

## **For residential projects:**

You don't need any permits to use collected rainwater outside the house.

To use it indoors for purposes like toilet flushing, you'll need to apply for a permit. The permit guidelines show how to plumb separate lines for rainwater and city water, and prevent contamination between them. [The permit guide can be downloaded here.](#)

To go a step farther and use rainwater to replace potable water, you'll need to apply for a permit appeal. The appeal process is used so that the Bureau of Development Services can look over your specific design and installation. It's not an adversarial appeal, more like a way to be sure an applicant has really thought through the installation. Also, that you understand the commitment--once water pipes have been used for rainwater they can't be converted back to city water.

Pasted from <<http://www.portlandonline.com/osd/index.cfm?a=bbehfa&c=ecbbd>>

## **Georgia's Statewide Water Management Plan: The Need for Strategic Water Conservation and Reuse Mechanisms and Measures**

Shana Udvardy, Policy Analyst, Georgia Conservancy on behalf of the Georgia Water Coalition  
October 27, 2005

c. Rainwater Harvesting: This practice involves the collection of precipitation from rooftops and the storage of this precipitation both above and below ground. Rainwater harvesting is a good way of balancing out water supply needs for outdoor water use, particularly during the summer season. In addition, rainwater harvesting reduces stormwater runoff, which is a major cause of pollution in local streams and rivers. The cost of harvesting rainwater varies enormously depending whether the water will be for potable use or for irrigation. A complete system for potable use with filtering and components can cost approximately \$5,000. The main cost for a rainwater harvesting system for irrigation is the storage tank. The cost of storage tanks depends on the size and material, however it can be as low as \$100 for a rain barrel (Krishna 2005). [Eventually, Georgia should require a rainwater harvesting system in place for all new residential and commercial buildings and require the retrofitting of old buildings.](#) Until it is required, the state should provide financial incentives such as property tax exemptions, sales tax exemptions, or rebate programs to ensure that progress is being made in the residential and commercial sectors to adopt rainwater harvesting systems.

d. Graywater Recovery Systems: The American Water Works Association estimates that these systems allow for the reuse of approximately 40% of residential "waste" water to irrigate lawns and to flush toilets. Graywater use helps to reduce water bills because it allows the reuse of water that has already been metered. It is also a more reliable source of water compared to rainwater harvesting. The most economical way to install a total graywater system in a house is to plan it into the construction of the house. All new commercial and residential buildings should eventually have a graywater recovery system in place, and Georgia law ought to be changed to at least allow for, if not require, full use of graywater in residential and commercial buildings. In addition, the state should provide financial incentives to help encourage the adoption of these systems in the residential and commercial sectors.

## **TCEQ REGULATORY GUIDANCE**

Water Supply Division

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Rainwater Harvesting:  
Guidance for Public Water  
Systems

The collection system must be designed so that the first part of each rainfall is collected in a separate storage tank (for nonpotable use) or flushed to waste. This feature is needed so that debris and chemical and biological contaminants do not reach the tank that stores the untreated water used for making your drinking water.

The roof and storage reservoir must be large enough to capture and store enough untreated water to provide an adequate supply during seasons when rainfall is less.

The rainwater collected from a roof-based collection system is classified as surface water. However, it should contain much less particulate matter than the surface water obtained from lakes, reservoirs, and ponds that are subject to land-based runoff. As a result, specialized treatment facilities are needed to treat rainwater. Since these treatment facilities will not meet the conventional design standards contained in our regulations, your engineer must obtain an exception, or waiver, to our standard design requirements. In order to obtain this exception, your engineer must specify treatment technologies which achieve the required level of public health protection. Although there are other ways to meet the requirement, most designs will:

use a filter (usually a cartridge or membrane filter) that is capable of removing at least 99% of the particles that are 3.0 microns or larger in diameter;

include a disinfection system (such as chlorine, ozone, or ultraviolet light) that is capable of inactivating (or killing) at least 99.99 percent of the viruses that might be present in the untreated water; and

be large enough to treat an adequate quantity of water to meet your customers' maximum daily demands at any time of the year.

In 2006, the Texas Water Development Board published a report to the legislature titled Rainwater Harvesting Potential and Guidelines for Texas which may prove helpful as you and your engineer prepare the plans and specifications for your rainwater collection and treatment system.