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Spring 2010

PIPELINE

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IRRIGATION
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On March 8, 2010, I had the privilege to speak the St. John's River Water Management District's Governing Board at their Rule Revision Public Workshop. I spoke after several of the public utility representatives and a group of environmentalists. Some of their concerns mirror ours, and I tried to elucidate our solutions.

What I expressed to the board was much of what I had previously stated in a letter regarding the rule revisions, dated December 21, 2009. I explained the position of professional irrigators is for water allocation and the allotment being 21 gallons per square foot annually. This number is consistent with Florida Water Star, the same Florida Water Star program that was developed by SJRWMD. This would change consumer's perception about irrigating. They would proactively change their irrigation schedules, and in essence hoard their water in case it was needed for future use. I suggested to the Board they begin metering self supply wells along with public supply sources. This will give the Board an accurate picture of water use for all purposes; after all you can't evaluate what you don't measure. I proposed the District implement a permit and fee for all water wells four inch and larger. This permit fee would be used to furnish a meter and an avenue for voluntary reporting. The District could then audit one percent of those and have a very accurate representation of water use. Further, I suggested using cost share money to help utilities invest in wireless water meters and monitoring software that would assist in data collection.

We support tiered water rates, the Florida Water Star program, and initiatives to use the lowest quality water available for irrigation.

We oppose the proposed rule revision that requires a seventy percent efficiency of the irrigation system. An actual irrigation audit would be required to assess compliance.

I also asked them, how were they going to implement the rule revision that mandated a 60% landscape limit per lot, and a sixty percent turf limit within the landscape? Would they send someone out with a wheel or would they Google Earth the lots? Each of these is labor intensive and unwieldy. Regulating water use is more easily implemented.

I concluded by reminding them that turf grass is good for erosion control, reducing urban heat islands, and sequestering carbon.

Judy Benson spoke to the Board as well. She mentioned the utilities are doing a good job with their water conservation efforts, but there is always more work to be done. She stated the FIS provides needed educational opportunities, but homeowners, retailers and lawn maintenance companies sometimes operate out of our influence.

I believe our message was received, but we need to remain vigilante. In the comment period, Vice Chairman Leonard Wood stated that the District should not be involved with writing landscape ordinances. An allocation program would dictate plant material. They should also stick to encouraging simple outdoor water use practices.

At the conclusion of the meeting, no action was taken. The staff will evaluate all comments for final rule making revisions in June.

Matthew Shreves

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FNGLA's Stance Wins Landscape Irrigation Results from SFWMD



After nearly two years of work, a consistent stick-to-the-science message and sheer perseverance, the Florida Nursery Growers and Landscape Association (FNGLA) scored a major industry victory at the end of 2009.

The South Florida Water Management District (SFWMD) unanimously voted to adopt a year-round water conservation rule providing for what FNGLA long sought: 3-days per week (rather than the current 2 days) for lawn and landscape irrigation. The rule also embraced FNGLA's goal of providing 90 days (rather than the current 60 days) irrigation for establishment of newly planted landscapes.

Several SFWMD governing board members and stakeholders (including environmental representatives) credited FNGLA's insistent adherence to the science and FNGLA's support of the rulemaking process as the major factors in successfully adopting the new rule in the face of stiff legal opposition from the water utilities.

This is a huge victory for FNGLA and for science which our industry uses as the

foundation for its public policy initiatives. The new rule has a very detailed and ambitious work plan of education, training and research over the next five years to prove the effectiveness of the 3-day rule.

Rule highlights include:

- 2-day-a-week watering in Charlotte, Highlands, Okeechobee, Orange, Osceola and Polk counties.
- Options for 3-day-a-week watering in Broward, Collier, Glades, Hendry, Lee, Martin, Miami-Dade, Monroe, Palm Beach and St. Lucie counties.
- No irrigation allowed on any day between 10 a.m. and 4 p.m.
- Irrigation using reclaimed water, rain harvesting systems and various low-volume methods — such as micro-irrigation, container watering and hand watering with a hose and automatic shut-off nozzle — is not subject to restrictions.
- Additional watering is allowed following the installation of new lawns and landscaping for up to 90 days.

More information about the Year-Round Landscape Irrigation Rule is available at www.sfwmd.gov/2days.

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2009 IA New Product Award Winner

DIG Corporation's LEIT-2ET weather based solar powered wireless irrigation system was named by the Irrigation Association as the new product winner for the Turf/Landscape Division at the recent San Antonio, IA show. The LEIT-2ET System was chosen as the winner of the New Product Contest by a panel of judges made up of irrigation professionals from around the U.S. The Irrigation Association award honors irrigation products that foster new concepts and innovative technologies that improve and conserve future irrigation water usage around the world.

DIG Corporation's LEIT-2ET weather based system is a new state-of-the-art, ambient light (solar) powered, wireless irrigation control system that adjusts daily irrigation programs according to site and real time weather information provided locally by the systems wireless weather stations. The LEIT-2ET system is programmed to monitor, con-



trol and adjust irrigation schedules for each zone through the weather information received from the solar powered, wireless weather stations along with programmed site information received from the LEIT RC2ET handset. The system operates by using ambient light (solar) power that charges lead-free super capacitors. Requiring no batteries, the LEIT-2ET system eliminates the need for any power or field wires making it one of the most environmentally friendly controllers on the market.

