

RAINBARRELS

Improve Storm Water
Quality

Conserve Precious
Water



Help Prevent Non-Point
Source Pollution

Help Prevent Erosion
and Control Sediment

Help Prevent Flooding

Provide Mineral-Rich
Water for Plants

Improve Ground-
Water Quality

Save Money on
Water Bills

**SAVING THE GREAT LAKES
ONE RAINBARREL
AT A TIME**



Rain Barrel Information & Resources

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Safety & Maintenance – Barrels are close to 500 pounds when full, so provide a sturdy base.

Cleaning – Empty completely and rinse out inside periodically

Winterizing – Disconnect from spouting and store inside (garage/basement) to prevent fittings from cracking and breaking.

Facts- 600 gallons collected per inch of rain on 1000 sq. ft. roof

.43 pounds of pressure is exerted for every additional foot above ground
(higher= faster flow)

This page contains some of the internet sites that we have found in researching rain barrels. It is by no means all-inclusive. ☺ Some of the websites are designed by companies or persons selling their own and can give an idea of current market prices and quite a few of these sites have excellent information on care & painting of barrels and frequently asked questions. Others are simply resource pages for pieces and parts to build your own, while others have step-by-step instructions. Enjoy!! If you have any questions, feel free to contact me, Elaina Taiclet, at h2ohiorainbarrels@yahoo.com

RESOURCES

Northwest Lawn & Garden – excellent site for everything!!

This site has a ton of other sources!! Please check this out.

<<http://www.kingcounty.gov/environment/stewardship/nw-yard-and-garden/rain-barrels.aspx>>

Rainwater Harvesting Guide – info, info and more info!!!

<<http://www.rain-barrel.net/>>

Great Lakes Green Initiative – lots of general info, but a section about rain barrels

< http://www.gligi.org/mediawiki/index.php?title=Rain_barrel>

W.A.T.E.R. – one of the best website we've seen – tons of info & how-to

< <http://watershedactivities.com/projects/spring/rainbarl.html>>

City of Olympia – the city's guide to providing residents with rain barrels

< <http://www.ci.olympia.wa.us/cityutilities/drinkingwater/conservation/rainbarrel.htm>>

