

Rainwater harvesting is the collection and storage of rain from roofs or from any surface area for future use. The water is generally stored in tanks, barrels, cisterns, ponds, or directed into raingardens or other areas which recharge the groundwater.

Rainwater Harvesting reduces our environmental impact in many ways:

- ◆ Saving energy and chemicals used to treat water
- ◆ Reducing the volume of waste water or runoff to be stored and treated.
- ◆ Helping to reduce flooding and storm water management problems.
- ◆ Helping to recharge the groundwater in your immediate area.
- ◆ Rainwater is soft water! Plants love this natural water. It is warmer and does not contain the chemicals in public water.
- ◆ Saving money. You are charged less for water. (Especially if your wastewater bills are tied directly to your total water usage). Or you save electricity if you use a well.
- ◆ The saved water is a source of water for your gardens or house plants.



Rain barrels can be used with your existing downspouts to trap water each time it rains. They can also be used without gutters if there is a valley or area on the roof where water streams off.

Rain barrels are new or clean recycled food grade barrels. These can be used to store water for your garden or your house plants. It is not recommended to use discarded oil, gasoline, or chemical barrels or barrels without insect and childproof lids.

How much Rain Water Can You Harvest?

Roof Size Sq. Ft.	Gallons of Water per 1 inch of Rain	Gallons of Water Annually (44 inches of Rain)
1000	562	24738
1100	618	29911
1200	674	35587
1300	730	41756
1400	787	48479
1500	843	55638
1600	899	63290
1700	955	71434
1800	1011	80071
1900	1067	89201
2000	1124	98912
2100	1184	109032
2200	1236	119645
2300	1292	130750

Maine receives an average of 44 inches of rain each year. This chart shows how much rain can be potentially caught from a building depending on the roof size. The first column is the square footage of roof. The second is the amount of rain coming off the roof in just one inch of rain. The final column shows an annual amount you could *potentially* harvest with an annual rainfall of 44 inches.

Long periods of rain will give you more water than you can use, causing excess to overflow. You can increase your annual harvest by using a larger container or by connecting multiple barrels together. You will be able to use rainwater longer during periods without rain or water larger gardens.

Besides collecting the rain in barrels, tanks, or cisterns, you can save some of this precious rainwater by adding a Rain Garden to your yard to slowly recharge your ground water and decrease the storm runoff from your property.

Basic Installation Instructions and Guidelines for your SkyJuice Rainbarrel

1. If you have gutters on your roof, place your barrel under the downspout so water flows directly onto the top of the barrel.
2. If you do not have gutters, but have a valley or an area on your roof where there is a steady stream of rain off the roof during a rainstorm, simply place your rain barrel so that the rain will stream onto the top of the barrel.
3. If you have a downspout that goes directly into an existing drywell or draining system, you may want to purchase a rain diverter (sold separately) to funnel the rainwater to the top of the barrel. This diverter connects your downspout back into your drain system during the winter months when you do not want to collect rainwater. Photo2
4. Your rain barrel must be placed on a surface that is flat and level. Use a spade to flatten the area for the bottom of the barrel.
5. If you are planning to use drip irrigation or have a garden that is level or slightly uphill from the barrel it will be necessary to raise the barrel off of the ground. By raising it 2 feet off of the ground, you will be able to easily fill a watering can or use gravity to water your plants.
6. A full rain barrel will weigh around 400 pounds. A good base can be made of cinder blocks, landscaping blocks, or a well built wooden box or platform.
7. Some assembly is necessary. Inside each barrel are a stainless steel screen, a 4-foot section of hose, and a 90-degree angle PVC connector. The screen easily sets inside the 3" hole on the top of the barrel. The 4' section of hose connects to the overflow. The elbow fittings threaded end screws into the tapped hole on the side of the barrel. The hose fits easily over the other unthreaded end and should face downward. This drains excess rainwater away from the house or back into the drywell at the bottom of the downspout.

Tips for Using Your SkyJuice Rainbarrel

1. Your gutters and downspout should be clean of debris and in good working condition. By adding a leaf-catching screen at the top of the downspout, you can prevent extra buildup of debris on the top of the barrel.
2. Never use water collected in these rainbarrels for drinking or cooking. Although these are food-grade barrels, they are for non-potable uses only, such as: watering your garden and house plants, washing the car, doing the laundry, or rinsing your hair like some of our grandmothers may have done.
3. To maintain the tight connection on the spigot at the bottom of the barrel, please refrain from lifting, bumping, or moving the barrel by the spigot. To maintain the tight connection, open the barrel and tighten the nut on the inside of the barrel.
4. The stainless steel screened inlet prevents insects from breeding in your barrel, and stops leaves, twigs, and rodents from getting in the barrel. Please note that pollen may clog your screen. It can be easily lifted out and rinsed off.
5. The lid of the rain barrel may be unscrewed for easy cleaning of the barrel.
6. **Winter Instructions.** Freezing rainwater will crack or damage the barrel. Drain the barrel before freezing weather. Remove the lid and turn it upside down to totally drain the barrel. Note: I have chased my rain barrels across the yard after draining them...they are lightweight and need to be put away for the winter!
7. The barrel works as a great storage unit for the winter for hoses or other garden accessories.
8. To maximize the rainwater collected, try a low flow drip irrigation system. By raising your rain barrel 2' off the ground, you have created 2 pounds per square inch water pressure which will run a low flow drip system.
9. If you need more rain harvesting capacity, consider connecting more than one barrel.



Photo 1

The regular downspout has been shortened so rain flows directly onto the top of collecting surface of the barrel. Note the PVC elbow and overflow hose on the side of the barrel. This allows the overflow from the barrel to be moved into another barrel or away from the foundation.



Photo 2

A Rain Diverter has been added to the downspout. When it is in the Open position it directs rain onto the top surface of the barrel. In the Closed position it allows regular use of your downspout. Note the PVC elbow and overflow hose on the side of the barrel. This allows the overflow from the barrel to be moved into another barrel or away from the foundation.

Thanks for Being Part of the Solution!

For more information visit www.skyjuice.us