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SWIFTMUD Extends Water Restrictions

Southwest Florida Water Management District (SWIFTMUD) has extended modified Phase II water-shortage restrictions through June 30, but it lifted restrictions on pressure washing for Polk County and 14 other counties in the 16-county district. Marion County will continue to follow the St. Johns River Water Management District's year-round water conservation measures.

According to a SWIFTMUD news release, the governing board voted to maintain most of the Phase II watering restrictions, including a once-per-week limit on lawn irrigation, as the district continues to recover from a four-year-long drought. SWIFTMUD officials say the district is still suffering from a 28-inch rainfall deficit for the past 48 months.

Under the modified Phase II restrictions, pressure washing is allowed for necessary purposes such as prior to painting or sealing, or to address a health or safety hazard. Pressure washing now will be allowed once per year for any reason. For details, visit www.WaterMatters.org/restrictions/.

Rain Bird Unveils New Sensors

As smart technology continues to emerge as a must-have for irrigation systems, more customers are asking contractors for options that are user-friendly, reliable and affordable. Now, Rain Bird has answered the needs of both customers and contractors with its new WR2 Wireless Rain and Rain/Freeze Sensors.

After installation and programming, the WR2 automatically senses and measures both rain and cold temperatures to prevent unnecessary irrigation, saving water and reducing wear on irrigation system components. The WR2 interrupts an irrigation controller's pre-scheduled cycle if one of six programmable rainfall set points (ranging from 1/8" to 1/2") or one of three temperature set points (41°, 37° or 33° F) is satisfied. By choosing one of three irrigation modes, users can 1) allow sensor data to determine the irrigation schedule, 2) postpone irrigation for 72 hours regardless of sensor readings or 3) continue with scheduled irrigation for 72 hours regardless of sensor readings. The WR2 also features a "Quick Shut-Off" feature that suspends irrigation immediately during any rain event without requiring significant rainfall accumulation.

The WR2 consists of three durable components: a controller interface with an easy-to-read LCD screen, a sensor unit and a self-leveling sensor mounting bracket.

Finding a spot to mount the WR2 is relatively effortless, as its superior signal strength can overcome most common line-of-sight obstructions such as trees, sheds and walls. Unlike other rain and rain/freeze sensors, the WR2 displays signal strength on both the sensor and the controller interface, making it possible for contractors to find the best mounting location without having to return to the controller. Internal antennas give the WR2 a clean and neat profile that keeps property owners happy.

The WR2's sensor transmits weather data back to the controller interface every 45 seconds allowing the device to be highly responsive to changing environmental conditions. After programming the WR2 with the appropriate irrigation mode, rainfall and temperature set points, contractors can save their settings using the special "contractor default" feature, making it an easy, one-step process to restore the settings if they are modified.

While the WR2 provides obvious benefits to end users, it offers a number of advantages to irrigation contractors as well. "By installing the WR2, contractors can help customers save up to 35% less water, solidifying their reputations as water management experts." Mueller explained. "Plus, because the WR2 is a simple and affordable smart technology upgrade, it offers contractors additional revenue opportunities."



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Tampa Bay Chapter Meeting
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April 13

Northwest Florida Chapter Meeting
Perry's of Niceville Legendary
Seafood & Steaks, Niceville

Volusia Chapter Meeting
Clubhouse Restaurant,
Daytona Beach

April 14

Central Florida Chapter Meeting
International House of
Pancakes, Orlando

April 20

Northeast Florida Chapter Meeting
Location TBA

April 21

Southwest Florida Chapter Meeting
Golden Corral Buffet & Grill,
Fort Myers

MAY 2010

May 4

Tampa Bay Chapter Meeting
CDB's Southside, Tampa

May 11

Northwest Florida Chapter Meeting
Perry's of Niceville Legendary
Seafood & Steaks, Niceville

Palm Beach Martin County
Chapter Meeting
Duffy's Sports Grill,
North Palm Beach

Volusia Chapter Meeting
Clubhouse Restaurant,
Daytona Beach

May 12

Central Florida Chapter Meeting
International House of
Pancakes, Orlando

May 19

Northeast Florida Chapter Meeting
Location TBA

For more information, please visit www.fisstate.org or call Jennifer Amarosa at 813-839-4601

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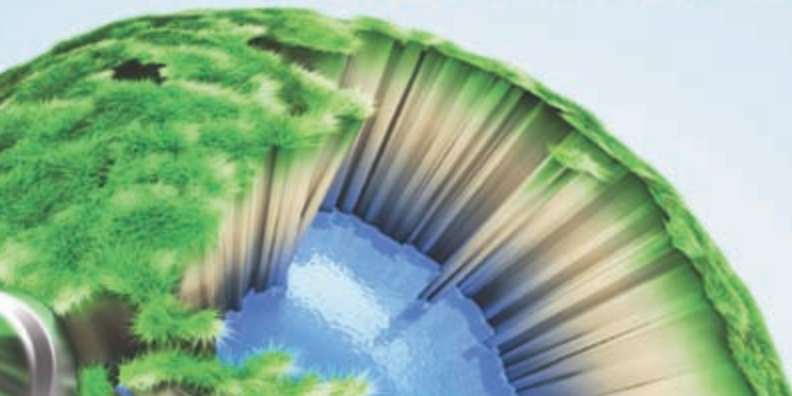
By Andy Voelz, Toro Company, Florida Irrigation Society Board of Directors

Now that the Florida rainy season has passed, we approach the drier portions of the year. Water efficient practices are beginning to make an impact by increasing the available potable water supply, but are these efforts enough to avoid water shortage situations altogether?

