

The Official Publication of the Florida Irrigation Society

PIPELINE

MARCH 2013
www.fisstate.org

Pricing
IRRIGATION
SERVICE WORK

**WEB-BASED
INTERACTIVE
URBAN
IRRIGATION
TOOL**

Irrigation
Standards Update





Scan the code with
your smart phone &
watch the video.

K-RAIN'S NEW ROTARY NOZZLE

WHY STOCK THREE WHEN

ONE

DOES THE JOB!



**FULLY ADJUSTABLE
FROM 80° TO 360° IN ONE NOZZLE**

K-RAIN'S NEW ROTARY NOZZLE TECHNOLOGY PROVIDES:

- Superior Uniformity
- Matched precipitation through all patterns and distances
- Low Precipitation Rate – 4/10 of an Inch per hour
- Full Pattern Adjustment from 80° to 360°
- 25% Radius Reduction
- Viscous dampened to ensure consistent application speed
- Double Pop-up to prevent dirt intrusion upon retraction
- Easy adjustment, wet or dry, with our unique tool

*Don't spend more time
and money installing other
rotary nozzles.*

- Get K-Rain and Save!

www.krain.com | 1-800-735-7246

K
RAIN®

The Official Publication of the Florida Irrigation Society

PIPELINE

Vol. 10 / Issue 1 / MARCH 2013
www.fisstate.org

TABLE OF CONTENTS

FEATURES

Pricing Irrigation Service Work	12
Web-based Interactive Urban Irrigation Tool	20
Irrigation Standards Update, How it Impacts You and Why it's Important	22

DEPARTMENTS

President's Message.....	4
Industry News.....	6
Industry Profile.....	10
Membership Application.....	26

PRESIDENT

Tom Super
 (239) 693-5488
 tom@naturesblueprintinc.com

VICE PRESIDENT

Spencer Phillips
 (561) 719-8747
 sphillips@research-irrigation.com

SECRETARY

Andy Voelz
 (941) 650-1339
 andy.voelz@toro.com

TREASURER

Jeff Davidson
 (813) 917-9498
 dlirr@aol.com

PIPELINE / PUBLISHER

Heather E. Poling
 Marketing & Communications
 Project Manager
 Associations Direct, LLC
 722 Vassar Street
 Orlando, FL 32804
 (407) 250-6784
 hpoling@associations-direct.com

ADVERTISING:

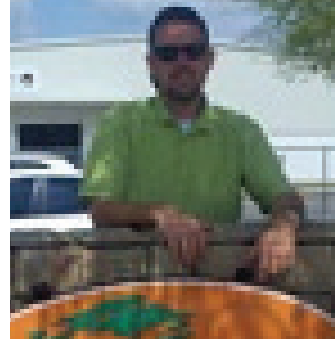
Heather E. Poling
 Marketing & Communications
 Project Manager
 Associations Direct, LLC
 722 Vassar Street
 Orlando, FL 32804
 (407) 250-6784
 hpoling@associations-direct.com

FIS HOME OFFICE

722 Vassar Street
 Orlando, FL 32804
 (813) 839-4601
 Fax: (407) 264-8425
 administration@fisstate.org

Copyright 2013 © Pipeline Magazine.
 All rights reserved. Pipeline Magazine
 is a quarterly publication of the Florida
 Irrigation Society, located at 722 Vassar
 Street, Orlando, FL 32804. FIS is not
 responsible or liable for any errors,
 omissions, or changes in information.
 Reproduction in whole or part is strictly
 prohibited.

The Florida Irrigation Society has achieved the milestone of state licensure. This monumental task was the direct result of years of hard work by many people, and tens of thousands of dollars in donations. We would like to thank the people that are responsible for this achievement. There are many to list, but to name a few: Mike Perkins, Matt Shreves, Kevin Cavaioli, Matt Eaton, Spencer Phillips, as well as legislative consultant Diana Ferguson. Again, there are many others that were directly responsible, and we are indebted to all of those that have donated time and resources to support this cause. We hope that we will have our first voluntary state licensure test in early to mid-summer. FIS will take the leading role in exam preparation and continuing education for this license.



Tom Super

The Board of Directors voted on a complete overhaul of the FIS website. The new site is much more user friendly and contains far more information. It will be utilized to help provide benefits to our membership holders. Please visit our website at www.fisstate.org for all society updates, educational offerings, chapter updates, and member benefits.

I would like to thank our immediate Past President, Matt Eaton for not only his diligent service while President, but also for his

continued supporting role as Past President. As your new President, I have an “open door policy”. Please feel free to contact me with any ideas and questions or concerns regarding FIS business. I hope to leave the society in a better place in which I received it as have the Presidents prior to me. We have many new exciting opportunities to grow our organization, and I look forward to working with each of you to obtain these goals.

NO GLUE

Push-On Fittings & Accessories



No Primer • No VOCs • No Wait • Permanent
Can Install Wet • Rotates • Use on Mainlines
Clear body to assure proper installation

LASCO®
Fittings, Inc.

