



## Managing Rainwater at Home

### Rain Barrels: What are the benefits?

- It is one of the easiest and most cost effective methods of helping our planet.
- Free refills! Save money on municipal water bills and qualify for rebates.
- It conserves fresh water and reduces demand on the public water supply.
- It reduces erosion and flooding caused by storm water runoff.
- Make your plants happy! Plants prefer non-chlorinated water.
- Using collected rain water to slowly irrigate your lawn allows the water to be absorbed back into the groundwater rather than run into the street and on into the streams.
- Reducing runoff reduces water pollution.
- It allows for watering even during a drought.

Source:<https://rollouttherainbarrel.com>

### Collected Rainwater Uses

- Watering lawn and garden
- Watering during a drought or water restrictions
- Watering indoor plants
- Rinsing outdoor furniture, toys, deck, porch, patio, driveway and sidewalks
- Washing exterior windows
- Flushing toilets when the municipal water system is shut off
- Washing cars
- Curtailing rain water from around your foundation

**Why is managing rainwater at home important?** In natural areas, rainwater is slowed down by trees, shrubs, and grasses before reaching the soil. As the water percolates into the ground, plant roots filter out pollution before it seeps down into the groundwater that feeds streams and rivers. In our neighborhoods where development replaces these natural drainage systems with impervious surfaces like roofs, driveways, and sidewalks, rain becomes stormwater runoff. Stormwater can back up and flood homes, cause sewer overflows and carry pollution into our waterways.

**Rain Barrels** are a simple, efficient, low-cost method for homeowners to collect and recycle mineral rich and chlorine-free rain. Instead of running down lawns and driveways to sewers, water is directed from a roof downspout into a 50- to 85-gallon barrel where it is stored for later use. The weight of the water and gravity forces the contents out of a spigot located at the bottom of the barrel either into a bucket or through a standard garden hose. Not intended for human consumption, the water is typically used for watering plants or to wash cars, decks and outdoor furniture.

To determine the amount of rain your roof catches, multiply your home's width by its length (in feet) to estimate its footprint. Then estimate the portion of this area that drains to the downspout you'll be using to catch your rain.

**This formula** will give a rough estimate of how much rain you can catch:

$$(\text{inches of rain}) \times 0.6^* \times (\text{portion of building footprint}) = \text{Rain caught in gallons}$$

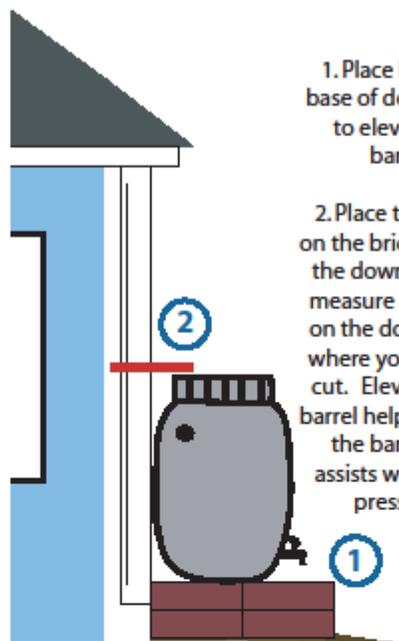
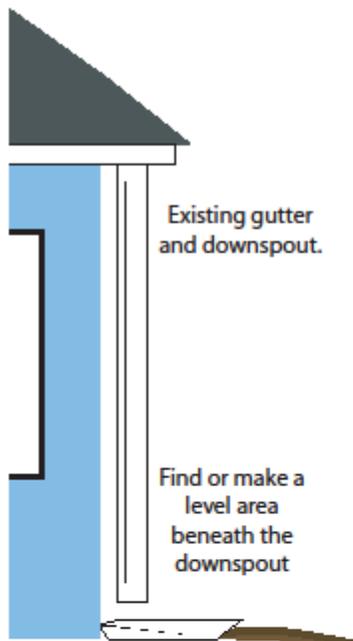
*\*One inch of rain falling on a square foot of surface yields approximately 0.6 gallons of water.*

For example, if your home's footprint is 1,400 square feet, and you want to know the amount of water that comes from a ¼ inch (.25") rain event:

$$\text{Rain caught (gallons)} = (.25) \times (.6) \times (1,400) = 210 \text{ gallons}$$

(or less if you're only gathering from one part of the roof).

# How To Install Your Rain Barrel



- What You'll Need...**
- Hacksaw
  - Flexible Elbow
  - Bricks or cinder blocks for the stand
  - Hose for overflow
  - Hose or bucket for spigot

