

Rain Barrels



Stop that Water Drop!


What exactly is a rain barrel?...

Rain barrels are a way of storing **rain water** runoff for later distribution to rain gardens, lawns and for other uses around the yard.





Natural Rain Water is...

- ❑ oxygenated and naturally free of chlorine and Fluoride
 - ❑ slightly more acidic, which enables plants to more easily access soil nutrients
 - ❑ helps recharge water supplies when used on local plants and is free.
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Storm water Runoff Reduction

- Reduces storm water runoff that would otherwise carry pollutants and sediment to nearby creeks, streams or rivers.



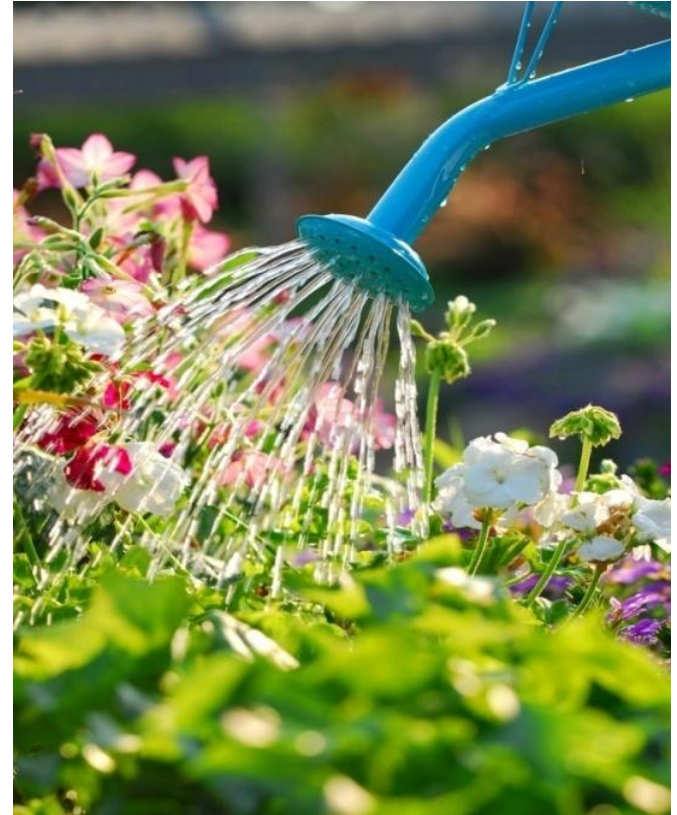
Where to Get a Barrel

- ❑ Pre-made rain barrels can be purchased from a number of companies/businesses including hardware stores, garden supply stores, local governments
- ❑ DIY kits (various sources)/use hardware you already have *online resources
- ❑ Pre-made barrels are more costly



How many rain barrels do I need to meet my needs?

- May want to start out with just one barrel at a time to acclimate yourself/system
- Those with intense landscaping would definitely need more than one



Typical Rain Barrel Components

Downspout adapter

Removable screen-mesh top

- Typically 50-60 Gallons
- constructed of any non disintegrating material such as wood or plastic

Release Valve

Rain barrel Stand



Screen Mesh Top (Removable)



Keeps out debris, mosquitoes & other pests while letting water flow freely into the barrel



Overflow Valves



Can attach a hose to this which directs excess water away from home foundation when tank is full.



Release Valve (bottom spigot)



Spigot should be low on the barrel so water does not stagnate at the bottom.



Accessories

- Splitters
- Downspout adapter
- Barrel Connector
- Barrel Pedestal



Splitters

A splitters is nice when you want to fill a watering pail without having to disconnect your garden hose.



Downspout Adapter

Aids in the diversion of water from the gutter to the barrel.



Downspout Adapter Continued



Can also use a gutter elbow rather than a downspout adapter to aid in the diversion of water from the gutter to the barrel



Barrel Connector

Connects two barrels (at the linking fittings) so that water can flow from one barrel to the next for additional storage.



Barrel Pedestal

Raises the rain barrel off of the ground



Wooden stand



Cinder blocks



Level tree stump

Since all rain barrels operate on gravity, raising them will improve water flow.