Customer Service: 800-776-2756 • For Irrigation Only
www.lascofittings.com

*My customer Joe had some properties where the turf needed something different- something **MORE-** than what the national brand could offer. So I told him about **TurfGro Fertilizers-** designed specifically for the soil in his area.*

His clients have never been happier.





exclusively at Horizon



Visit your local Horizon, or scan here to shop online with 24/7 Anywhere. Anytime. Any Device.

Your local Horizon stores:
 Boynton Beach 561.533.1441
 Ft. Pierce 772.465.1966
 Stuart 772.287.9905
 Lake Park 561.863.5580



Legislative News Update

By Diana Ferguson, ESQ.
Rutledge Ecenia, P.A.

The Florida Irrigation Society (FIS) has worked with the Construction Industry Licensing Board (CILB) and other stakeholders to develop a voluntary licensure program for irrigation contractors. We began the process last spring. We came before the CILB on several occasions to talk through issues and continued to hone the rulemaking language until it was satisfactory to all of the CILB members. Jackie Watts, who represents HVAC contractors on the CILB but is also a plumber, was instrumental in helping us to craft language that everyone could agree upon. We have completed the rulemaking process and the new rule will be effective February 13, 2012. In the meantime, several FIS members have worked hard with DBPR's testing vendor Professional Testing, Inc. (PTI) to develop a written examination for

irrigation contractors. This process will be wrapping up soon. Once everything is in place, irrigation contractors may elect to take this exam and use one state license to do business statewide in Florida without the need to obtain separate licenses in every county. Contractors will still have the option of maintaining a local license. But for contractors doing business in multiple counties, this will mean significant savings in terms of both time and money. FIS will continue to pursue its regulatory efforts, with the ultimate goal of mandatory statewide regulation. However, we have made great strides in the last year and we urge our members to take advantage of this new option for licensure. Our statewide efforts can only be successful if we are able to show a significant level of support from within the industry.



TWC DISTRIBUTORS, INC.

NOW OPEN IN LAKELAND!

Polk County and the surrounding areas now have a local TWC location to supply your Turf & Ag irrigation, water well, drainage, landscape lighting needs and more!

2384 OLD COMBEE RD. LAKELAND, FL 33805
0 - 863-665-2819 • F - 863-665-2793

WWW.TWCDISTRIBUTORS.COM



PRO-SPRAY[®] BUILT TO LAST

**PRESSURE
REGULATED MODELS**  **50%**
provide water savings up to



Learn more by visiting:
<http://hntr.in/conservation>

CHECK VALVE
+ CO-MOLDED WIPER SEAL
= NO LEAKS, NO SWEAT

**PRS40
& MP ROTATOR**



a better way to water

**PRO-SPRAY: WHERE INNOVATION
MEETS CONSERVATION**

Northeast Florida Chapter Update

By Kirk Wurster

The Northeast Florida Chapter meets the 3rd Tuesday of each month at various locations around the area. The Chapter is planning the 5th Annual Creek Wars Fishing Tournament on October 19, 2013. The Chapter sponsored two children and



was a “Loop” Sponsor for the Wolfson Children’s Hospital’s “One to Grow On” event held on February 19, 2013. Tournament t-shirts were given to all of the children, and the children enjoyed the giant cake frosted with all of the sponsors and names of the children. We are also going to be doing a drip zone installation in a vegetable garden at Atlantic Beach Elementary in the next few weeks. The garden is taken care of by the students of the school.

Central Florida Chapter Update

By Tom Allen

The Central Florida Chapter of FIS is looking for volunteers to help revive our chapter activities! If you are interested or know someone that is interested in volunteering, please contact Tom Allen of Ewing Irrigation at 407.722.6500.

Tampa Bay Chapter Update

By Andy Voelz

The Tampa Bay Chapter of FIS held their monthly business meeting on February 5, 2013. Guest speaker was Rob Johnson of the Welty Corporation and shared new NDS and American Hydro System products. All committee chairs gave committee updates. Flyers were handed out for the JDL Everglades Challenge with prizes including one year free rental on a mower and a gator. Other specials will also be available at the event. The 2013 Excavation and Safety Guide directory was handed out. Local members will be receiving invoices soon. Discussion was had about how to increase membership, as well as creating a new statement on the benefits of membership.

Southwest Florida Chapter Update

By Mike St. Pierre

The Southwest Florida Chapter of FIS is pleased to announce their new Board of Directors!

- Mike St. Pierre – President
- Dan Demont – Vice President
- Jacki Hubbell -- Secretary
- Bob Ryan – Treasurer

The Southwest Florida Chapter recently held a Bowl-A-Thon at Gator Lanes in Fort Myers for Judy Kings, sister-in-law of FIS member Scott Kings. We are proud to say that several FIS members and family friends raised over \$13,000 for her to help her with her battle with cancer! The chapter will be hosting the annual Golf Tournament at the end of April, and further details will be available soon. We are hoping to increase chapter membership this year by promoting the statewide contracting licensing that was recently approved statewide, as well as working with our local FNGLA to grow membership for both of our organizations. Our chapter meetings are held the third Wednesday of each month at McDaddies in Fort Myers.

