HELP US PRESERVE OUR WATER RESOURCES

To Reuse or Not to Reuse? That is the Question...

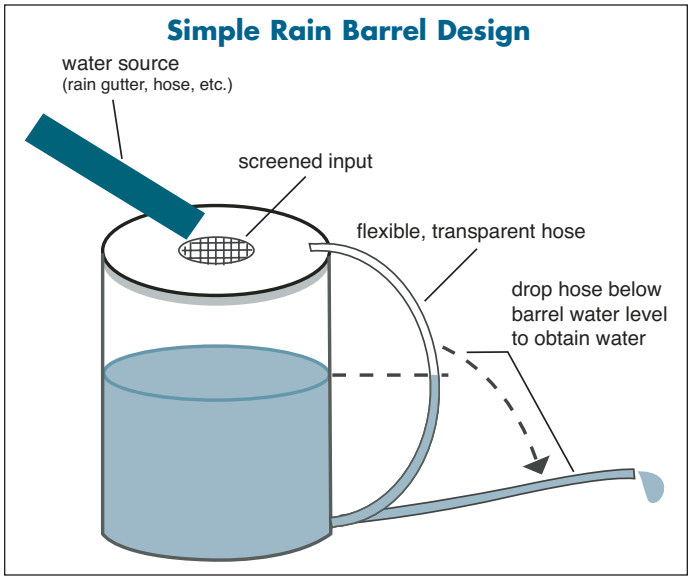
A practice that extends our limited, finite water resources is, without question, a practice that should be encouraged. Reusing, recycling or reclaiming water preserves our water resources – our drinking water supplies. The less we use now, the more we will have available in the future. Think of it as a savings account. We all know that savings are beneficial and essential for our future well being.

Water used in manufacturing or production processing steps, in various businesses and even in the home can be captured, minimally treated and used again. Reclaimed water is frequently used for irrigation, especially on golf courses. Decisions made today can help ensure that there will be adequate drinking water supplies for the future.

In Our Homes

One of the simplest examples of recycling water in the home is capturing rainwater from a roof and then using it to water plants and shrubbery. The rain barrel method, common in the 1950s and 1960s, is now recommended by today's water conservationists and is usually referred to as water harvesting. It has been estimated that an average sized roof of 1,800 square feet can collect 750 gallons of water for each inch of rain.

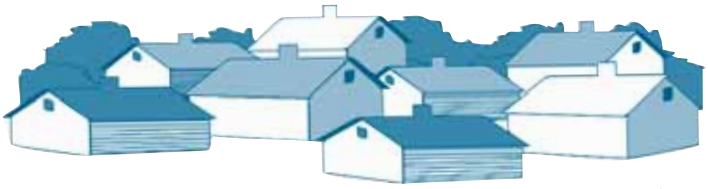
Another example is the use of gray water for landscape irrigation. Gray water typically includes untreated water from showers, baths, bathroom sinks and clothes washing (machines and laundry area sinks). Wastewater from toilet flushing, dishwashers or kitchen sinks requires treatment and is not considered to be gray water.



Installing gray water systems in an average home can be inexpensive, depending on the size of the system. Typically, these systems include pipes, valves and holding tanks. Homes with septic tank systems may have two septic tanks – the second for gray water to reduce the possibility of overwhelming the regular septic tank. This may make the use of gray water for irrigation easier since it is already being separated. If you decide to install a gray water system, contact your local Health Department because a permit is required.

In New Developments

Throughout northwest Florida, reuse/reclaimed delivery lines are being planned and installed with new developments. Reclaimed water may be made available by your water utility or water provider. Wastewater is collected, treated and redistributed through reclaimed water distribution systems. These systems are sometimes less costly than constructing new wells. Reuse water is frequently employed to water golf courses and landscaped areas surrounding businesses.



A utility in Walton County recently installed a reclaimed water distribution system for irrigating a new residential development to reduce the use of fresh water from coastal aquifer wells. Another utility serving south Walton County is installing lines to extend the delivery of reclaimed water to north Choctawhatchee Bay. Wells along the coastal areas are subject to saltwater intrusion if excessive withdrawals occur. Minimizing or diverting water use from coastal wells reduces this threat.

In southern Leon County, an advanced wastewater treatment facility is planned for a new residential development. It will allow water to be reclaimed and used in landscape irrigation, including a golf course, saving thousands of gallons of water each day that would have been withdrawn from the ground water system. This use of reclaimed water reduces freshwater use and extends our finite water supplies. There also are plans to replace some older wastewater treatment systems, such as Pensacola's, with a new wastewater treatment facility that will include reuse lines. These are just a few examples. There are many others.

In Agriculture

Most of the water used for agricultural irrigation comes from ground water or surface water withdrawals. A minimal amount of reclaimed water is used for irrigation. Restrictions about using reclaimed water (secondary treated effluent) apply to edible crops as well as to uses that might present health issues.

Recycling can occur, however, by simply planning field crops. Water used on one field may be recycled on an adjacent field if there is a hydrological connection. Watering on a hill or bank can also result in the same water being recycled at lower elevations. Harvesting (or catching) rainfall is another method.

In the Gadsden County area of northwest Florida where there is limited surface water available for irrigation, recycling is encouraged through such methods as tailwater recycling or recovery, field border irrigation pits or rainfall harvesting. Agricultural practices that use plastic sheeting in fields (such as tomato crops) and container nurseries for growing plants are ideal candidates for these methods.

