

## **the Right Water for the Right Use**

### **The Future of Reclaimed Water**

Sarasota County is evaluating the establishment of an irrigation utility. It will include more than just reclaimed water for irrigation. This innovative concept would use alternative sources for irrigation such as stormwater runoff.

It is important to conserve our highly treated drinking water for drinking. Irrigation water can be treated differently and still provide what a landscape needs. This illustrates the concept "the right water for the right use™."

As the reuse system grows, additional equipment needed to operate it will be evaluated. Improvements will be made to increase the reliability of reclaimed water delivery to our customers.

### **Reclaimed Water Rates**

The rate for reclaimed water is currently \$0.44 per 1,000 gallons. The cost to produce reclaimed water is actually two to three times higher than what is charged.

The Board of County Commissioners reviews reclaimed water rates every two years.

For more information, please contact Customer Service at 861-6790 or visit the website at [www.scgov.net](http://www.scgov.net) and search for "reclaimed water", or email us at [Reusewater@co.sarasota.fl.us](mailto:Reusewater@co.sarasota.fl.us).

### **Accolades**

- In March of 1999, Sarasota County Utilities received the prestigious Dr. David W. York Water Reuse Award in recognition of the Development and Operation of an exemplary water reuse program.
- In 2001, Sarasota County's Regional Reuse System was presented the Municipal Water Use Efficiency Award for the most innovative and effective Reclamation and Reuse Program.

## **What is Reclaimed or Reuse Water?**



**Reclaimed water is the result of purifying wastewater at a water reclamation facility. The product is then reused for landscape irrigation. Extensive treatment and disinfection ensure that public health and the environment are protected.**



Every day, Sarasota County treats over 8 million gallons of wastewater. This results in highly treated, disinfected reclaimed water for irrigation. In the past this valuable resource would just be wasted. We have practiced a better option for over a decade, reclaiming and reusing this resource for irrigation needs.

**Reclaimed water is an important component of both wastewater management and water resource management in Florida.**

### **Why Use Reclaimed Water?**

- Reduces the demand on water supplies used for drinking
- Postpones development of costly new sources and supplies of drinking water
- Enhances landscapes through irrigation
- Reduces groundwater pumping
- Saves on potable water bills
- Provides a responsible and environmentally sensitive alternative to effluent disposal

### **Who Uses Reclaimed Water?**

#### **In Florida**

- Over 584 million gallons per day of reclaimed water are reused for landscape irrigation, wetlands, ground water recharge, industrial and agricultural applications.
- Over 122,000 residences, 419 golf courses, 405 parks and 188 schools use reclaimed water for irrigation.

Approximately 46% of all domestic wastewater produced is reused.

#### **County-Owned Facilities**

- Over 2,300 single family homes, 10 multi-family developments, medians, common areas, parks, 19 golf courses and a sod farm receive reclaimed water.
- More than 80% of County wastewater is reused.

**Using reclaimed water for irrigation conserves over six million gallons per day of groundwater or 2.2 billion gallons a year. That's enough to supply the drinking water needs of over 36,000 families.**



In 1996, water reclamation facilities were interconnected to provide additional supplies to areas needing it most. This allows reclaimed water to be delivered where customer demand is greatest.

The Southwest Florida Water Management District helped to offset financial costs for interconnecting Sarasota's water reclamation facilities. Over six million dollars in grants have been received for reuse transmission lines, storage facilities, and pumping stations, which helps keep down the cost for reclaimed water.



Extensive testing has not found any giardia lamblia or cryptosporidium in our reclaimed water.

## When can I water my landscape?

### **Reclaimed watering days schedule for residential, common areas, and multi-family users:**

Odd numbered addresses:

Monday 11:00 p.m. – Tuesday 11:00 p.m.

Even numbered addresses:

Wednesday 11:00 p.m. – Thursday 11:00 p.m.

New landscaping or system maintenance:

Friday 11:00 p.m. – Saturday 11:00 p.m.

Bulk customers, such as golf courses, and customers with storage facilities get large quantities of reclaimed water. Then they repump the reuse when needed.