Northwest Florida Chapter Update

By Skeets Mez

The Northwest Florida Chapter of FIS held it's 3rd Annual Water Management Summit on January 31, 2013. With more than double the attendees as last year, it was a very successful Summit! Participants came from as far away as Homestead, Tallahassee, and surrounding counties. Speakers included: Lauren Connell of



NW Florida Water Management; Dr. Michael Dukes, Ph.D. of the University of FL; Kati Migliaccio of the University of Florida Tropical Research and Education Center; Tom Shannon of Ewing Irrigation; Bryan Unruh, Ph.D. of the University of Florida, West Florida Research & Education Center; and Brad Martin of Sunshine One Call 811. According to Kati Migliaccio, "This was a well-organized and attended event with a good mix of innovative and educational irrigation information, with a bonus of rules and regulations and new product information!" Special thanks to Brand Martin and Sheila Dunning for serving as program moderators.

Hard Working Member Dedicates Himself To Transforming The Irrigation Industry

When Adam Jones graduated from high school in Houston, TX, he was only 17 years old. However, he had already started what would become a long and lucrative career in the landscape and irrigation industry. Beginning his career with ChemLawn Services, Adam began by washing the service trucks, but quickly found himself as a Lawn Care Specialist. He was then promoted to Tree/Shrub Specialist and soon found himself as the first specialist to be promoted without a degree in Horticulture.

At the age of 19, he was transferred to Florida and continued to work for ChemLawn as a Manager in both Orlando and Palm Beach. When ChemLawn was acquired by Ecolab in 1991, Jones decided to pursue other job opportunities and was recruited by Mr. Harvey L. Massey, Chairman & CEO of Massey Services, headquartered in Orlando, FL. He began his career at Massey as a General Manager in the GreenUP Landscape Services division and by 1999 was promoted to Vice President, Director of Quality Assurance, the title which he continues to hold today.

At Massey Services, Jones says their mission is closely aligned with that of FIS's. "At Massey, our mission is to provide beneficial services that protect health, food, property and the quality of our environment. The primary reason we are engaged in water management services is to address the needs of our customers to conserve our most precious resource. We clearly see the opportunity to dramatically



reduce outdoor water use by improving the design and maintenance of our customers' landscapes."

Additionally, Massey – like FIS – is also continuously working to improve the knowledge and skills of the average irrigation contractor in Florida. By improving the quality through training and standards, Massey and FIS are developing irrigation professionals that are true stewards of water resource management.

Jones has been a member of FIS for several years and was recently Co-Chair of the statewide licensing committee that worked on getting the statewide contractor rule adopted and the licensing exam created. In February, the rule was adopted by law and irrigation professionals are now able to apply for a single license that will allow them to legally perform irrigation work statewide. Says Jones of the process: "It has been a long and rewarding process that the industry drastically needed and I am happy to have participated in it."

FIS thanks both Jones and Massey Services for being true partners in helping us carry out our Mission Statement.

**YOU WORK IN
ALL CONDITIONS...
SO DOES IT.**



LEIT-1TM
Irrigation Controller

SAVE



- No need for direct sunlight, batteries, or wires
- Patented ambient light powered technology
- Simple to set historical ET programming
- Available with an anti-siphon valve, manual valve actuator or in-line valve



Register for a chance to win the LEIT-1

Scan the QR code or visit: leit-1.digcorp.com/register

Winner will be notified April 30th 2013

DIG[®]
CORPORATION



Pricing

IRRIGATION SERVICE WORK

By James Huston, President of J.R. Huston Consulting

Irrigation service work for small jobs lasting less than a day or two can be some of the most lucrative work you perform, if you price it correctly. However, there are potential pitfalls to be aware of when it comes to pricing your irrigation service work. **They are: 1) covering drive-time labor (and other non-site time labor: loading the trucks at the yard, picking up materials, etc.) and the service truck; and 2) establishing daily billable goals for individuals and/or crews performing the work.**

THERE ARE POTENTIAL PITFALLS TO BE AWARE OF WHEN IT COMES TO PRICING YOUR IRRIGATION SERVICE WORK.

You can also use the methods outlined here to calculate time and material (T&M) rates for other types of work. Substituting your costs for materials, labor, labor burden, general and administrative (G&A) overhead, etc., in place of the ones used in the examples, will allow you to develop accurate labor rates to use in T&M situations. Your pricing will probably be close to that established in the examples. However, you should take the time to complete these exercises, using your costs in order to ensure that your rates are accurate.

HOW IT WORKS

A few winters ago, I met with an irrigation contractor in New England. He wanted to calculate his rates for his ser-

vice work. At the time, he was charging \$52 per hour for service repairs. After a fairly thorough analysis of costs and the market, we determined that he needed to charge \$65 per man-hour. This was a 25 percent increase, which he thought was a pretty hefty increase. However, he implemented it.

Six months later I revisited him and asked if he'd lost any customers as a result. He told me not only had he not lost any customers, but that only two of them had even mentioned the increase.

This contractor provided excellent service to his customers but was under pricing his work. As a result of the analysis I did for his company, which I'm going to share with you, he put an extra \$23,000 in his pocket in the first six months of his season.