A transition from “thinking green” to “living green” is the key to the sustainability of the earth’s freshwater supplies and can directly affect water supply issues. This article will show you how Americans rank water-related issues, worldwide potable water situations, local water-related information and methods of water conservation that can be applied to everyday life.

FRESHWATER SUPPLY:

Why Living Green is Key to Sustainability



Gallup Poll Results of Top Environmental Concerns

This table presents a timeline series of the top environmental concerns of Americans as determined from consistent long-term polling. The data is expressed as the percentage of respondents who worried about a particular environmental problem “a great deal.” Consistently, the most serious concerns have been expressed about water-related problems, including pollution of drinking water, pollution of rivers, lakes and reservoirs as well as maintenance of the nation’s supply of freshwater for household needs. Around half of all respondents worried “a great deal” about each of these three problems. However, notice the downward trend of environmental concerns since 1990s.

THE WORLD’S WATER

Top Environmental Concerns of the American Public: Selected Years 1997-2008 (by percentage)

Issue	1997	1999	2000	2001	2002	2003	2004	2006	2007	2008
Pollution of drinking water	NA	68	72	64	57	54	53	54	58	53
Pollution of rivers, lakes, and reservoirs	NA	61	66	58	53	51	48	52	53	50
Contamination of soil and water by toxic	NA	63	64	58	53	51	48	51	52	50
Maintenance of nation’s supply of fresh water	NA	NA	42	35	50	49	47	49	51	48
Air pollution	42	52	59	48	45	42	39	44	46	43
Damage to Earth’s ozone layer	33	44	49	47	38	35	33	40	43	39
Loss of tropical rain forests	NA	49	51	44	38	39	35	40	43	40
Extinction of plant and animal species	NA	NA	45	43	35	34	36	34	39	37
Greenhouse effect or global warming	24	34	40	33	29	28	26	36	41	37
Acid rain	NA	29	34	28	25	24	20	24	25	23

On a global scale, under-developed areas face life-threatening situations dealing with freshwater supplies. Pollution, political control, military tactics, sewage and drainage are a few of the factors influencing these nations' abilities to practice efficient water resource management. The following excerpts were found on the www.WorldWater.org website and detail some extreme situations relating to potable water availability:

■ A family in Madhya Pradesh (India) is killed by a small mob for illegally drawing water from a municipal pipe. Others ran to collect water for themselves before the pipe ran out. Drought and inequality in water distribution lead to more than 50 violent clashes in the region in the month of May and media reports more than a dozen people killed and even more injured since January, mostly fighting over a bucket of water. (Singh, Govind, 2009, "Water Wars Strike Ahead of Predictions," *EcoWorldly.com*, May 16, 2009.)

■ On December 3, police clash with hundreds of Mumbai residents protesting water cuts. One man is killed and a dozen others injured. Mumbai authorities are faced with rationing supplies after the worst monsoon season in decades. (Chandran, Rina, "One Killed in Mumbai Water Shortage Protests." Reuters, December 3, 2009.)

■ A protest over the price of water in Nyanya, Abuja, Nigeria results in violence, including the beating of water vendors. (Yakubu, A. 2008. "Water vendors protest at Nyanya." Daily Trust (Abuja), *AllAfrica.com*. March 4, 2008.)

How does all of this apply to us?

In 2009, an ongoing drought in parts of the United States prompted a ban on using sprinkler systems to water lawns in Tampa, FL. Council Chairman Tom Scott said the drought conditions forced city officials to ban the use of the sprinkler and irrigation systems on area gardens and lawns starting April 3, 2009. "We are in a crisis," Scott said after the Tampa City Council adopted the measure. "And it's going to get worse before it gets better." Brad Baird, Director of the Tampa Water Department, that preserving the city's water supplies is vital. "This drought may become the worst on record," Baird said. "Our challenge will be preserving enough water to make it through the dry season."

It's Not All Doom and Gloom

"Take care of the little things and the big things will take care of themselves."
—**Joe Paterno, Penn State University**

The simply-stated wisdom from Joe-Pa applies to all situations and can be perceived as an excellent method of organization, productivity, progress, responsibility, success, unity - - all of which are required in our daily lives. What can an individual do to influence the larger issue of water conservation? What local water choices can be made to avoid the extreme water issues faced around the world?

Efforts to expand water conservation techniques in the irrigation industry have resulted in increased reclaimed water usage, water basin based irrigation, rotary and spray nozzle technology (increased Du), ET based control systems, enhanced central control systems, micro-irrigation, political action, continuing education, efficient landscaping techniques, and overall more efficient irrigation systems.

