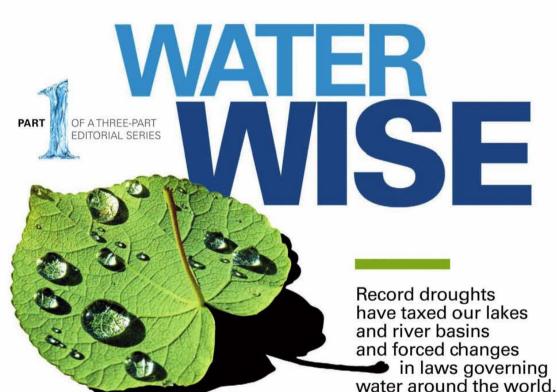
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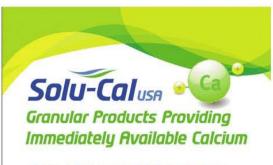


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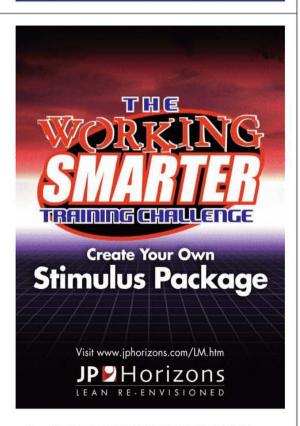
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THEHALLMARK

RON HALL EDITOR-AT-LARGE

Contact Ron via e-mail at rhall@questex.com.

Saving water and growing a legacy

ames "Jay" Livingston Fraleigh is a proud and progressive grower. It's a lifestyle he is familiar with as he's the sixth generation in his family to work the family farm, which is now Gro-Eco wholesale nursery, near Madison, FL.

Fraleigh is also a businessman. In 1999, he founded the plant nursery that's just a short drive south of the Georgia state line. He directs the more than 90-acre operation with the help of his wife, two sons and about 50 other co-workers (during peak season).

A wholesale plant nursery is one of the first links in the Green Industry supply chain. But like every other link in the chain, it is being asked to produce and deliver its products and services in a more environmentally friendly way. This includes reducing its water and energy footprints.

Fraleigh began getting ahead of that curve a decade ago when, after months of study and hundreds of drawings, he engineered a new way a less water-intensive, more efficient path to grow healthy, hearty landscape nursery plants. He named it the Gro-Eco Growing System.

The patented system uses raised beds where container plants are placed in protected sockets overlaid with a drip irrigation system. The

Fraleigh says his patented Gro-Eco Growing System saves 85% in water usage compared to traditional irrigations systems.

automated drip irrigation system applies the water directly to each plant, and only the amount of water each plant needs. Fraleigh says the system saves 85% in water usage compared to traditional irrigation systems. He estimates it is saving more than 100 million gallons of water annually.

"I'm not digging ponds and ditches and trenches and becoming a waste water treatment plant. Environmentally, it's the best way I have seen to produce container plants," says Fraleigh.

There also is an irrigation line in the middle of the bed that maintains the proper temperature for the root system, even in harsh weather. The soil protects the roots of the plants from bitter winter cold (yes, north Florida gets freezes) and scorching summer heat. And with containers surrounded by soil, employees no longer have to set them upright again after a strong blow.

Gro-Eco plants, recognizable by distinctive blue labels, are available at retail nurseries throughout the Southeast. His long-term goal is to establish Gro-Eco Growing Systems elsewhere across the United States — close to locations, including retail outlets, where significant numbers of ornamental plants are sold. Buyers, including the big box stores, increasingly will favor local suppliers for environmental and also economic reasons, he believes.

In 2007, Fraleigh was awarded the Agricultural Environmental Leadership Award by the Florida Department of Agriculture. He says he is flattered by the recognition but stresses he created his production system for a more fundamental reason.

"I did this because I love the industry and at the same time I wanted to improve it," he says.