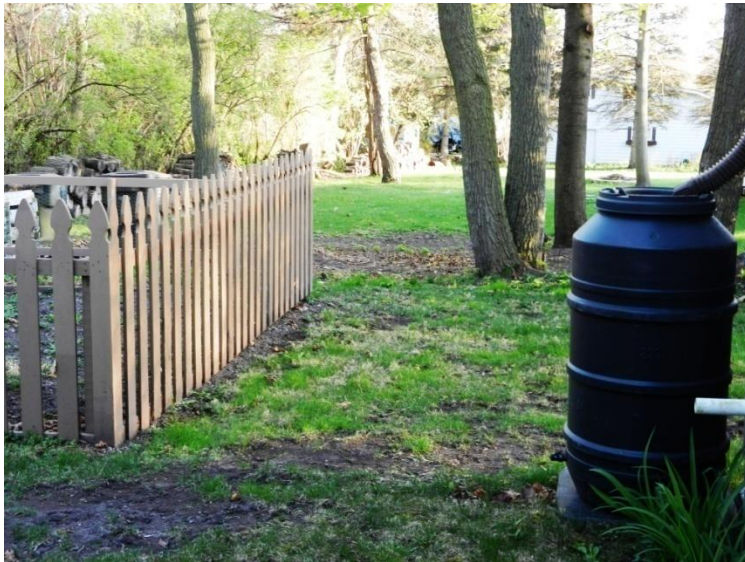
Locating a site for your rain barrel

- Choose a downspout on your house or garage that is close to the plants and garden you water most.
- Choose a downspout where the overflow of the rain barrel will soak into your own yard, and not into your neighbor's property.



Locating a site for your rain barrel

- Place the rain barrel on a pervious (landscaped) surface to allow overflow from the barrel to soak into the ground.
- ▣ Make sure that water drains away from active areas by means of slope and gravity



Installing a Rain Barrel: adapting the gutter



[http://www.rainbarrelguide.com/
how-to-install-rain-barrels/](http://www.rainbarrelguide.com/how-to-install-rain-barrels/)



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Installing a Rain Barrel: adapting the gutter



Considerations

- ❑ Do you need a permit?
- ❑ Managing overflow
- ❑ Water pressure
- ❑ Choosing the right color
- ❑ Increasing the Capacity of Rain Water Storage



Do I need a permit?

- May want to check with your Homeowner's Association if you belong to one.
- Local ordinances? Most municipalities encourage the use of rain barrels.



Managing Overflow

- A Typical Rain Barrel that's between 50-60 Gallons will completely fill up after an $\frac{1}{2}$ " rain event.
- Empty the barrel in advance of a big storm to create more storage
- Use a barrel connector to allow flow of water to another barrel
- Use a downspout diverter



How much water pressure does a rain barrel have?

- Use a garden hose, landscaping tubing or drip tubing
- You will not be able to use a sprinkler or soaker hose
- You can water hanging plants by starting with the hose on the ground and lifting up. You'll have enough pressure to water 2-3 pots.





What color should you choose?

- ❑ If you prefer to hide the barrel behind a tree or large bush, **black** or **brown** would work.
- ❑ **Terra cotta** blends well with brick homes.
- ❑ **Blue** barrels are nice for decorating/painting.
- ❑ **Black** barrels warm up the water inside, which is favorable for bird baths.





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Increase the Capacity of Rain Water Storage

- ❑ You can connect more than one barrel together at each downspout.
- ❑ Keep the rain barrel spigot closed when not in use so that the barrel can collect rain water.
- ❑ Regularly check gutters, downspouts, screens, etc.



Maintenance

- Winter maintenance
- Cleaning the barrel





Winter Maintenance

- ❑ Rain barrels left connected will crack due to freeze/thaw
- ❑ Disconnect prior to the first hard freeze
- ❑ Return gutter to original configurations
- ❑ Drain all of the water out of the barrel/spigots
- ❑ Clean the barrel
- ❑ Store outdoors with spigot OPEN or,
- ❑ Store indoors (shed, garage, etc) along with hoses, accessories or,
- ❑ Store outdoors upside down or with an impermeable material on the top (tarp, upside down saucer secured with bungees, etc)





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Cleaning the Barrel

Rain barrels should be regularly maintained to prevent mosquitoes from breeding or algae from forming inside of the barrel.