Additionally, growing areas may be shaped to direct runoff into tailwater recovery systems or field border irrigation pits. Then the water can be reapplied to the growing area. Before implementing such a recovery system, check with the Northwest Florida Water Management District's Regulatory Division because a surface water management permit is required for these water recovery systems.

In Industries and Businesses

Water used in industrial or commercial businesses may be recycled and reused more than once. For example, industries that need water for cooling purposes may implement recycling practices. Systems that use water only once for cooling could be converted into closed loop systems that recycle the water over and over for cooling purposes. Another option is to convert to cooling towers which also allow the water to be used again and again.

In northwest Florida, power company plants in Pensacola and Panama City have emphasized recycling water in their operations. Processes have been introduced that recycle water used for cooling, saving thousands of gallons of fresh water each day.

Other businesses can employ reuse or recycling methods as well. Commercial car wash facilities may install reclaimed water systems which enable them to reuse the wash/rinse water. It has been estimated that car

wash systems that capture water and treat it for reuse may be able to reduce water usage by as much as 50 percent. Businesses that use water for washing or rinsing – hair salons, photographic/x-ray processing; paper production and other various manufacturing production facilities – also can take steps to recycle water.

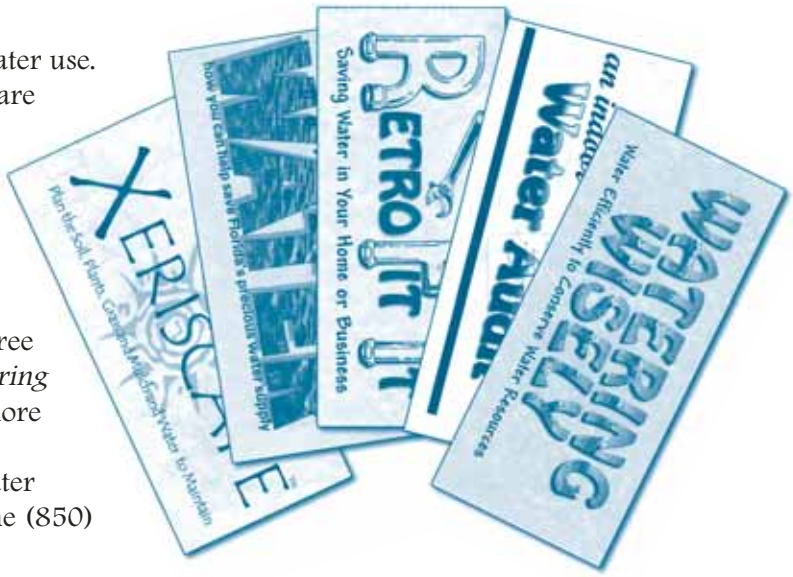
Evaluate

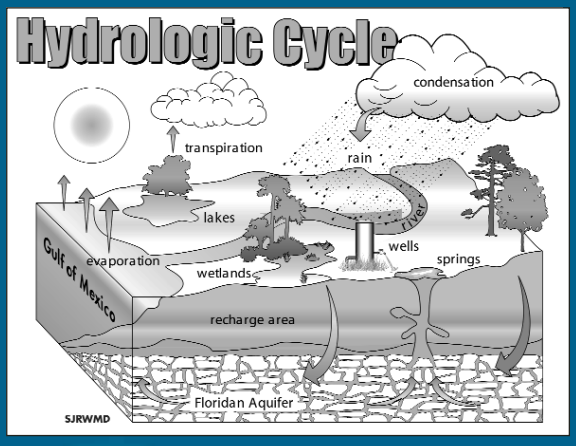
The use of reclaimed water for irrigation has gained acceptance and now is more widely used than ever. Guidelines and various permitting requirements help ensure the safe use of recycled, reused or reclaimed water. The simplest form of reuse, such as capturing rainwater from your roof, obviously would not require a permit.

Take time to assess your business or home's water needs. Develop a plan. Compare the costs of installing the recycling system to the payback period – the time required to recover those expenditures through dollars saved by reducing water use. The cost savings to you or your business could be significant.

Other Conservation Practices

Other water conservation practices also reduce our water use. Planting drought tolerant plants and wildflowers that are native to an area can eliminate the need for frequent watering. In Florida, this is called Florida Friendly Landscapes, Xersicape® or drought tolerant landscapes. Several brochures and books are available on these topics. The Northwest Florida Water Management District has five water conservation brochures, in addition to this one on reuse, available free of charge: *Fifty Ways to Save Water*, *Xeriscape*, *Watering Wisely*, *Retro Fit It* and *An Indoor Water Audit*. For more information contact the Office of Public Information, Northwest Florida Water Management District, 81 Water Management Drive, Havana, Florida 32333. Telephone (850) 539-5999. Web site: www.nwfwmd.state.fl.us





Even the environment recycles:

THE HYDROLOGIC CYCLE
The water cycle itself is an ongoing process of recycling water. The same water circles endlessly through its different phases – from the oceans, though the air, to the land and back to the oceans. Rainfall today is the same water recycled over millions of years.

Printed on recycled paper at an approximate cost of 10 cents each.

Public Information Circular 2005-1


Catch a
Falling DROP...
They Add Up!