PRICING IRRIGATION REPAIR/SERVICE WORK

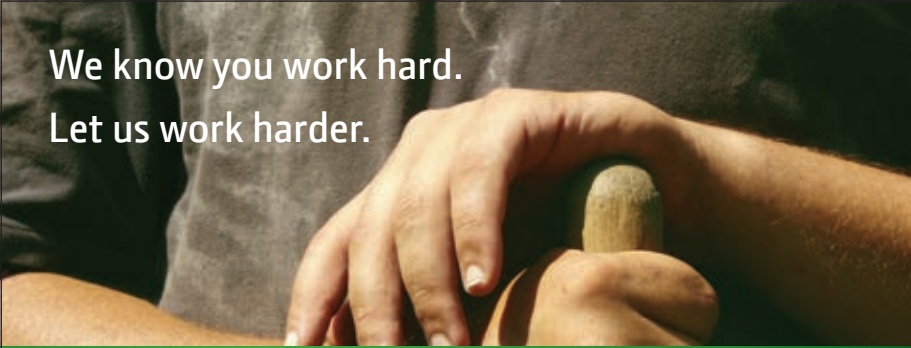
Before you start developing your labor rates, you need to address how to handle the pricing of the materials used for repairs and non-site time (e.g., drive time, load time, picking up materials time, etc.). I recommend charging for repair materials independent of labor rates.

Most contractors charge clients the manufacturer's list price for irrigation materials used in T&M service work. Sometimes, list prices will be lowered for commercial customers. However, I recommend marking up materials a

minimum of 30-40 percent above actual invoice cost. Residential irrigation markets will usually allow you to mark up materials 40-50 percent above invoice cost, which should bring your pricing for materials very close to the "list" or retail price residential customers would have to pay on the open market.

Off-site labor time (drive, load, and picking up materials time, etc.) can be handled one of three ways:

1. It can be included in the hourly "curb-time" rate charged to the client. Curb time is the actual time a techni-



We know you work hard.
Let us work harder.

Lean on us for some of your business demands - we know we can work harder for you. This is why we've implemented the Partners Program and Business Solutions, and the Px3 Maintenance Package.

Contact your local branch to learn more about these opportunities. We are eager to help you with as many of your business challenges as possible!



800-347-4272
JohnDeereLandscapes.com

cian or crew is on the job site. It starts when they arrive at the site (curb) and ends when they leave. Hence, the term “curb time” is used. You calculate the curb-time rate by dividing the total price (including all costs except for materials, and net profit) for an average day of service work by the average amount of on-site (curb time) labor hours. In our example in Figure 1, the price of \$640 is divided by eight hours of curb time. The resultant curb-time rate is \$79.94 per curb-time man-hour, which I’d round up to \$80.00. I’d charge \$80.00 per curb-time man-hour if that was the way that I charged for irrigation service work.

2. The client is charged for actual off-site time (primarily drive time to the job site). This is often referred to as “portal to portal” billing. Essentially, the clock begins to run once the driver leaves the yard and stops when the job is completed, or in some cases when the driver returns to the yard. This method has some inherent problems, especially if the driver starts from a location other than the yard, gets stuck in traffic, or has to make other stops along the way. In our example, the portal-to-portal price is \$63.95 per man-hour, which I’d round this up to at least \$65.00.

An average amount of off-site time could be allocated to the job instead, but this puts you into the third method.

3. You can charge a show-up or “trip charge” fee that includes drive time and other non-site time, plus a certain amount of time on the job (e.g., the first 30 minutes on site). Time after that is normally charged at a pre-determined rate, and in 15-minute increments or part thereof.

In our example, I’d charge \$65 to show up, knowing the average job was 20 minutes from your office/yard and required approximately 10 minutes of additional off-site time for loading the truck, etc. The trip-charge rate would include these 30 minutes, plus the first 30 minutes of

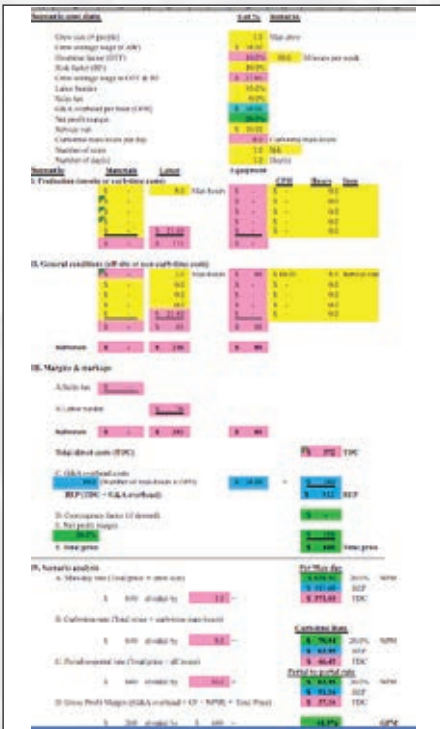


Figure 8.1

time on the job. Additional time on the job would be charged out at \$16.25 per 15-minute increment or part thereof.

Let's look at Figure 8.1 and the scenario that follows to see how we determined these rates.

