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Rain Barrels

A rain barrel is a large container connected to the end of a downspout used to collect rainwater and melted snow and ice running off a rooftop. A rain barrel generally consists of a large barrel or drum, spigot, overflow pipe, and an inlet with a screen. Rain barrels can be purchased ready-made or constructed relatively inexpensively. When constructing a rain barrel with a used barrel or drum, be sure that the barrel or drum was used to store materials that are safe for humans, plants, and animals. Check with local food distributors for used barrels. Rain barrels can also be constructed from heavy duty trash cans purchased from local department or hardware supply stores. Plastic grade paint can be used to paint plastic rain barrels. The photo (above, left) is of a rain barrel painted by the Madison County Horticulture Agent, Amanda Sears, and several volunteers.

Rain barrels reduce stormwater runoff, which is defined as rain or melted snow and ice that flows over the ground. Impervious surfaces, such as rooftops, sidewalks, roadways, and parking lots, inhibit stormwater runoff from seeping into the ground. As stormwater flows across these paved surfaces it picks up pollutants such as cigarette butts, candy wrappers, oil, automotive fluids, pet waste, soaps used from washing vehicles, and any other substance that has been deposited on the ground. This polluted runoff then enters streams, rivers, and lakes by way of storm drains resulting in poor water quality conditions. Rain barrels decrease stormwater runoff by capturing stormwater that runs off rooftops. This reduces the amount of polluted stormwater runoff that enters local water bodies. These local streams, rivers, and lakes potentially serve as habitat for wildlife, drinking water sources, and recreation areas such as swimming, boating, and fishing.

In addition to reducing stormwater runoff, rain barrels also decrease the amount of municipal water used, thereby decreasing your water bill. The rainwater collected in a rain

barrel can be used for watering gardens, flowers, or lawns. This reduces the amount of water used from public water suppliers, thus not only decreasing your water bill, but also reducing the amount of chemicals and energy used to treat water. Please note water from rain barrels should be used for outdoor purposes only and should not be used for human or animal consumption.

Rain barrels are relatively easy to install and maintain. When installing a rain barrel, consider the weight of the barrel when full (a full barrel may weigh over 400 pounds). Position the barrel on a firm, level surface such as cinder blocks. This will help stabilize the barrel when the ground is wet and/or the barrel is full, and will allow the spigot to work better. During installation, point the overflow pipe away from the house or building's foundation. If your barrel is directly connected to a downspout, install a type of gutter guard to prevent rooftop debris, such as leaves and pine needles, from clogging your inlet screen and barrel.

Maintaining your rain barrel requires very little time. A few key points to remember, routinely check your inlet screen for holes, and close and secure all other openings. Barrels with openings can create safety hazards for children and animals. In addition, holes and openings can allow for mosquitoes to enter and breed. Biological control agents, such as Mosquito Dunks, can be purchased at home improvement stores and on the internet to further protect against mosquito infestations. To prevent sediment from collecting at the bottom of your barrel, agitate the barrel before using the stored water. To avoid stagnant water, empty your barrel a week after a rain event. Freezing temperatures can also damage your barrel. To avoid damage, drain water from your barrel during winter months and store your barrel upside down to keep any additional water out.

Keep three to five gallons of water in wooden barrels to prevent shrinking and drying.

Developed by Ashley Osborne, Extension Associate for Environmental and Natural Resource Issues. Kentucky Water Awareness Month Packet 2009.