HOW-TO GUIDES

DIY Life – an excellent step-by-step guide

<<http://www.diy-life.com/2008/04/25/rain-barrels-made-easy/>>

Metro Blooms – some interesting info and links

< <http://www.metroblooms.org/rainbarrels.php>>

Rain Barrel Guide – good instructions on how to install

< <http://rainbarrelguide.com/>>

HGTV- instructions for make-your-own

< <http://www.hgtv.com/landscaping/rain-barrels/index.html>>

INSTRUCTIONS FOR RAIN BARREL ASSEMBLY

- Inlet** – Measure the diameter of the underside lip of the basket and mark that on top of drum and use holesaw of that diameter to cut hole, or measure and drill hole along perimeter and then use jigsaw to cut. Be sure of where you want the hole in relation the edge of the drum before marking. TIP-cut on small side and enlarge if needed.
- Overflow** – Use 1-5/8” holesaw and cut hole in side of barrel about 2-3 inches down from top. Be sure to leave room for lid clearance. You’ll want to leave some room at the top in case heavy rain – even a larger overflow will not keep up with a good downpour and if there is a little room at the top of the drum, it will help. After having glued together the trap adapter to the elbow, paint if desired and use a washer on either side of the drum and use plastic nut on inside of drum to tighten with elbow facing ground. Be sure to decide in advance which side of the drum you want the overflow to be aimed before drilling hole. Take 2” discharge hose and clamp and secure to end of elbow and this will direct overflow water out.
- Outlet** – Drill a 1-1/2” hole near the bottom (up about 2” or so) to accept the bell shaped end of the closet spud. Sometimes the spud will fit in from the outside, but most often you will have to unscrew and insert from inside of drum. Then put rubber and metal washer back on from outside and screw and tighten. Make sure it stays centered in the hole and do not over tighten. You may have to have someone hold the inside with pliers or vise grips as you tighten from outside. Next, use Teflon tape at each of the connections to prevent leaks. The 3/4 x 3/4 x 3/4 tee goes on first with the side tee pointed horizontally to the left/right (give thought here as to which direction for possible later 2nd linking barrel and on which side that would be). After the tee goes the spigot/garden valve/ boiler drain toward the front (sometimes, depending on the fitting you bought, you may have to use 3/4” adapter (3/4” close) here to match male and female ends.) The opening that was facing the side will now accept another 3/4” close fitting and then the 3/4 x 3/4 x 1/2 tee with the 1/2 opening facing up. Into the top of the tee screw in the plastic fitting with the 1/4 barbed fitting. Onto the fitting push the 3’ length of clear tubing and secure with 3/8” hose clamp. The tubing will need trimmed to be able to drill a hole through the top and secure to ring of drum with piece of wire when finishing. The remaining 3/4” opening facing to the side will accept either a 3/4” plug (if no 2nd barrel will be linked), or a 3/4 threaded x 3/4 barbed fitting to link to 2nd barrel with 3/4” clear hose as described below.
- 2nd Barrel** – If linking a second barrel, use the 3/4” threaded x 3/4” barbed fitting in the last galvanized opening and run a length of hose (length to be determined by distance to next barrel when set up) to the same plastic fitting on a second barrel and secure each end with 3/4” hose clamps. The fittings on the bottom of the second barrel will be just as with the first (though without an inlet and overflow). The bottom closet spud on the second barrel will be attached to a 3/4 x 3/4 x 3/4 galvanized tee, on a horizontal plane with the straight through section facing left and right. A 3/4” galvanized plug will be put in the end section to stop flow. (this can be replaced with another plastic fitting to continue linking drums in line). Multiple drums can be linked together, though take care to keep on even line, or the overflow on the first barrel may not function properly.
- Tips** – Make sure to place drums on flat, sturdy base as they weigh close to 500# each when full. Elevated drums will provide more pressure, but only 0.43#/sq in for each foot of elevation. When choosing spigot, look for one with good flow through – some are heavily restricted internally. Barrel will need cleaned periodically with soapy water and a thorough rinse. Disconnect and store for winter as water freezing will break fittings and spigot. When connecting barrels, it may be easiest to set them up no farther than 36” apart.

***** Rain Barrel Parts List *****

1 food grade/recycled plastic 55 gallon drum (open top best, closed will work though)

***** INLET *****

1 pond basket-5"dia or so from pond store – plastic basket with lip(plant basket)

***** OVERFLOW *****

1 – 1-1/2 x 1-1/4 PVC trap adapter (slip by threaded)

1 - 1-1/2" PVC street elbow or 90

1 – 2" hose clamp

1 – piece of 2" pump discharge hose x 3' to ? _' (depends how far you want to go)

1 – 1-5/8" holesaw to make opening near top of drum

2 – washers (approx 2-3/8 OD x 1-5/8" ID) cut from rubber sheet if need be

***** OUTLET *****

1 – 3/4 x 1 brass closet spud – good hardware/plumbing store

1 – 1-1/2" holesaw to make opening near bottom of drum

1 – 3/4 x 3/4 x 3/4 galvanized tee

1 – 3/4 galvanized plug

1 – 3/4 valve/spigot/boiler drain/garden valve (look for big opening to max. flow)

2 – 3/4 close galvanized couplers

1 – 3/4 x 3/4 x 1/2 galvanized tee

1 – PVC 1/2 male x 1/4 barbed fitting (for sight gage)

1 – 3/8 hose clamp

1 – piece of clear tubing (3/8 OD x 1/4 ID) x 3' long

1 – small piece of wire to hold top of sight gage to top of drum

***** LINK TO 2nd BARREL (in needed)*****

2 – 3/4" male x 3/4" barbed plastic fittings

1 – piece of clear tubing (1" OD x 3/4" ID) x 2' max.

2 – 3/4" hose clamps

***** MISC *****

Teflon tape for threaded fittings

PVC cement for overflow pieces

Paint (for overflow) and drum if necessary

Utility knife or jigsaw to cut opening in lid for pond basket