- ▣ *Clean the barrel once a year with 2 tsp **vinegar** or **lemon juice** per gallon of water*



Safety Concerns

- ❑ Rain water is not potable water
- ❑ Elevating/containing the barrel
- ❑ Wood shingles/shakes
- ❑ Using rain water on vegetables



Water that is collected is not potable unless treated.

Do not use as drinking water.



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Elevate and enclose the rain barrel. Place screws in the lid to secure it to prevent tampering.





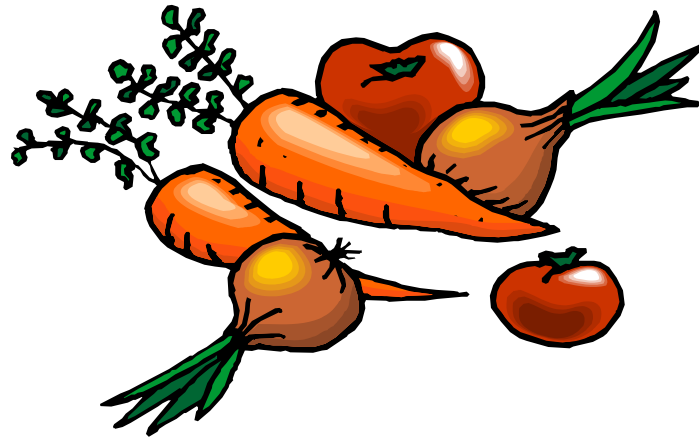
If your roof is made of wood shingles or shakes that have been treated with any chemical (usually **Chromated Copper arsenate-CCA**) to make them resistant to rot and moss, lichen and algae growth, don't water your plants from a rain barrel.



Can I use rain water on my vegetable garden?

Yes, **but**...

- Water on the roof *may* contain bird or animal waste



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Yes, **but**...

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you never want to directly consume something
That has been in direct contact with water from
inside a rain barrel.



Can I use rain water on my vegetable garden?

- Use a soaker application rather than a broadcast application to ensure soil filtration.



Other Considerations

- Using native plants
- Weather patterns
- Uses of rain water



Using native and other drought-tolerant plants can reduce your garden's water consumption.



Rain patterns show regular rain fall events occur during April, May & June

- Water annuals and perennials with rain water and mulch heavily to retain moisture during the drier months of July & August
- Rain showers can occur in July and August, refilling the barrel.



The uses of rain water...

- Connect to a soaker hose
- Fill watering cans and hand-water landscaping
- Keep compost bins moist
- Rinse off gardening tools
- Washing hair
- Washing the car
- Washing pets
- Fill birdbaths
- Rinse off hands, feet, boots
- Rinse off yard toys (soccer balls, etc)
- Topping off pools
- Watering houseplants



After purchasing a rain barrel

- Camouflaging your rain barrel
- Painting the barrel



Camouflaging your Rain Barrel

Consider growing a vine/morning glories around the barrel to camouflage it (chicken wire holds the plant in place).





How to paint a rain barrel

- To paint a rain barrel a solid color, Krylon's Fusion Spray paints and Ace Hardware Brand Spray Paints are recommended. Make sure they are designed for plastic and do not require a primer.
- To paint designs, first prime the barrel with Zinser 1-2-3 (blue can) and follow with a coat of interior/exterior grade acrylic paint. Finally, paint your designs with acrylics.



Painted Rain Barrels



Wonderful project for youth



Misc. Information

- Efficiency
- Where the SWCD's barrels come from
- Unique gift-giving
- composters



Efficiency

- Harvesting systems are not 100% accurate.
- Typically, efficiency is at 70-90% efficient.
 - Water lost to gutter spillage, wind or evaporation



The SWCD's rain barrels have previously been used to ship food products like pickles and olives and have been recycled into rain barrels.



Unique gift-giving

- It's the gift that keeps on giving
- One of a kind gift (especially for gardeners!)
- They can be painted to suite one's personality
- Save money on utility bills for those depending on city water
- Water drawn from the ground in areas with limestone bedrock tends to be alkaline (high pH).