- Our sprinkler technician works alone and gets paid for 10 hours a day, 50 hours per week, which means the overtime factor (OTF) is 10 percent (five hours of overtime divided by 50 hours of straight time equals a 10 percent OTF).
- Although all work is performed on a "T&M" basis with a theoretical Risk Factor of zero, I'd still calculate a 10 percent Risk Factor into this scenario to cover contingencies.
- The technician's hourly rate is \$18.00.
- Labor burden is 35 percent.
- The technician drives a van that calculates out to \$10.00 cost per hour (CPH).
- An average job is 20 minutes from the office.



THE REAL DEAL.

We're more than a product source, we're your business resource.

FIND US:
www.ewing1.com

TALK TO US:
800.343.9464

Check out our **earn** partner program
and take advantage of money-saving offers!

**EWING**

IRRIGATION | TURF PRODUCTS | LANDSCAPE LIGHTING | EROSION CONTROL | WATER FEATURES | HARDSCAPE

- An additional 40 to 60 minutes per day is required to load the truck, pick up materials, do administrative work, etc.
- You plan to perform and bill a minimum of four jobs per day.
- Materials are charged to the customer at current list prices.
- Approximately \$150 of materials (at cost) is to be installed per day.
- The general and administrative (G&A) overhead cost per labor hour (OPH) amount has previously been calculated to be \$14.00.
- A combined net profit margin and contingency factor of 20 percent is to be included in the work.

Turning to Figure 8.1:

- We've put eight man-hours in our Phase I curb-time production costs.
- Phase II general conditions contain the remaining two man-hours of estimated daily load, drive, administration and materials pick-up time.
- The service van is also included in Phase II general conditions at eight hours for the day. We use eight hours because the cost per hour is calculated using an eight-hour day. You should use ten hours in your

daily costs if your technician works four ten hour days per week.

- The total price, including all costs and 20 percent net profit, for an average day of sprinkler repair work is \$640.00 (which is indicated at the bottom of the Phase III calculations).

Put another way, total revenue that must be generated per day to cover all costs (including G&A overhead and providing a 20 percent net profit margin) is \$640.00. In other words, we must bill \$640.00 per day, excluding materials, to cover all costs and show a 20 percent net profit.

Let's break this down into more meaningful scenarios using the trip-charge method.

[A] Scenario #1

You bill four jobs per day and keep the service technician busy (billable) all day. Generated revenues are:

4 (jobs) x \$65 (show-up charge) ...	\$260
6 hours billed at \$65/hour	\$390
Total	\$650
<i>You've exceeded your goal of \$640 by \$10.</i>	

[A] Scenario #2

You bill five jobs per day and keep the repairman billable all day.

5 (jobs) x \$65 (show-up charge) ...	\$325
--------------------------------------	-------

Learn more about WR2 features and simple LCD interface programming at www.rainbird.com/WR2



Giving the green light to one-man installation. That's intelligent.



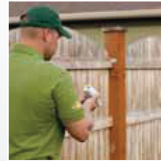
With the Rain Bird® WR2, one person can install the system in half the time of competitive wireless rain sensors. So you can save labor costs for your business while saving wasted water for your customers. That's The Intelligent Use of Water.™

Step 1



All settings programmed in one place using intuitive icons.

Step 2



Blinking green light indicating signal strength expedites sensor placement.

Step 3



Versatile bracket snaps on gutters easily or can be mounted to walls or fences.

RAIN BIRD®

5 hours billed at \$65/hour\$325
 Total\$650
You've exceeded your goal of \$650 by \$10.

[A] Scenario #3

You bill six jobs per day and keep the repairman billable all day.

6 (jobs) x \$65 (show-up charge)...\$390
 4 hours billed at \$65/hour\$260
 Total\$650
You've exceeded your goal of \$640 by \$10.

Each of the three scenarios produces an extra \$10.00 of net profit, in addition to the \$128.00 net profit built into the day rate. And remember, this net profit is also supplemented by the net profit on the materials each day. The difference between your cost and what you charge the customer is pure net profit.

The key is to keep your technician busy and billable all day, and to bill a minimum of \$640.00 per day excluding any materials. If that occurs, you're making money and any revenue billed above the \$640.00 is extra net profit.

You should track your irrigation service work on a daily basis. Many of my clients use global positioning system (GPS) software to track their service vans or labor-tracking software to track their service technician's time on the job. At a minimum, the items that should be monitored are:

- Sales or total billable dollar amounts per day per technician.
- Labor hours and job tasks (e.g., Drive to Jones' residence, 15 minutes; repair two heads, 35 minutes; return to shop, 15 minutes; pick up irrigation materials, 20 minutes; etc.).
- Materials used and billed per job.

Once you have historical data from which to work, go back and adjust your hourly rates and trip-charge rate, if desired.

SUMMARY

Irrigation service work and time and materials (T&M) work can and should be some of your most profitable work, if you calculate your pricing correctly. Be sure to include off-site labor time and vehicles in your prices and to set daily goals for billable production hours and revenue. Use the example to calculate your labor rates. Add a service helper if desired.