Public knowledge is key in water conservation. The more people reached, the more efficiently water resources will be used. The world's water supply (in its



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saves time, water and money. Every feature of the revolutionary Rain Bird® WR2 Wireless Rain Sensor saves labor, conserves precious water, and provides new revenue opportunities. It installs quickly, thanks to intuitive programming, a versatile mounting bracket and signal strength indicators on both the sensor and controller interface. Programmable rainfall set points and a Quick Shut-Off feature save up to 35% on water usage. Staking your reputation — and your fortune — on a product that leaves nothing to chance. That's The Intelligent Use of Water.™

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Water Saving Tips Inside of the Home

- Install high-efficiency toilets, showers and faucets in each bathroom.
- Run your dishwasher when full only. Every load uses about 15 gallons.
- Run your clothes washer when full only. It uses from 16-41 gallons per load.
- Turn off water while brushing your teeth and save up to 8 gallons per day or 240 gallons per month.
- Shaving — just fill the sink with a little water and rinse your razor. You can save up to three gallons.
- Rinse vegetables in a sink full of clean water instead of continuously running water.
- Washing dishes. Fill one side of the sink with clean water to rinse dishes after you wash them.
- Refrigerate a container of drinking water, so you don't have to run the tap to cool it.

Water Saving Tips Outside of the Home

- Water your lawn deeply and less frequently.
- Avoid over-watering and runoff.
- Adjust sprinklers to water the lawn, not the pavement.
- Schedule irrigation for early in the morning or late in the evening.
- Water only what your plants need. Trees, shrubs and groundcover need only half the water of grass.
- Modify watering schedule monthly.
- Plant vegetation that is native to the area and follow watering instructions. Planting non-native trees and shrubs may require over-watering.
- Use a broom instead of the hose to clean outdoor areas, like patios.
- When washing your car, use a self-closing hose nozzle or turn off the water between rinses.



various physical states) remains constant, as it is neither created nor destroyed. Introduction of pollutants and excessive usage of freshwater supplies remain the top issues of concern.

The challenge now lies in evolving from “thinking green” to “living green” in our everyday lives. This article provides methods to begin affecting water conservation decisions in everyday life. Please continue the conversations with your peers about the importance of resource conservation, especially in the irrigation industry. Another Joe-Pa saying, “You have to perform at a consistently higher level than others. That’s the mark of a true professional.” This defines the role of irrigation and landscaping professionals - the responsibility to educate the public and practice methods of efficiently utilizing the earth’s limited resources.



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The LEIT-2ET weather based, wireless irrigation control system automatically adjusts irrigation schedules based upon local weather data provided by the on site weather station and user programmed site information. Powered only by DIG's ambient light (solar) technology no AC power is needed providing the ultimate freedom and flexibility.



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WATER SAVED THROUGH TECHNOLOGY

Comparison of Water Consumption



By Alan Yoder, Polk County Utilities

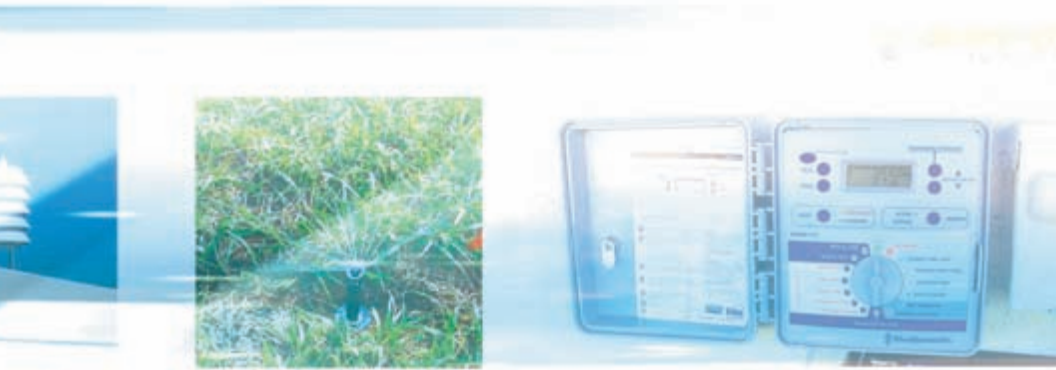


A “smart technology demonstration garden” was planted in 2005 at the Polk County Utilities Administration Building. This served to educate the public on Florida Friendly Plants and gardens. This fine example was the motivation for landscaping projects that utilized the latest technology to maximize the efficiency of the irrigation system for a Florida-friendly plant garden.

A comparison of water consumption was made between the a residence and a county building: One used an efficiently designed irrigation system supplied from a shallow well with a water meter and included climatologically-based smart irrigation controls, soil moisture sensors, rotary nozzles, drip irrigation and Florida-

Wings Technology:

Optimization Using "Smart" Tools



friendly plantings all working together to maximize water savings. The other used a basic irrigation timer that had to be programmed by the homeowner and provided potable irrigation for a lot 0.21 acres in size.

