

TOWNSHIP OF CHATHAM

Municipal Building 58 Meyersville Road Chatham, New Jersey 07928 (973) 635-4600 FAX (973) 635-2644



A *Sustainable Jersey* [™] Certified Municipality Commission (CTEC)

Chatham Township Environmental

Website:

www.chathamtownship.org/CTEC/index.html

Email: ctec@chathamtownship.org

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Chatham Township Environmental Commission's Soak it--Don't Send it Program

- **Rain barrels** cut household water bills by up to 40%.
- Rain water--free from chlorine, water treatment chemicals, and toxic pesticides--is an excellent water source for lawns, plants and gardens.
- Rain barrels protect your water source quality.
- The use of rain barrels reduces pollution and storm water runoff.
- Rain barrel use lowers municipal water demands and saves energy at water treatment facilities...
- Rain barrels provide an extra source of water, in case of drought, by catching rainwater from roof drains.

BEFORE installing or using your rain barrel, consult the rain barrel manufacturer's instructions for all information. The information provided here is done so as a public service only and has been researched and compiled by the Chatham Township Environmental Commission--with most information provided by Rutgers NJAES and Michele Bakacs, Environmental & Resource Management Agent, Rutgers NJAES.

Why Use a Rain Barrel?

Take an active role in recycling rainwater - install a rain barrel at your house, school, business, house of worship, municipal building, club house, or any other applicable structure! A rain barrel is placed under a gutter's downspout next to a house/building to collect rain water from the roof. The rain barrel featured in our Program holds about 55 gallons of water which can be used to water gardens, lawns, or do water chores (wash cars and pets) and for other uses. For other ideas, see below. Harvesting rain water has many benefits including saving water, saving money on your utility bills, preventing basement/yard/neighbor flooding. By collecting rain water, you are also helping to reduce flooding and pollution in local waterways. (When rain water runs off of hard surfaces like rooftops, driveways, patios, roadways, parking lots, and compacted lawns, it carries with it pollution to our local waterways.)

Harvesting the rain water in a rain barrel is just one of the ways you and others can reduce rain water from running off your property, recharge your groundwater, and prevent pollution and flooding problems.

Frequently Asked Questions

What if there's a heavy storm and my rain barrel overflows?

Use the overflow hose and/or a diverter:

- Two overflow openings are on the rain barrel. You can use one or both openings (each rain barrel comes with an overflow hose and installation parts). You can purchase additional or different hoses as overflow hoses (e.g., purchase/use a longer one to reach your garden, or connect to a second barrel to fill, etc.). Rain coming down from the downspout goes into the top of the rain barrel and when the barrel reaches capacity, the excess rain water will come out the overflow hose. Be sure that your end of your overflow hose is far away enough (four to six feet) from the foundation of your home, building, window, or any other structure that you do not want exposed to water. Arrange the overflow water hose as you need: directing water to a nearby garden, or lawn area, or set up a drip line irrigation (punch holes in the hose and snake the hose through your garden/lawn area---the water is directed at the roots of the plants and this is better for the plants, saves water [less evaporation], and is a more efficient means of watering.
- Use a diverter. If you don't want to use an overflow hose as above, then you can purchase and install a manual or automatic <u>diverter</u> (see photo below). That way, when your rain barrel is full, the excess rain water will be diverted away from the full barrel, flowing back into the present gutter system you have (i.e. flow down the gutter and/or downspouts). Various online stores carry both manual and automatic downspout diverters. The price range of a manual downspout diverter ranges from \$15 to \$40, and the price range of an automatic downspout diverter ranges from \$20 to \$50 and even higher.



My roof is small, is it even worth it for me to have a rain barrel? Yes! For an 800 square foot roof area that is being drained into one downspout gutter, 600 gallons of water from the roof. The average rain barrel holds 50 gallons of water. To maximize the amount of water collected, multiple rain barrels can be connected together to transfer rain water from a full barrel into empty barrels. 500 gallons of water will come off your roof in a one-inch rain storm!

What can I do with the rain water that my rain barrel will harvest? The water collected by your rain barrel could be used to water your flowers, shrubs, trees, and lawn. You could use the water to rinse your hands/feet, landscape tools, or even your muddy shoes. Please do not consume water collected in your rain barrel.

