

When rain falls, the water should soak into your yard. It is a natural source of water for the land-



scape and doesn't cost anything. Water that percolates down into the soil is filtered by the layers of earth before entering the aquifer. By contrast, rainwater that runs off of our yards, runs directly into the sewer system and is not treated at a water treatment plant before it runs directly into ponds, lakes and rivers. In addition, paved areas in our landscape also contribute to stormwater runoff. Oil spills and other automotive leaks on our driveways wash directly into the lakes and rivers of our city.

Here are some steps you can take to reduce the pollution from stormwater runoff in the Florida yard.

**Downspouts:** If your roof has gutters, make sure that the downspouts are aimed toward areas of planting and not down the driveway. This allows the water to soak into the ground instead of just running into the lakes and rivers. You may need to choose plants for these areas that can adjust to having more water. Make sure your down-

spouts are long enough so that standing water does not pool up next to the foundation of your house as this will promote problems with termites.

**Rain barrels and cisterns:** Collecting and storing rain water from a down spout into a rain barrel or cistern allows you to save rain water for hand watering during times when rainfall is not sufficient. Directions for making a simple rain barrel are included at the end of this lesson. Cisterns are just rain barrels with larger storage capacities. Cistern construction may require professional assistance.

**Swales and berms:** Swales are low areas in the landscape that collect water during rain fall. Berms are raised areas that help direct rain water runoff back into the yard. This type of earth-shaping might be a natural feature in your yard, or it could be designed to become an attractive landscape element. Berms and swales are especially important when you live on a body of water. Appropriately placed berms and swales will keep the rain water runoff from going directly into the waterway, along with fertilizer and pesticides that may have been applied to your lawn or garden.

Mosquitoes will not be a problem if the standing water is gone within three days.

**Decrease erosion:** Erosion occurs when water falls on soil areas that are not held in place by plant roots. The soil in these barren areas may wash directly into the water ways. If you have areas where lawn grass doesn't grow well due to shade or sloping ground, consider planting ground covers to hold the soil in place.

**Use porous materials:** Driveways, walks and patios that are paved with nonporous materials contribute to excessive amounts of stormwater runoff. Whenever possible, consider using brick, gravel, flag stone, mulch, shell, and pervious concrete to cover these areas.

**Keep yard areas clean:** Clean up after pets that may use your property as a bathroom. Pet droppings contain large amounts of bacteria and nutrient pollution which can run off into the storm drains. Clean up oil spills and other automotive leaks on your driveway. Instead of using soap and water that will wash into the storm drain, spread cat litter over the spill, sweep it up and dispose in the trash. Sweep grass clippings, fertilizer, and soil off of your driveway and sidewalks back into the lawn. Remove trash and other

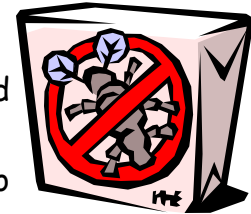
debris from your street gutters before it washes down the drain. Do not use storm drains to dispose of oil, grease, or chemical products. Let only water go down the drain !



To dispose of household wastes and unwanted pesticides, contact your county Household Hazardous Waste Collection facility at Volusia County Solid Waste Services at 943-7889

for west Volusia and 947-2952 for east Volusia. You can also visit their web site

at [www.volusia.org/recycle](http://www.volusia.org/recycle). If you live outside of Volusia County, contact your local County Extension Office.



### **Acknowledgements:**

The Florida Yardstick Workbook; ed. Billie Lofland. University of Florida Cooperative Extension Service, Bulletin 325.

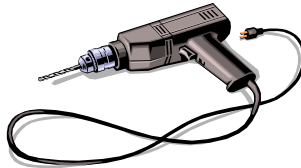
A Guide to Environmentally Friendly Landscaping, Florida Yards and Neighborhoods Handbook; Allen Gardner, John Stevely, et. al. University of Florida Cooperative Extension Service, 1996.

## Making a Rain Barrel

Rain barrels are a great way to reduce stormwater runoff and to save water for a dry spell. If you have gutters on your house, you may be able to collect 55 gallons of water during a 1/2-inch rain by connecting a downspout to a rain barrel or cistern.

### Tools:

Electric Drill  
15/16" Drill Bit  
Sabre Saw (you can use a hand drill & hand saw)



### Supplies:

Plastic Drum (55 gallon is best)  
3/4" Spigot (with male threads)  
PVC Cement  
Caulk



**Directions:** Use only barrels that have carried food products.

- Drill 15/16" hole at the first even part of barrel, about 6" to 8" from the bottom.
- Screw 3/4" spigot into hole (should have a snug fit).
- When spigot is about 3/4" of the way in, apply PVC cement to threads and finish tightening.
- If using a downspout, use a sabre saw to cut a hole in lid to fit spout.
- After inserting down spout, caulk around the hole.
- Other option: Take off the lid of a drum or trash can and cover the opening with a fine fiberglass screen. Place the container where water flows off your roof.
- Elevate barrel on 2 to 3 cement blocks to allow easy access to the spigot. (Note: If you want more pressure, raise the barrel higher above the ground.)
- It would be a good idea to add a second spigot at the top of the barrel so you can direct the overflow through a hose into a specific part of your yard.