## Reclaimed Water Is Not For Everything

### **Sarasota County only provides reclaimed water for irrigation purposes. It is NOT for:**

- Human or animal consumption
- Field crops that are normally consumed in a raw state
- Interconnection with another water source
- Above ground hose bib, faucet, quick coupler or hose uses
- Swimming pool filling or car washing



## Reclaimed Water is a Balancing Act

Florida receives most of its rainfall within a four-month period, June through September. Storing reclaimed water during these wet months is crucial to having it available during dry periods.

In addition, when it's raining, customers don't need to irrigate landscapes. Therefore when there is no demand, reclaimed water needs to be stored. Our current reuse system has a 350 million gallon storage capacity. Once we reach full capacity, back-up disposal methods are implemented.

Several communities along the gulf coast are beginning to store highly treated water

underground so that it can be retrieved later when needed. Sarasota County's water resource team will continue to monitor advancements in science and technology related to this aquifer storage and recovery alternative.

## Irrigation Design and Installation

Reclaimed water irrigation systems for residential homes should operate at 40 pounds per square inch (PSI).

The water is pumped through a master meter. The distribution system within the subdivision or multi-family community is the responsibility of the community.

Each customer must install a shut-off valve on their property so reclaimed water can be turned off.

It is the responsibility of the customer to install a backflow device on the drinking water supply line before reclaimed water service can be provided. This prevents cross connections that could contaminate the public water supply.

If there is a community irrigation well used for additional irrigation, a backflow prevention device must be installed on the well to avoid potential well contamination.

Automatic rain sensors or shut-off devices for irrigation systems prevent the system from operating during or immediately following rainfall events. All automatic irrigation systems must have a functioning shut-off device.

Single-family in-ground irrigation systems may be controlled either manually by zone valves or automatically by a timer. The system should not draw more than twenty gallons per minute and can run no longer than three hours per day on specified watering dates.



## Did you know?

- Our studies indicate that the use of reclaimed water for irrigation is highly variable. Those who don't directly pay for it (billed through a homeowner's association) will use twice as much as those customers that pay directly.
- It takes the wastewater of about four households to irrigate one lawn with reclaimed water. In fact, applying one inch of water can use over 600 gallons per 1,000 square feet. A fairly small lawn (40 x 100 feet or 4,000 square feet) might receive 2,500 gallons of water in a single irrigation.
- An application rate of ¾ inch for watering a lawn should suffice. For information on estimating the amount of water your irrigation system delivers, contact the Sarasota County Extension Service at 861-9800.

For an attractive and environmentally sensitive landscape make it "Florida friendly."

Florida Yards & Neighborhoods (FY&N) is a public education and outreach program available to residents.

## The Nine Major FY&N Principles:

### **Right Plant, Right Place**

Plants selected for your site will require minimal amounts of water, fertilizer and pesticides.

### **Water Efficiently**

Irrigate only when your lawn and landscape need water. Efficient watering is the key to a healthy Florida yard and reduces runoff.

### **Fertilize Appropriately**

Less is often best. Over-utilization of fertilizers can be hazardous to your yard and the environment. Use slow release fertilizers to reduce potential nitrate pollution flowing off your lawn.

### **Mulch**

Maintaining a 2-3" layer of mulch will help retain soil and moisture, prevent erosion, and suppress weeds. It also adds organic matter over time to our sandy soils.

### **Attract Wildlife**

Plants in your yard that provide food, water and shelter can help conserve Florida's diverse wildlife.

### **Control Yard Pests Responsibly**

Unwise use of pesticides can harm people, pets, beneficial organisms, and the environment.

### **Recycle**

Grass clippings, leaves, and yard trimmings are recycled on site to provide added nutrients to the soil and to reduce waste disposal.

### **Reduce Stormwater Runoff**

Water run off from your yard can carry soil, debris, fertilizer and pesticides that can harm water quality. Reduction of this runoff will help reduce nonpoint source pollution.

### **Protect the Waterfront**

Waterfront property, whether on a bay, river, stream, pond or beach, is very fragile and should be protected as a natural treasure.

To find out more about any of these programs or other Florida friendly approaches to an attractive, healthy landscape, contact the Sarasota County Cooperative Extension Office at (941) 861-9800, or visit the web site at: <http://sarasota.extension.ufl.edu/>.

