

Build Your Own Rain Barrel

Situation



With an average rainfall of 45 inches per year, New Jersey is often considered to be a “water rich” state. However, when considering that New Jersey is also the most densely populated state in the country, our current and future demands are likely to exceed the sustainable supply of our water resources. The average New Jersey resident uses 100 gallons of water per day, a number which in many cases increases dramatically during the summer months. In fact, in some cases, New Jersey communities that engage in outdoor lawn irrigation increase their average water use by up to 185 gallons per day in the summer months.

The “Build Your Own Rain Barrel” program offers New Jersey residents the opportunity to take an active role in recycling rain water by installing a rain barrel at their home at a reduced price. Rain barrels are food grade drums converted with a spigot and screen to collect rainwater from roof tops. Rain barrels hold about 50 gallons of water which can be used for lawns and gardens.

Action

Water purveyors are under increasing stress in parts of the state because of depleted aquifers, water pollution, and urban and agricultural runoff. An easy-to-implement mitigation strategy is rainwater collection. A “Build Your Own Rain Barrel” program offers your community an opportunity to build and install rain barrels at a reduced price. These programs are in demand and can help create “green jobs” within your community.

Rain barrel workshops have been held in Rahway, Belmar, Egg Harbor Township, and East Greenwich. New Jersey Water Savers has subsidized a significant portion of the cost of the rain barrels to encourage wider participation.



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If you are interested in implementing this program, you may want to consider the following:

- Determine what you will charge for participants to attend this program. If the screw top food-grade barrels are donated to your community, you may be able to reduce the price of participation. It is important to note that you will need some preparatory time to clean the barrels. It takes the Water Resources Program one (1) hour to power wash and scrub five (5) rain barrels. You will also need to dedicate time to collecting the supplies needed for the rain barrel building kit. In an effort to save time, you may want to pre-cut out a hole that is 8-12" diameter. We also recommend assembling a rain barrel adapter kit, which would include: flashlights, thread seal tape, tubes of silicone caulk, scissors, paper towels, one (1) brass faucet, one (1) hose adapter (male, $\frac{3}{4}$ diameter), two (2) PVC plastic adapters (female, $\frac{3}{4}$ diameter), gray fiberglass screen, adjustable wrench, jigsaw (saber saw) and protective eyewear.
- If you will be implementing a "Train the Trainer" program, you may want to consider subsidizing the cost of the demonstration barrel in an effort to recruit volunteer educators who will be responsible for offering this program throughout the community.
- Determine the length of your program. It is important to allow enough time for an educational workshop, as well as time to build the rain barrels.
- Determine an appropriate venue for your program.
- It is important to know about what the rainwater can be used for, as well as how to avoid issues such as bacteria and mosquitoes.

Impact

While installing a rain barrel at home is certainly not an answer to our water supply problems, it most certainly serves as a catalyst for change. Rain barrel workshops have helped New Jersey residents think about water resources and how they can make a difference. Harvesting rainwater helps homeowners save water, save money, and prevent basement flooding, and it helps the community to reduce flooding and pollution in local waterways.

New Jersey Water Savers Partnership

New Jersey Water Savers is a partnership between the Rutgers Cooperative Extension Water Resources Program, the New Jersey Department of Environmental Protection, and the United States Environmental Protection Agency. This partnership was created to provide leadership to promote water conservation throughout New Jersey. For more information on our partnership efforts, visit us at www.water.rutgers.edu.

