

# The Water Saver



Orange City Utilities

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## Make Your Own Rain Barrel



### Getting Started

Generally, a rain barrel consists of four main components: a barrel, a top hole, an upper drain, and a lower drain.

Plastic 55-gallon drums are the recommended type of barrel to use for safely collecting water with minimal leaking.

A top hole should be cut in the top of the barrel for collecting water. Insert a skimmer basket like those found in garden ponds and swimming pools to filter out leaves and other debris. It is

important to cover the basket with fiberglass window screen to prevent mosquitoes and other disease-carrying insects from entering the barrel.

The top drain is a plastic faucet that should always be left in the "open" position to keep the barrel from overflowing.

The bottom drain is a plastic faucet that attaches to a hose for watering lawns and gardens. This faucet should be kept in the "closed" position when not in use.

### Tools

- 7/8" spade drill bit
- Electric jigsaw
- Electric drill
- Utility knife
- Marker

### Supplies

- 1 - 55-gallon plastic barrel
- 2 -  $\frac{3}{4}$ " plastic faucets
- 1 -  $\frac{3}{4}$ " female coupling
- 1 - Skimmer basket
- 1 - Roll Teflon tape

- 1 - All purpose caulk or plumbing sealant
- 1 - 5-ft. section of garden hose
- 4 - Hose couplers
- 1 - 12" x 12" piece of fiberglass window screen

### Top Hole

- Use basket to trace template on barrel
- Pre-drill small hole using 1" spade bit
- Make sure to drill inside the line

Use a jigsaw to cut out hole following the inside line.

### Upper Drain

- Mark holes at least two inches from top of barrel
- Use 1" drill bit to drill hole
- Screw plastic faucet into hole
- Use utility knife as needed to alter hole

Wrap  $\frac{3}{4}$ " coupling threads in Teflon tape and caulk and screw onto faucet inside the barrel.

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Jigsaw cutting the top hole



Skimmer basket



Installing upper drain



## The Water Saver

### Make Your Own Rain Barrel...Continued

#### Bottom Drain



Installing bottom drain

- Mark holes at least two inches from bottom of barrel
- Use 1" drill bit to drill hole
- Screw plastic faucet into hole. Use utility knife, as needed, to increase hole size
- Remove faucet, wrap threads in tape, caulk threads, replace faucet
- Caulk area where faucet and barrel meet to reduce leakage

#### Attaching Hoses



Hose and coupler

- Cut 2' section of hose
- Push each end of hose into a hose coupler and tighten screws
- Screw 3' section onto top outflow faucet and 2" section to bottom faucet

#### Final Steps



Catch rainwater from a roof w/ gutters

- Build a base to elevate the rain barrel
- Adjust downspout to flow into rain barrel
- Always keep overflow valve open

#### Special Points of

##### Interest:

- Use water wisely by watering your garden with free water collected from your roof.
- Rain water is great for plants.
- Use your rain barrel in areas where you may not have a convenient spigot.
- It is estimated in the hot months the average homeowner uses 40% of household water in their yard.
- 1/4" of falling rain on a typical roof will yield over 200 gallons of water.
- A 55 gal. drum of water weighs over 400 lbs.
- A rain barrel will save most homeowners 1,300 gallons of water during the peak summer months.
- Diverting water from storm drains decreases the impact of runoff on streams, lakes, and oceans.
- Ample supply of "soft water" containing no chlorine, lime or calcium.

- A rain barrel can also help reduce the amount of water that may settle around the foundation of your home.
- Fill a watering can and hand-water plants, flower beds and gardens.
- Keep your compost bin moist.
- If you have recently chemically treated your roof, unhook rain barrel for at least 2 weeks.
- Leaf debris, bird droppings and roof material won't likely be harmful to plants. Use a window screen or wire mesh to keep out debris and insects, and clean the tank periodically to remove any settling.
- Rinse off gardening tools.
- Check with your city or county to see if a permit is required to install a small rain barrel for landscape watering. Some subdivisions with deed restrictions with deed restrictions prohibit them.



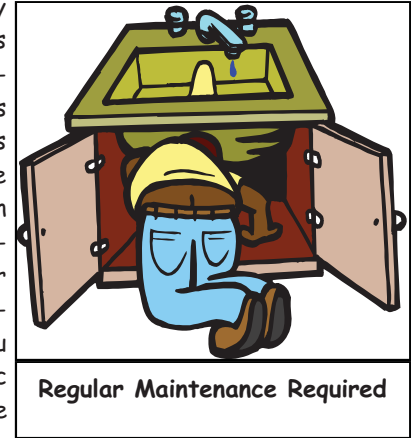
### Point of Use Devices (POU'S)

Retreatment of drinking water at the point of consumption. POU'S include softeners, whole house filters, and faucet cartridges. These devices can be simple or complex. If you decide to install a POU, make sure to choose the right device for what you wish to remove from the water. For instance, a carbon faucet filter is designed to remove chlorine, but will not remove iron. A softener is designed to remove iron, but not chlorine. Before purchasing any

water treatment system, compare not only prices, but also the operating and maintenance costs for the different units. No device will give you good performance over the long term, unless it receives regular maintenance. Know what it is you want to treat for before you buy!