The .30 acre residential site with the efficient irrigation system contained about 40% irrigated lawn, 28% mulched irrigated flower beds and 32% for the house and paved patios and driveways. Do not make the assumption that a high tech design comes with low maintenance. There were problems with sand clogging the micro-screens on the MP rotors used for lawn irrigation on the shallow well application. While these rotors are extremely efficient, the heads needed cleaning and adjustment over the first year. Pets were also a problem since the

drip irrigation emitters were removed by the pets in the yard.

The drip irrigation tubing had to be adjusted, reattached and sometimes replaced monthly as it was found to be missing. One design feature lacking on the manufacturer's drip tubing design was that there were no barbs on the connectors, so it was easily disconnect-



Consumption Comparison

PROJECT SITE 0.3 acres					NEIGHBOR RESIDENCE 0.2 acres		
Water Units					Water Units		
Month	Inside Potable	Irrigation Well	Total	Monthly Cost	Month	Inside+Irrigation	
	x1,000 gal	x1,000 gal				Potable	Monthly Cost
	x1,000 gal	x1,000 gal	x1,000 gal			x1,000 gal	
10/30/09	4	14.3	18.3	\$63.74	10/30/09	25	\$164.78
9/30/09	6	6.7	12.7	\$74.48	9/30/09	17	\$115.28
8/30/09	5	6.7	11.7	\$67.64	8/30/09	15	\$107.29
7/30/09	7	6.6	13.6	\$81.32	7/30/09	22	\$139.25
6/30/09	6	11.8	17.8	\$74.48	6/30/09	24	\$151.24
5/30/09	6	14.2	20.2	\$74.48	5/30/09	31	\$195.21
4/30/09	6	28.5	34.5	\$74.48	4/30/09	33	\$211.20
3/30/09	5	7.9	12.9	\$67.64	3/30/09	35	\$227.19
2/28/09	5	8.1	13.1	\$67.64	2/28/09	28	\$175.22
1/30/09	4	7.2	11.2	\$60.80	1/30/09	27	\$169.22
12/30/08	6	13.4	19.4	\$74.48	12/30/08	23	\$145.24
11/30/08	4	11.7	15.7	\$60.80	11/30/08	25	\$157.23
10/30/08	5	30.3	35.3	\$67.53	10/30/08	18	\$119.08
Total	69	167.5	236.5	\$909.51		323	\$2,077.43

Money Saved \$1,167.92

Water Saved 86.5 x 1,000 gal

ed. The drip irrigation device should be redesigned to include lock tight connectors on all drip emitters. The well required freeze protection for several days in January 2009.

A summary of water use was made comparing the 0.21 acre residential property with the 0.30 acre residential site which has the smart timer. This comparison showed the smaller residential home on 0.21 acres utilizing potable water for

the home and for irrigation used 323,000 gallons at a cost of \$2,077.43 (total utility costs for water and wastewater.)

The residential home on 0.30 acres using a smart timer used a total of 236,000 gallons of water. This was based on the sum of 69,000 gallons of potable water inside the home at a cost of \$909.51 and 167,000 gallons of well water for irrigation. The savings over a two-year period should pay for the installation of the irrigation well.



The data collected with over 13 months of data shows that water can be saved by using smart timer technology. This comparison shows a larger landscaped area can be efficiently watered and remain healthy while using approximately 87,000 gallons less water for irrigation when the smart timer technology is allowed to operate.

The cost for the landscaping using Florida-friendly plants was \$8,000. Other costs were \$4,500 for the installation of the irrigation system utilizing smart controller technology and two soil moisture sensors. A shallow well was installed for \$2,000 for a water source and additional lighting was added to the landscaping for \$1,000. The irrigation system requires maintenance, repair and adjustment to achieve the designed maximum efficiency.

Irrigation with potable water is expensive and can waste water by using poorly designed irrigation systems. Even with an efficient irrigation system installed, the homeowner can counteract the benefits of smart timer technology by setting the "Bypass Switch" to override the automa-



tion and manually run the irrigation system. This results in the overwatering of the lawn and the mulched flowerbeds.

This cutting edge technology works, but does require a heightened sense of awareness to be sure all the components are working as intended. The most efficient systems are those that are well planned, accurately installed, properly managed and utilize technology with the proper plant installation. Using all the tools and information available promotes sustainable water conserving landscapes.

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What Will the Market Bear?

By Kevin Colesworthy, Sales Manager, TWC Distributors, Inc.

Who knows how much more you could be earning if you never pushed the envelope forward? Writing proposals and contracts that are based primarily on what the last project went for, or, a worry that it's too soon to raise prices is not only holding YOU back but the entire industry as well. Have you given up trying to make more? If so, you'd better get out now because you will not be able to continue your business playing it safe.

Those of you that have been reading my articles for the past two years may think that I just don't get it. Believe me, I do understand that the jobs just don't roll in the doors anymore and, if you get a chance at it, there's always someone there that submits a "There's No Way In Hell" price. I have the same challenges in distribution more than you can imagine. We're all in the same boat and I'm tired of paddling!

I think the problem is that everyone has become "pricers" instead of "sellers". We've lost the ability to investigate the project via the designer, developer, general contractor, municipality, landscaper, builder, nursery, etc., etc., etc. By not understanding the job, you probably have moved miles away from leveraging your professional ability to do it right in deference to a "bid it to get it" strategy.

