

Roll Out the Rain Barrels By Betsy Rickards, CZM

Reusing water in rain barrels is not a new concept. In fact, storing rainwater in cisterns dates back 2,000 years. Only recently, however, did the rain barrel come back into fashion. Due to the ever increasing demands and costs of municipal water supplies, the public is beginning to realize the benefits of harvesting rainwater. Not only does the reuse lower water bills, harvesting rainwater offers environmental advantages—protecting natural water resources and reducing stormwater runoff.

Under typical conditions, rainwater that falls onto a roof runs off or gets routed and directed toward a driveway or roadway, where it goes on a journey through the stormdrain system and finally into a local water body. In the Boston area, the approximately 43 inches of annual rainwater that falls on a 1,000 square foot roof is equivalent to 25,800 gallons of rainwater that drains away to the ocean. The water that runs off is unable to help support plant life and has the potential to carry pollutants (see *Greenscapes for a Blue Planet*, page 25). Furthermore, because the water does not have a chance to settle, infiltrate, and replenish the groundwater supply, the local water reservoir or aquifer (typically providing the municipal water supply) becomes depleted. In the summer when rainfall is low and demand for irrigation, drinking water, and other uses is high, this lack of replenishment often leads to summer watering bans.

The rain barrel is a cask-sized solution to this big problem. Rain barrels are literally barrels that capture rainwater from the roof so that it may be stored or used for watering outdoor gardens, compost bins, and indoor plants; washing your garden tools or your hands; or any other non-potable (i.e., not suitable for drinking) use you can imagine. Now, the rainwater that falls on the same roof during the gardening season (i.e., from March to October, which is approximately 28 inches) will provide you with approximately 16,800 gallons of free water to use on your site as you see fit. To boot, using the water on-site allows it to slowly seep into your landscape and recharge the groundwater.

Rain barrels are not difficult to use, and installation can be performed by a homeowner. The barrel is placed below a downspout (cut to fit) to capture the roof rainwater. The barrel itself can be a clean drum (55 gallon drums are the most common), or one of the many brands of “rain barrels” currently on the market. Many communities and water districts are offering rain barrels at discount prices as part of a grant program from the Massachusetts Department of Environmental Protection. (See www.mass.gov/dep to see if your community is eligible.) These market rain barrels have special adaptations such as a spigot to attach hoses, an overflow hose to direct any overflow away from your foundation, and a screen and cover to preclude the breeding of mosquitoes and to prevent leaves and debris from causing clogs or decay. Maintenance requirements for rain barrels are minimal and consist only of periodic cleaning out of leaves and debris, and regular inspection of the unit, its components, and the gutter and downspouts. Rain barrels should be drained and removed for the winter months to prevent ice damage. So, keep those barrels rolling—and make use of that perfectly good roof rainwater.

Free water from the roof—the runoff from a typical roof provides tens of thousands of gallons of water during the growing season in the Northeast—for big, gorgeous sunflowers, just add sun!



Photos: Miles Freedman