Orange City Utilities uses an additive to purify the water. This additive prevents minerals from becoming a nuisance in the water and inhibits

corrosion in the distribution system. It works by sequestering the minerals for a few days, and allowing them to eventually pass to waste. However, it has been discovered that whole house filter cartridges can block this process and create more of a problem for the homeowner, than having no filter at all! If you are experiencing a chronic water quality issue, please contact the Utilities Department before you buy!



### Backflows

Backflow is the backward flow of water through a pipe. The normal direction of water flow is from the utility water main into the home. The backflow of water into the community water system occurs when water is pulled backward due to a pressure loss in the utility main pipe or pushed back by a pressure source like a well pump. Back-

flow preventers are designed to prevent the flow of water backwards through a pipe. The backflow preventer is used to protect your water supply from the potential risk of contamination.

The Florida Department of Environmental Protection has required all providers of public drinking water to

maintain a "Backflow Prevention Program". All commercial properties in Orange City have these devices. All residential customers with wells will be added this year.

The backflow preventer is a mechanical device that needs maintenance just like a car. An annual test indicates if the parts are working properly.

" protect your water supply from the potential risk of contamination"

### Current Updates

**#1** At the City Council Meeting of March 23, 2010, your City Council voted to reward those water customers who use less than 6,000 gallons of household water per month, by removing the monthly \$4.00 Alternative Water Fee charge from their water bill. This change will be effective with all billings generated

after May 1, 2010. Over 50% of O.C.U.'s customers will benefit from this decision. It now pays you to conserve water.

**#2** O.C.U. is currently in the process of replacing the 2" water line on Montclair Ave. The new line will provide increased flows for the residents on that street. Fire

hydrants are also being installed for better fire protection service to the area. Four more streets are scheduled for water line replacement with this project, including Greenwood and Sumner Avenues, and sections of Park, St. Lawrence, Banyon, and Cottonwood Avenues.

UPDATED

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UPDATED



Orange City, the Heart of SouthWest Volusia...

## Orange City Utilities

426 South Volusia Avenue  
Orange City, FL 32763

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### Billing and Water Related Questions

Please go to:  
City Hall  
205 East Graves Avenue (rear entrance)  
Orange City, FL 32763  
Phone: 386-775-5444  
Hours: M-F/8am -5pm (excluding holidays)

### Do "Not" Flush...

Orange City Utilities recommends the following guidelines to avoid sanitary sewer blockages:

1. Do **not** use the toilet as a wastebasket!
2. Do **not** flush:
  - Kitty litter
  - Paper towels
  - Diapers (Baby or Adult)

- Sanitary napkins
- Bandages
- Pantyhose

These items above should be disposed of in the regular household garbage. These items can cause a sanitary sewer blockage resulting in a backup into the residence. Your neighbors will also be affected by

these blockages! This can result in costly repairs for the homeowners.

Orange City Utilities makes every effort to maintain a reliable sanitary collection and disposal system. We want to help you avoid repairs and clean-up. Be a good neighbor, and dispose of these items properly.

We welcome your comments. We hope you find this newsletter to be interesting and informative. We look forward to keeping you up-to-date on the latest happenings of Orange City Utilities. We want your input. Please email us at:

[cbredbenner@ourorangecity.com](mailto:cbredbenner@ourorangecity.com)

We're on the Web,  
[www.ourorangecity.com](http://www.ourorangecity.com)

### Waterwise Plants

Waterwise landscaping is a common sense way to conserve water and protect the environment. The main objective is to match the right plants with the existing site conditions to minimize the need and use for additional resources such as water, fertilizer, pesticides, and labor.

One step in planning a Waterwise or Xeriscape landscape is to "Choose Proper Plants". Take into consideration the plant

height, its need for sun and shade, soil and water, and its tolerance to cold and salt.

One plant to consider is the Beach Sunflower or the scientific name, *Helianthus debilis*. This sunflower is a spreading perennial, which bears sunflower-like heads throughout the year and has small, dark green glossy leaves that attain a length of 4 inches. They are very drought-tolerant, good for dunes

and sunny spots, likes sandy soil, high salt, and is a native plant to Florida. The flowers of this plant are followed by small seeds that readily germinate to produce plantlets. The Beach Sunflower can be used as a ground cover, border, mass plantings, and can cascade down a wall. It is fast growing, grows in full sun, and should be spaced 18-24 inches apart when planting. A variety of butterflies are also attracted to this plant.



Beach Sunflower  
*Helianthus debilis*