Recently, I was told that manufacturers and distributors are trying to sell product for prices that are higher than the market will bear. Huh? The market will bear a higher price if we focus on making money rather than buying it or selling it cheaper than the next guy. Why not instead justify your unique grasp of how it needs to be done and what it will require. Knowledge and current information has a value that a low price can't match. Do you have a resource you can trust? Maybe you need a meeting with the boss once in a while rather than the employee to get a clearer picture of the business we're in.

I can promise you that there are a number of individuals in a variety of irrigation positions and companies that have no idea what's going on with prices (costs) of materials. Some will advertise that they have a new, lower and contractor-friendly price. What they don't understand is there are more reasons for us all to not take the bait.

- Buying more than you need is dumb.
- Pushing the lower price out on your quotes is stupid.
- Failing to know that your overhead expense just went up exponentially due to new tax rates is ignorant.
- Selling at lower prices is INSANE!

The average Joe Contractor/Distributor/Manufacturer on the street doesn't know that copper has increased roughly 40% in a year, but you should. He could care less that PVC pipe prices can change like the room rates in Vegas. He also doesn't know that he's been sending out bids based on the old prices because he's not reaching out for information from someone qualified to share it. If you don't know what's going on, you'd better start asking someone other than your regular "guy" because he's probably in the dark.

Low prices don't mean that he knows something you don't. It's probably just the opposite. Your goal is to make money on every sale. The old saying that, "five percent is better than nothing" is wrong. You'll be surprised at how many people just want to know that you take pride in your work and are professional in the job you do. They'll pay for confidence. Be THAT guy.

WATER, WATER EVERYWHERE...

So Why Water Management?

By **Donna Hoover**, LEED AP Hoover Pumping Systems



The definition of “water management” depends on who you ask and where you are in the world. In Florida, we are blessed with plentiful fresh water and rainfall. The warm climate and verdant landscapes have attracted boundless development, causing an ever-increasing demand for water and placing significant pressure on our water resources.

It is common knowledge that up to 50% of the domestic water supply in Florida is used for landscape irrigation. The relationship of irrigation practices and landscape water requirements are obvious as the water supply is stressed and droughts occur from time to time.

The state of Florida contains five water management districts that are responsible for the management of ground and surface water and water conservation. The districts establish and enforce water use restrictions as well as issue and manage permits for water usage and consumption.

Developers, communities and other property owners are feeling the pressure of these restrictions and permit requirements. Violation notices and fines for non-compliance are becoming more common as restrictions and permits are more strictly enforced.

The demand on irrigation service contractors to provide more efficient landscape water is becoming critical as the water supply is stressed and water use regulations become even more stringent.

Irrigation contractors in Florida now have a real opportunity to become the leaders in managing landscape water. With good knowledge of efficient irrigation best practices, irrigation contractors are equipped to influence property owners to water responsibly and effectively.

Today, many cash-strapped property owners focus on cutting maintenance costs, especially those for irrigation and landscaping. It is up to the Irrigation contractors to demonstrate to their clients that investing in efficient irrigation practices will

cost less in the long run, protect the landscape from damage or loss, and ultimately reduce the maintenance budget.

The following information may help you expand your knowledge and awareness:

- Our neighbors in California, where water availability is a crisis, the recent study “Urban CII Landscape Water Use & Efficiency in California,” prepared for the California Landscape Contractors Association suggests that conversion from turf to other irrigated plants may not result in lower water use. In other words, efficient water management is far more important than planting “politically correct” plants.
- The Water Audit, a crucial irrigation practice that produces detailed information about actual system performance in the field, recommendations, and, where applicable, cost benefit analysis, should be performed on all irrigation systems by certified irrigation auditors.
- Watering Cycles: Many watering schedules benefit from cycles, an effective water conservation measure. Cycles per day means that the watering on a given day is broken down into smaller increments, allowing the water to penetrate the soil more deeply to the root zone of the plant. This stops wasted run-off and, if soil moisture sensors are being used, allows them to detect adequate moisture levels that prevent excess irrigation from being applied. Too frequent, shallow, watering is a common cause of shallow roots and unhealthy plants that suffer greatly when droughts occur.
- Simple, low or no cost ways to maximize landscape water savings:
 - Water trees first; they keep the area cooler.
 - Check for leaks on a regular basis and fix them immediately.

- If there is an available water meter, learn to read it to determine if there are leaks.
- Runoff means wasted water. No runoff means the water is being absorbed by the soil.
- Turn on each sprinkler zone and see how much time it takes to start generating runoff for each zone. Round sprinkler time down to the nearest minute and set that time as the maximum run time for each station. Program the controller for multiple run cycles.
- Mow lawns higher and less frequently. Do not take off more than 25% when mowing.

■ Overwatering: Plants and trees suffer without enough water, but overwatering can be equally as damaging. Water-soaked soil prevents air and nutrients from reaching the plant roots. Wet soils invite problems like root rot and other plant diseases that result in serious damage and eventual cost of replacement. Excess watering encourages the growth of weeds, causes rapid growth of plants that need more trimming and mowing, and depletes important nutrients from soil resulting in the need for more fertilization. Last but not least, overwatering also runs the risk of violating water restrictions and exceeding the allowed usage as required by the Water Use permits.