Remember, the net profit on materials is pure profit. Also remember that these pricing methods are to be used for jobs of short duration and which are fairly typical for your company. If a T&M job requires lots of extra drive time, or includes difficult job-site conditions, adjust your pricing accordingly.

If, after you calculate your T&M prices, they look too good to be true, they probably are. Go back and check your arithmetic and don't be afraid to add some extra net profit if they appear too low. Your rates should be reasonably close to market rates. The main difference is that now you have confidence in knowing how you arrived at your rates and how to adjust them if conditions change. You can also set well-defined daily production and revenue goals using them.

You can price your irrigation service with confidence, knowing that all of your costs are covered by your rates. You can also know with confidence that you're going to make money every time a service truck leaves your yard. And pricing with confidence is what the irrigation service business is all about.

MAIN POINT

You can ... know with confidence that you're going to make money every time a service truck leaves your yard.

ACTION POINT

Validate your irrigation service T&M unit prices and ensure that you set hourly and daily revenue goals for your technicians.

NOTE

The costs used in our scenarios are for illustration purposes only. Your costs will vary from the ones used in these examples. The key is for you to build a typical one-day scenario for the different crew, materials and equipment mixes you use. Round up these rates as appropriate. If your costing structure is accurate, the rates you calculate should be very close to your current ones and to those generally seen in your market.

This article was adapted from James Huston's new book and audio book, *How to Price Landscape & Irrigation Projects*, and his previous book, *Estimating for Landscape & Irrigation Contractors*. The author is president of J.R. Huston Consulting., which specializes in construction and services management consulting to the Green Industry. Mr. Huston is a member of the American Society of Professional Estimators and he is one of only two Certified Professional Landscape Estimators in the world. For further information on the products and services offered by J.R. Huston Consulting, call 1-800-451-5588, e-mail Tiffany Huston at tiffany@jrhuston.biz or visit the J.R. Huston Consulting web site at <http://www.jrhuston.biz>.


 INTERACTIVE
IRRIGATION
TOOL


Web-based Interactive Urban Irrigation Tool

Authors: K.W. Migliaccio, K.T. Morgan, and M.D. Dukes.
University of Florida

There are many gadgets and gizmos out there that promise a lot! And, it is difficult to decide what we really need sometimes. In an effort to help people make good irrigation decisions when it comes to gadgets and gizmos, we developed a ‘try it before you buy it’ type of tool. This irrigation tool is designed for homeowners, irrigation professionals, and others for investigating different irrigation schemes. The tool is web-based and allows you to try out the most popular gizmos available for improving turf irrigation – namely soil moisture sensor (SMS)-based irrigation and evapotranspiration (ET)-based irrigation.

Our purpose in developing this tool was to provide users with the ability to ‘test drive’ different ways of scheduling irrigation for their lawn (or turf) without incurring the cost and without harm to their turf (due to over or under irrigation). By trying new technologies such as smart irrigation soil moisture sensors (SMS; Fig. 1) or evapotranspiration (ET; Fig. 2) controllers in a virtual environment, the user can determine which system they prefer as well as implement practices that could potentially result in water conservation, a healthier lawn, and lower water bills. Property owners can assess various ways to improve their

irrigation efficiency by using less water and reducing their water bills. Irrigation professionals can use the tool to assist their clients in determining how to best manage home and business irrigation.

Figure 1. Soil moisture sensor installation for irrigation scheduling (Credits: S. Michael Gutierrez)



Figure 2. Weather station for evapotranspiration controller for irrigation scheduling (Credits: S. Michael Gutierrez)



The tool is based on a simple weekly water balance method that considers rainfall, infiltration, runoff, percolation, ET, irrigation, and soil water content. The user provides some information on the irrigated area such as the soil type, root depth, days when irrigation occurs, and amount of irrigation. The user also inputs their ZIP code which links their location to the closest weather data. Real-time weather data from the Florida Automated Weather Network (FAWN)

is used in the tool. The tool combines the simple water balance calculations, user input, and real-time rainfall and ET data to provide information on either how much excess water the lawn received or how many days the lawn experienced water stress, i.e., too little water to support lawn turf growth. All results of the tool are provided to the user via a weekly email, with results based on calculations from the previous week.

This interactive tool is available free of charge on the FAWN website (<http://fawn.ifas.ufl.edu>). The tool can be found under the 'Tools' menu tab and within the Irrigation grouping on the FAWN website. To use the tool, you need a google account. These are easy to set up

if you don't already have one. This can be done by going to the gmail website and creating a new account. A step-by-step guide for navigating through the tool is available at the following link: <http://edis.ifas.ufl.edu/ae485>. For questions on the tool or how to use it, please contact Kati Migliaccio at klwhite@ufl.edu. Also, be on the look out! We are in the process of updating and improving this model and anticipate a new release by 2014.