Fraleigh recognizes the great responsibility he has to his family and employees. But he's equally aware of his responsibility to preserve the resources of the region, especially its soil and water resources. The farm has been in his family since the 1840s, and he views the legacy he leaves to the land's seventh generation, sons Russell and Lane, as central to his life's work.



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GIC places emphasis on sustainability

The president and president-elect of PLANET offer insight on how next month's Green Industry Conference will help professionals truly 'go green.'

BY DANIEL G. JACOBS MANAGING EDITOR

nglish is a living language,
and words have a tendency
to shift meaning over time.
Different groups claim them
— some might argue hijack
them — to serve their purposes.

"Green" and "sustainability" are two terms whose meanings essentially have been lost to the Green Industry because other groups have finagled their way into the "green" discussion.

Landscape Management spoke with Bill Hildebolt, president of the Professional Landcare Network (PLANET), and David Snodgrass, the president-elect, about those words and about the upcoming Green Industry Conference (GIC), which runs along side the GIE+EXPO in





Louisville, KY, next month.

"It's all about emphasizing professional in the Professional Landcare Network," says Hildebolt, owner of Nature's Select Premium Turf Services, Winston Salem, NC.

The problem, he adds, is that outside the landscaping world, the concept of continued on page 10







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PLANET's Breakfast With Champions roundtables again will be held each morning.

continued from page 8 what constitutes a "green industry" has been co-opted by other interests.

"We want to advance and take the lead in sustainable practices, and show the world we are the original Green Industry," says Snodgrass, president of Dennis' Seven Dees, Portland, OR.

That will require retaking control of

the "green" message and teaching contractors to embrace sustainable business practices and lifestyles. Neither task will

"If you ask a group of 100 people what 'sustainability' means, you'll get 100 different perceptions - 90 of them negative," Hildebolt says. "The term has been co-opted by activists and used



against us so many times.

"But we are the professionals, the true stewards of the environment," Hildebolt adds. "What we're working toward is: How do we integrate sustainability into PLANET so we can be known as the true leaders in this increasingly key area?"

Learning from one another

Much of that begins with the educational programs at this year's GIC.

"Some are well ahead of others in adopting sustainable practices," Snodgrass says. "We're going to share their best practices at GIC - elevating the industry as a whole and changing and greening how we think and operate.

"This whole sustainability movement started out all about the ecology of the planet," he continues. "Now it's much broader - encompassing the necessary people and profit parts."

At GIC, top professionals in the industry will share ideas and strategies regarding sustainability and lean management, Hildebolt says. And those messages will continue through other PLANET-sponsored events in 2009 and beyond.

"We are developing a continual sustainability learning experience that will follow us from venue to venue," he says. "Last November, we had an outstanding Crystal Ball meeting on sustainability. We had a really healthy, frank discussion on what sustainability means to regulators, the public, the service sector and opinion formers."

Naturally, that discussion led to new educational opportunities at GIC.

"We're looking at how you can sustain your personnel, as well as your personal health and well-being and that of your family," Hildebolt says. "We're also looking at educating members on the many paths to increased profitability through sustainability."

Embracing sustainable business practices and lifestyles also will help the Green Industry manage the message and public perceptions.

"If you're not taking care of yourself and you don't have a profitable business model, you won't be sustaining much of anything," Hildebolt says. "At PLANET, we're taking a holistic approach." LIM



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GIE+EXPO schedule

GIC keynote speakers

Rick Ascolese, President & COO, TruGreen LandCare

As President and Chief Operating Officer, Ascolese oversees the operational and strategic direction of TruGreen LandCare. Throughout his 20-year career, Ascolese has held several leadership positions with some of the industry's most-innovative companies and has applied successful strategies to numerous business models including mechanical services (appliances, HVAC and plumbing), home warranty and landscape maintenance.

Scott Brickman, CEO, Brickman

Since assuming the position of CEO in 1998 at the age of 35, Brickman has grown the privately held commercial landscape maintenance firm, founded by his grandfather, from \$100 million to \$500 million in annual revenues. Today, the company has more than

6,000 employees, 135 branches in 23 states and provides quality commercial landscape services to thousands of office parks, hotels, cemeteries, health-care facilities, retail centers, homeowners associations and schools.