Investment in further education* and specific irrigation knowledge is essential for Florida irrigation contractors if they are to lead the effort to adopt efficient irrigation and landscape water management practices...and well before it becomes a serious crisis.

**Note: The Florida Irrigation Society and other educational resources offer many opportunities for increased irrigation knowledge and competency.*

How To Become A Certified Florida Water StarSM Irrigation Professional

By **Ed Garland and Deirdre Irwin**, St. Johns River Water Management District

Water conservation is receiving increased attention in Florida, whether brought on by a growing population, climate change or through water supply discussions. The St. Johns River Water Management District has been committed to water conservation for many years, having put the first water-conserving rule relating to landscape irrigation in place nearly 20 years ago.

Among the district's most successful and ever-expanding endeavors related to water conservation in recent years is Florida Water StarSM program, which focuses on water efficiency in residential and commercial developments. The program was created following collaboration with the Florida Irrigation Society and the Irrigation Association on the development of the irrigation criteria, and that collaboration continues today. Goals for the irrigation criteria include saving 40 percent of outdoor water over traditional irrigation, increasing distribution uniformity and efficiency of the system.

Similar to the federal Energy Star[®] program but with a water conservation focus, the District's Florida Water StarSM certification program encourages water efficiency in household appliances, plumbing fixtures, irrigation systems and landscapes. The program offers a third-party certified inspection to guarantee water efficiency in new home construction and for renovations.

The district launched Florida Water StarSM in 2006, and the first house was



certified in July 2006 under the program's Silver tier. Numerous local governments support the program through incentives and rebates, and the program is offered in the South and Southwest Florida Water Management Districts as well as in the St. Johns District.

Criteria for certification focus on efficiency and cost-effectiveness for the property owner. The program is designed for a broad range of homes, from a condominium with no yard to an older home on a half-acre lot with an aging irrigation system.

Homes are certified under a "tiered" system (Bronze, Silver and Gold) and qualifications points lists offer ways for every property owner to succeed in obtaining certification for their water efficiency efforts both indoors and in their landscapes.

Under the Gold tier, for example, a residence must achieve additional points and

meet more rigid requirements than in the Silver tier. A Gold tier certification allows no more than 50 percent high-volume irrigation on a residential property, while also requiring that numerous design prerequisites are met. The Gold tier, unlike the Bronze and Silver tiers, also includes water quality best management practices, such as the use of organic mulches and unirrigated plant beds near shorelines and seawalls.

Indoors, a Gold tier home must include high-efficiency toilets, low-flow faucets and other indoor water efficient appliances.

The district launched the latest tier of the residential version, the Bronze tier for existing homes, in fall 2009. This tier offers homeowners a menu of options to retrofit their homes to a new water efficiency standard. As with Silver and Gold, the Bronze tier encourages efficiency in the landscape and indoors.

Participation in any of the program's three tiers requires:

- Limiting high-volume irrigation
- Using only micro-irrigation in landscape beds
- Locating sprinkler heads no closer than two feet from any building
- Installing appropriately-sized sprinkler heads for the turf species used
- Using check valves in low lying areas
- Irrigation systems to have matched precipitation
- Head-to-head spacing for all sprinkler heads
- Irrigation system design drawings and schedule information to be permanently located by the controller


Optional criteria include further limiting high-volume irrigation, using pressure-regulated spray-heads or system-wide pressure regulation, installing soil moisture sensor controllers or ET controllers, and harvesting rainfall or using alternate water sources for irrigation.

Florida Water Star Accredited Professionals

To provide continuing education for practicing landscape and irrigation professionals, the district is developing a Florida Water StarSM Landscape and Irrigation Accreditation Program to assist in designing and installing systems for Florida Water StarSM builders.

Two types of certification programs will be offered: Florida Water Star Accredited Irrigation Professional and Florida Water StarSM Accredited Landscape Professional.

To achieve certification as a Florida Water StarSM Accredited Irrigation Professional, applicants must pass the Florida Water StarSM irrigation exam and must be a Certified Irrigation Contractor. For those seeking certification as a Florida Water StarSM Accredited Landscape Professional, applicants must pass the Florida Water StarSM landscape exam and hold a current credential as a licensed landscape architect or certified landscape designer. Florida Water Star irrigation



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achieving a Florida Water StarSM accreditation, irrigation and landscape design professionals may use the Florida Water StarSM logo in promoting their businesses.

Florida Water StarSM can be effectively integrated into projects along with other programs such as Energy Star[®], the Florida Green Building Coalition's (FGBC) green standards and the U.S. Green

and landscape workshops will be available to assist in preparing for either of the two exams.

The accreditation program will provide an opportunity for landscape and irrigational professionals to enhance their credentials in sustainable landscape and irrigation design. Upon

Building Council's LEED program. Florida Water StarSM focuses on Florida's unique water resource constraints, and can therefore further enhance the effectiveness of other green certification programs.

For more information about Florida Water Star, visit the program's website at floridawaterstar.com.