IRRIGATION STANDARDS UPDATE, How it Impacts You and *Why* it's Important

By Michael D. Dukes, Ph.D., P.E., C.I.D.
University of Florida IFAS
mddukes@ufl.edu

Yes, this guy is still writing about irrigation standards! I know many of you may be tired of the subject and thinking that it won't affect you. The current population of Florida is just under 18 million. This number is projected to reach 26.5 million by 2030, a 47% increase. Current public supply water used is 2.5 billion gallons per day. Assuming the rate of water used per person remains the same, total water use will also increase 47%. Much of our public supply is used to irrigate landscapes. Where do we get this water? One solution is more efficient irrigation and in one form or another all of the recent and current irrigation standard activity is related to more efficient irrigation through improved testing, specification and design of materials and equipment as well as common methodologies.

By the time you read this, the Landscape Irrigation Emission Devices Standard will have been through one round of public review. The International Code Council (ICC) has a webpage for this standard (<http://www.iccsafe.org/cs/standards/IS-IEDC/Pages/default.aspx>) and I have discussed in the Pipeline in recent issues. This standard should provide an apples to apples comparison of data on manufacturers' emission devices (i.e. sprinklers, drip emitters and micro-jets). Thus, when specifying the same

type of sprinkler across different manufacturers, the end user can be confident that performance data were collected in a the same manner. Currently, some differences exist.

The Irrigation Association (IA) and American Society of Agricultural and Biological Engineers (ASABE) have sponsored the, "Landscape Plant Water Use Standard" (<http://www.asabe.org/standards/x623-project-update.aspx>). The committee met immediately after



the IA meeting in Orlando, November 2012. Experts from around the country have come together to draft language on a common scientific methodology to determine landscape plant water requirements. The approach will be similar to the approach used in agriculture using reference evapotranspiration (ET_o) and crop coefficients (K_c) except for landscape plants the terminology will likely be ET_o and some type of “plant factor” since it is well-known that water can be supplied at less than an optimal amount yet plant quality can still be acceptable; whereas, with the K_c concept water requirements are typically computed to maximize yield. The idea of this standard is to produce a common methodology that could be adopted anywhere in the U.S. and that would produce identical results under the same conditions. As many of us know water can be allocated in different amounts under the

exact same conditions given differences across local municipalities. As with any standard, anyone that has an interest is invited to participate in the process. By the time you read this, the committee will have met in Orlando at the end of February.

ASABE also has standards committees on auditing landscape irrigation systems and “smart” irrigation controllers for landscape irrigation. Point your web browser to <http://www.asabe.org/standards/landscape-irrigation-standards> for more information.

All of these standards efforts are aimed at ensuring a better product and more efficient irrigation which should help us provide water to a growing population. There is no doubt that the outcome of these various standards efforts will impact many of us in the irrigation industry for years to come.

Hunter Industries Announces the New Pilot™ Golf Central Control System

Pilot is a new central control system from Hunter Industries designed exclusively for golf course irrigation control. The new system is available as an above-ground system using conventional field controllers or a below-ground system using decoders. The new equipment can be used stand-alone, or networked into a whole system with Pilot central control software.

In addition to central control software, Pilot products include field controllers, decoder hubs, and decoders. The field controller manages up to 80 stations, and the decoder hub can control up to 999 stations.

According to Product Manager Randall Mills, “The Pilot system was designed to enhance serviceability and reliability, two major issues for any golf course manager. From sophisticated troubleshooting tools built into every component to a clean design with no exposed electronics or loose wires, no detail was overlooked in the creation of the system. The color-coded, modular layout includes unique technology to eliminate the frustration.”

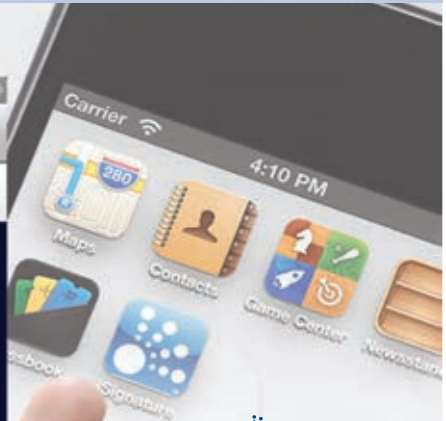
The Pilot system also aims to please from a service standpoint. The only service tool required is a #2 Phillips screwdriver, which Hunter highlights by including one with every controller. The Pilot Central Control System is available now, and can be used in retrofit, upgrade and new construction situations. To learn more about Hunter’s complete line of golf irrigation products visit hunterindustries.com/golf.

ABOUT HUNTER INDUSTRIES

Hunter Industries is a global manufacturer of products for the irrigation, landscape lighting, and custom molding sectors. Founded in 1981, the family-owned company offers over 1,000 products including a complete spectrum of water-efficient solutions for residential and high-end irrigation systems. Hunter’s core mission always has and always will remain the same: to produce innovative products of the highest quality and back them with unwavering customer support.

MEDIA CONTACT

Caitlyn Braegelmann (760) 591-7347
1940 Diamond Street, San Marcos, CA 92078
caitlyn.braegelmann@hunterindustries.com



Signature Share

The Latest
Controller Technology
From Signature.

**Really Simple... Really Easy...
Everything At
Your Fingertips.**

SIGNATURE CONTROL SYSTEMS, INC.

