filtration systems to make it potable. The diagram above — taken from a handout published by the King County (Washington) Department of Natural Resources and Parks — shows a hybrid arrangement capable of storing and distributing several hundred gallons of rainwater. You can download a PDF version of the pamphlet <a href="here">here</a>. If it routinely drops below freezing where you live during the winter, it's wise to drain your barrel and store it for the season to avoid cracking. It will be ready to go again in plenty of time for spring.

#### But sometimes rain isn't free

Think back to splashing through puddles as a kid. There's something joyful about a good rain shower. Rain seems so simple, clean and free.

That's not always the case. In large sections of the Southwest, for instance, it's illegal to harvest rainwater. This is largely the heritage of an era in which cattle and sheep ranchers wielded a lot of political power. They depended on rain to fill the streams which watered their flocks, so laws were passed to prohibit any impediment to stormwater runoff. That still includes rain barrels. You may also have local ordinances or neighborhood covenants prohibiting rainwater harvest. Check your local regulations and building codes before starting a rain barrel project. **So enjoy!** 

As green home improvements go, rain barrels are a fairly simple, low-cost project with long-term returns. They help take some load off municipal water and waste treatment systems, add value to your home, and provide a hedge against drought for landscaping and kitchen gardens. Invest a few hours next weekend and get started.

We're big fans of HGTV. Here's a video segment showing a solid, DIY rain barrel project using a 50 gallon food-grade plastic barrel and common plumbing accessories. It may provide some inspiration for your own setup.

YouTube video on how to make a rain barrel:

https://www.youtube.com/watch?v=MGFDlkJOdaM