A promotional graphic for the 3rd Annual Florida Water Summit Conference. The background is a night view of a large, modern building with many lit windows. In the top left corner is the logo for 'fis' (Florida Irrigation Society) with the tagline 'MANAGING EVERY DROP' and the website 'WWW.FISSTATE.ORG'. The main text is in large, bold, white letters: 'COME JOIN US FOR THE 3RD ANNUAL FLORIDA WATER SUMMIT CONFERENCE!'. Below this, in smaller white text, is 'JULY 28 - 30, 2010 • OMNI ORLANDO AT CHAMPIONSGATE RESORT'. A green heading reads 'This years' event will offer:'. Below this is a bulleted list of benefits in green and white text.

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 - The latest innovations in irrigation technology
 - Learn about local water rebates
 - Meet with manufacturers
- Ascertain how contractors overcome the same challenges you face



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SOCIAL MEDIA MARKETING: Is it Useful for Contractors?



By **Jeff Carowitz**, Strategic Force Marketing

So you're seeing many national consumer products companies dive into social marketing: Facebook, Twitter, YouTube, and more. It seems to be a great way to sell coffee, cell phones and disposable razors. But is it a useful tool for companies in the landscape industry?

Before you dive into creating a company Facebook page or launching a blog, understand whether these new marketing tools can generate fantastic leads and relationships, or if they might absorb more of your time than their worth. Most of these tools are free or low cost to use, but require a significant amount of effort on your part to create content and manage participation.

Studies show that over 70% of major purchase decisions are researched by consumers on the internet. Most quality contractors have made a strategic investment in a web site and many are using tools like pay-per-click advertising to drive customers to it. So where do these so-called "Web 2.0" social media tools fit in?

According to the book *Groundswell: Winning in a World Transformed by Social Technologies*, experts recommend the POST method (People, Objectives, Strate-

gy, Technology) to plan how your company should leverage social media tools.

PEOPLE: Understand your customers and what they're ready to embrace. Are your customers still using phone calls and e-mails, or are they tweeting and blogging? How many of your clients are on Facebook, or are they more the LinkedIn type? Their current behaviors are the best guide of what they will do. Take care not to use your own preferences and biases as representative of what your customers will use.

OBJECTIVES: Put simply, what do you hope to achieve through social media? Typical goals are building stronger relationships with current clients or increasing referrals to new clients. "Trying it out to see what happens" is seldom a good goal with social media marketing.

Many companies begin by simply listening: reading blogs and message boards, observing customers interacting on line and then using the learning to shape improved products and services. Listening also doubles as a strategy to see if there really is an audience for your product or service.

Others adapt social media tools to broadcast focused messages, hoping to reach and engage tightly targeted audiences. For example, one contractor discovered passion about drip irrigation among rosarians (experts in growing ornamental roses) and turned that into increased sales.

Some organizations use social media to ignite their base of loyalists. If you have a tribe of chest-thumping devotees that wear your logo with pride, social media could be for you.

STRATEGY: How will social media help you positively change your interaction with customers? For example, can you get customers to refer you more often electronically than they do verbally? Can it build customer loyalty? Are you hoping to get insights into next generation products or services? It requires a significant investment in TIME, both for you and the participant. Make sure that something “fun” also delivers real value.

TECHNOLOGY: Only after you have determined your audience, your objectives and your big-picture strategy, is it time to think about tools. Don't dive in without a plan “just because others are doing it”. Those Facebook invitations from your golfing buddies don't necessarily mean that you should start with a Facebook page.

There are many tools: blogs, podcasting, broadcasting (Twitter), user-generated video (YouTube), social networking sites (Facebook, LinkedIn, Bebo, hi5), information collaboration (Wikipedia), forums and ratings (Google Local, Angie's List, Yelp). Get some good advice on which will best achieve your objectives.

An irrigation industry veteran, Jeff Carowitz is a consultant with Strategic Force, a full-service marketing firm for landscape industry businesses. Find him on LinkedIn or at Jeff@StrategicForceMarketing.com.

Visit the Florida Irrigation Society's Facebook Page at:
<http://www.facebook.com/home.php?#!/group.php?gid=280526558269&ref=ts>



INTERNET AND SOCIAL MEDIA “DO’S AND DON’TS” FOR CONTRACTORS

DO:

- Have a web site that showcases your company's unique strengths and capabilities. Customers will check you out on the web before calling you.
- Make sure your site can be found easily via search engines using both organic (SEO) and pay-per-click (PPC) tools.
- Take advantage of free social media services to draw more visitors to your site.
- Consider starting a blog to have fresh content associated with your site and draw visitors with unique keywords and stories. Hire someone to help you with content.
- Engage a web design firm that understands your industry and why your customers buy your type of service. You're trying to sell your services, not just look pretty. Collect e-mail addresses from your customers for an e-newsletter.

DON'T:

- Tolerate a poorly-designed web site for your company. Amateurish graphics and mis-spelled words are a dead giveaway of an unprofessional operator.
- Consider starting over rather than patching a weak web site.
- Fall for promises of hucksters promising fantastic search results for your business. Nobody fools Google. Nobody. Save your money for measurable campaigns.
- Sign up for every possible social media opportunity (blog, Facebook, etc.) and then allow all to go dormant due to lack of attention.



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