WORLD HEADQUARTERS
18 Goodyear • Suite 110
Irvine • California • 92618
Tel: 949.580.3640
Fax: 949.580.3645
USA Toll Free: 866.4SIGNATURE

MANUFACTURING FACILITY
8800 N. Allen Rd.,
Peoria • Illinois • 61615
Tel: 949.580.3640
Fax: 949.580.3645
USA Toll Free: 866.4SIGNATURE

EUROPE, MIDDLE EAST & AFRICA
5 rue de la Vallée Yart
78640 Saint Germain de la Grange
France
Tel: +33.13.489.9056
Fax: +33.13.489.6025

REGIONAL OFFICES ASIA
NanXian Plaza • MinZhi Street • Shenzhen
Guangdong Province • 518131
Tel: (86) 13600419465 • Fax: (86) 755.83275012
LATIN AMERICA
Ribera Escondida 118 • Riberas Del Campestre
38000 Culiyá, Cto. • Mexico
Tel: Fax: +52 (461) 614.2322



For more information, please visit us at: www.SignatureControlSystems.com

APPLICATION FOR MEMBERSHIP

Membership year: January 1, 2013 – December 31, 2013

I am: A New Member Renewing my Membership

Please make check payable to: Florida Irrigation Society Or To Pay By Credit Card Go To:

<http://www.fisstate.org/registration.html#MembershipDues>

Company: _____ Phone: _____

Name: _____ Fax: _____

Address: _____ City: _____

State: _____ Zip: _____ County: _____ Email: _____

Select the Chapter you will be affiliated:

Central Florida

Dade/Broward

Northeast Florida

Northwest Florida

Palm Beach

Southwest Florida

Tampa Bay

Volusia County

Please indicate your Category and enclose relevant dues:

		Annual Dues
<input type="checkbox"/>	A Manufacturer	\$330.00
<input type="checkbox"/>	B Distributor	\$275.00
<input type="checkbox"/>	C Contractor	\$200.00
<input type="checkbox"/>	D Consultant, P.E., L.A.	\$200.00
<input type="checkbox"/>	E Irrigation System Operator	\$200.00
<input type="checkbox"/>	F Associate	\$50.00
<input type="checkbox"/>	G Technical	\$50.00
<input type="checkbox"/>	H Student	\$10.00
<input type="checkbox"/>	I Supporting	\$100.00

Helpful Category Information:

***Associate Members are employees of current FIS Member firms in categories A-E.**

***Technical Members are individuals employed by educational institutions or governmental agencies.**

***Students retain all Membership rights except voting Representation.**

***Supporting Members are individuals that wish to be members that are not in the irrigation industry. (Example: Insurance Agents, Auto Dealers, etc.)**

Please tell us about yourself so we can better serve your specific industry needs:

- Installer of Irrigation Systems
- Distributor in irrigation equipment
- Irrigation System Design only
- Manufacturer
- Well Driller
- Operator or Irrigation Systems

- Registered Professional Engineer
- Registered Landscape Architect
- Certified IA Designer
- Certified Landscape Irrigation Auditor
- Landscape Contractors
- Other Certifications: _____

If your business is located in a county that requires an irrigation contractor license through testing, please provide your license number(s) and counties for Membership Directory listing.

License #: _____
 License #: _____
 License #: _____
 License #: _____
 License #: _____

County: _____
 County: _____
 County: _____
 County: _____
 County: _____

Applicant Signature & Date _____

Questions? Call the Society at 813-839-4601 or visit our Web site at www.fisstate.org



The Florida Irrigation Society is pleased to announce the arrival of FIS's new website!

The new design makes it easier for members, vendors, sponsors and partners to find information on upcoming meetings, events, partnership opportunities, chapter-specific news and more.

Check out some of our new features!

- Upload pictures of your projects to share.
- Register and pay for all Chapter and Section events.
- Link to other FIS Members.
- Track legislative issues important to you.
- Much, much more!!



CHECK US OUT TODAY!

SAVE THE DATE

2013 FIS WATER SUMMIT

JULY 31- AUGUST 2



Join us at the beautiful Sheraton Sand Key Resort in Clearwater Beach!

Bring your family to experience all that this resort and beautiful Clearwater Beach have to offer.

- Network with a diverse group of professionals
- Learn about the latest products, services and technology
- Be up-to-date on the latest legislative news
- Attend educational workshops and listen to inspiring keynote speakers
- Share new ideas about best practices

Visit www.fisstate.org to get the latest information on details and registration.

We hope to see you there!

Florida Irrigation Society
Managing Every Drop

PRSRT STD
US POSTAGE
PAID
MID-FL FL
PERMIT NO. 392

Florida Irrigation Society
Managing Every Drop[®]

Florida Irrigation Society, Inc.
P.O. Box 13502
Tampa, FL 33681

INTRODUCING THE MOST EXCITING NEW MOBILE APP IN THE INDUSTRY

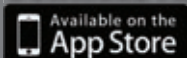
This FREE app is designed to save you valuable time by putting everything **Irritrol** in one place. Find the latest information on:

- Promotions
- Installation guides
- Bidding specifications
- How-to videos
- Product images
- And much, much more...



PRO ONLY

Download **FREE** at



Irritrol[®]
For Professionals Only.™