Craig Ruppert, CEO, Ruppert Companies

Ruppert is the CEO of Ruppert Companies, comprised of Ruppert Landscape a commercial landscape construction and management company with branches across several states; Ruppert Nurseries, a wholesale tree growing operation with more than 800 acres; Ruppert Properties, which develops, owns and manages industrial/ flex warehouse properties; Ruppert Ventures; and the Ruppert Foundation.

Note: LM Editor-in-Chief Marty Whitford will serve as the GIC keynote panel's moderator:

WEDNESDAY, OCTOBER 28

7:30 AM - 3:00 PM	PAC Golf Outing
9:00 AM - 12:00 PM	Workshops – Paluch and Harwood
11:00 AM - 5:00 PM	Maker's Mark Distillery To
1:00 PM - 4:00 PM	Workshops – Kehoe and Hayter
5:00 PM - 6:30 PM	New Member/1st Timer's Orientation — Sponsor: Baye Environmental Science
7:00 PM - 8:30 PM	Welcome Reception – Sponsor: Cub Cadet Commerci
8:00 PM - 10:00 PM	PLANET'S Live Auction

THURSDAY, OCTOBER 29

7:00 AM - 8:30 AM	Breakfast With Champ - Sponsor: Caterpillar Inc
9:00 AM - 5:00 PM	GIE+EXPO Show*
9:30 AM - 11:00 AM	Concurrent Sessions
2:00 PM - 3:30 PM	Concurrent Sessions
5:00 PM - 6:30 PM	PLANET Keynote -

Sponsor: John Deere
6:30 PM - 7:30 PM Specialty Group Receptions

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7:00 PM - 10:00 PM Concert on 4th Street

FRIDAY, OCTOBER 30

7.00 AIVI - 0.30 AIVI	Sponsors: Ewing Irrigation Products and Mulch Mule by Green Industry Innovators
9:00 AM - 5:00 PM	GIE+EXPO Show*
9:30 AM - 11:00 AM	Concurrent Sessions
1:00 PM - 2:30 PM	Concurrent Sessions
2:45 PM - 4:15 PM	Concurrent Sessions
4:00 PM - 5:00 PM	Faculty Forum
5:00 PM - 7:30 PM	Awards Presentation – Reception Sponsor: Husqvarna
6:00 PM - 8:30 PM	Student Industry Roundtabl
7:00 PM - 10:00 PM	Concert on 4th Street

SATURDAY, OCTOBER 31

7:00 AM - 8:30 AM	Breakfast with Champions
8:30 AM - 12:30 PM	Certification Exam
9:00 AM - 1:30 PM	GIE+EXPO Show*
9:30 AM - 10:30 AM	Concurrent Sessions
10:45 AM - 11:45 AM	Concurrent Sessions

All Green Industry Conference sessions will be held at the Louisville Marriott Downtown unless otherwise noted.

^{*} Held at the Kentucky Exposition Center

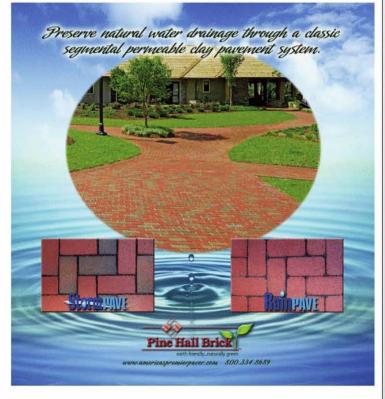


PHOTO BY: ISTOCK INTERNATIONAL INC.

What a beautiful blue world

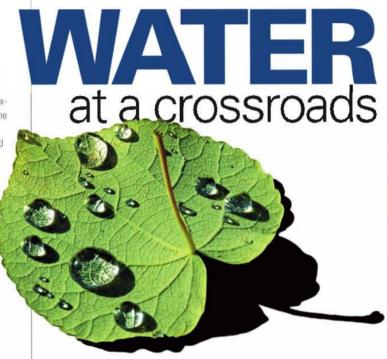
As I begin researching this report in July, the reassuring voice of ABC news anchor Charles Gibson seeps into my office from an adjoining room. He's recounting that exactly 40 years ago, Neil Armstrong became the first human to step onto the moon.