Can I leave my rain barrel out in the winter months? It is best to bring your rain barrel indoors during the winter months. However, it is acceptable to leave your rain barrel outside for the winter as long as there is no water accumulating in your barrel by turning the barrel upside and/or covering the barrel. Frozen water in your barrel may cause the barrel to crack.

Is rain water good for plants? Yes! Natural rainwater has proven more beneficial for plantings and gardens than tap water because it doesn't contain chlorine and its slightly acidic pH assists nutrient availability in most lawns and gardens.

Would it be safe to use the water harvested from my rain barrel to water vegetable gardens? Yes, if the water from the roof is "safe." Consider several factors that affect roof water—for example, has the roof been treated with chemicals recently, like a moss preventative treatment? If you want to use your rain barrel water to water plants grown for consumption, then it is recommended that you have your rain barrel water tested. Take a sample of water collected from your rain barrel and have it analyzed by your <u>local water testing laboratory</u>. We suggested you request your water be analyzed for contaminants such as zinc, lead, chromium, arsenic, polyaromatic hydrocarbons,

fecal coliform, and *E. coli*. Once you confirm that the water is safe to use, it is best to use drip line irrigation to water the roots of the vegetables. Be sure to thoroughly clean the vegetables with potable water before consumption.

If you've used a moss killer on your roof: Allow for a few (three or four) heavy rainfall events to occur before collecting water for use with the rain barrel. To be cautious, flush the first batch of water collected with the rain barrel. For a written confirmation that the water is safe, take a sample of the water collected in the rain barrel to your local water testing laboratory be analyzed (refer to above for suggested types of tests and where to find your local water testing laboratory).

What else can I do to maximize my rain barrel use?

- ✓ Redirect downspouts to areas where the water can soak into the ground
- ✓ Read about water saving tips at www.epa.gov/watersense
- ✓ Check out local activities: http://www.chathamtownship.org/CTEC/EPA-water-campaign-071610.html and http://www.chathamtownship.org/CTEC/events.html
- ✓ Install a <u>rain garden</u> on your property to capture rain water before it goes into storm drains and into nearby waterways (see Rutgers Cooperative Extension's <u>Rain Garden Fact Sheet</u>)
- ✓ Reduce the amount of hard surfaces on your property ("impervious coverage"). Use gravel, mulch, or pervious pavers to help infiltrate water into the ground—ideas at http://www.chathamtownship.org/CTEC/events.html (scroll down to water protection projects).



Drip line irrigation

SAFETY:

- Refer to manufacturer's instructions
- Refer to Rutgers NJAES Fact Sheet 1118 which contains installation, safety, and other tips for various types of rain barrels: http://njaes.rutgers.edu/pubs/publication.asp?pid=FS1118
- Be sure that the barrel is on a level and secure foundation (a 55 gal rain barrel full of rain water weighs more than 400 lbs.)
- Always keep the lid to your barrel tightly secured to avoid any accidents involving children or animals.
- Water collected in your rain barrel is NOT for drinking. If the barrel is installed at a school or location
 where there are many children, consider putting a sign on the rain barrel (perhaps something like "water
 for gardening only~ NOT for drinking water"

Cleaning:

Refer to manufacturer's instructions, but note that cleaning frequency depends upon such factors as how much water collects in your rain barrel, how often you draw water from your barrel, the amount and type of rain water you get in your area, the range of temperatures in your area, etc. Barrel top screens should be checked regularly and cleared of debris. When cleaning the barrel and its parts: scrub with soap and water, or power wash, and triple rinsed to remove any residual liquid or materials.

Installation:

- ✓ refer to manufacturer's instructions
- ✓ read the above points about overflow
- ✓ refer to Rutgers NJAES' Fact Sheet 1118 which contains installation, safety, and other tips for various types of rain barrels: http://njaes.rutgers.edu/pubs/publication.asp?pid=FS1118
- ✓ refer to photos below

A variety of ways to set up your rain barrel:







Notice the overflow hose directing the overflow water to a nearby garden.

Helpful Links

- www.chathamtownship.org click on Chatham Township Environmental Commission or email us at ctec@chathamtownship.org
- ➤ Refer to Rutgers NJAES Fact Sheet 1118 which contains installation, safety, and other tips for various types of rain barrels: http://njaes.rutgers.edu/pubs/publication.asp?pid=FS1118
- > http://www.water.rutgers.edu/Stormwater Management/rainbarrels.html