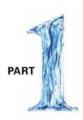
Oh, what Armstrong saw as he looked from that barren, rock-strewn landscape into the vastness above him: a huge blue sphere streaked with wisps of white. four times larger than the silvery orb that dominates our skies at night. Like the handful of astronauts and cosmonauts preceding him into space, he marveled at Earth's beauty, a sight so unlike any other in the inky sea of the universe peppered with innumerable tiny points of light.

The beauty of Earth - indeed, the miracle of life - is the gift of its most precious resource: water.

On the following pages, and in the October and November issues of Landscape Management, you'll read about vital water issues. You'll develop a better understanding of how our industry fits into the picture of fresh water's availability and its conservation, globally and regionally. You'll also learn about emerging ideas, technologies and partnerships to guide your business and the Green Industry wisely in terms of intelligent water use now and in the future.

Our sincere thanks to Rain Bird for making these reports possible. - Ron Hall





How Australia, Texas and states fed by the Colorado River are meeting the challenges of landscape irrigation with dwindling water resources

A Texas-sized water challenge

The second largest state in the union has huge water problems. The Colorado's uncertain future

Areas fed by the Colorado River need to go on a water diet.

A climate change of attitude

Australia serves as a testing ground for water strategies.

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EVERY DAY, WE MAKE CHOICES — choices that directly affect our families, our communities and our environment. But will our choices leave behind a better world for future generations than the one we inherited?

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Our commitment to The Intelligent Use of Water extends beyond our products to initiatives aimed at educating the industry and the community on the need for and best practices of outdoor water efficiency.

Through the annual Intelligent Use of Water Summit, Rain Bird brings together some of the world's leading experts on water, irrigation and conservation to openly

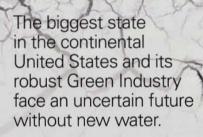


discuss and debate water-related issues. From our well-documented white papers to the curricula we've developed with leading educators, Rain Bird constantly seeks out new ways to build a better understanding of water's economic and environmental roles.

We also believe that building partnerships with likeminded individuals and organizations is a powerful way to inspire change. Rain Bird partners with organizations like the GCSAA's Environmental Institute for Golf and the American Public Gardens Association to promote responsible water management.

Rain Bird is dedicated to environmental stewardship, and this commitment is woven into the very fabric of our organization. In the future, we will continue to develop both products and initiatives that have the potential to inspire responsible, informed choices about the way we all use water each and every day.





BY RON HALL EDITOR AT LARGE

Texas-sized water challenge

exas is on a collision course with its fresh water resources. If the state doesn't develop new sources of fresh water and convince Texans to mend their water-wasting ways, its future economic vitality is in jeopardy.

Who says? The 2007 State Water Plan, the latest in a series of reports developed every five years by the Texas Water Development Board. The plans attempt to project the state's water needs 50 years into the future.

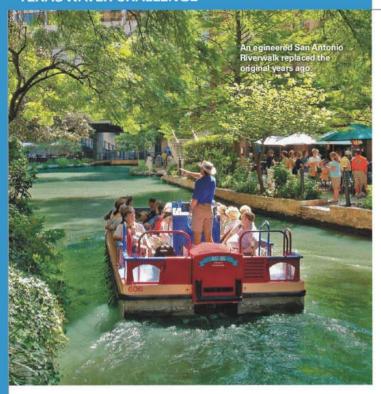
But long before the state's economic engine stalls, the Green Industry already would've been squashed flatter than an armadillo attempting to cross Austin's I-35 during rush hour. While all other uses of water are expected to increase into the future, the plan is calling for a gradual decrease in water used for irrigation.

The visibility of the Green Industry's water use and the perception it's wasting water (justified in many instances) guarantee it will be one of the first industries dramatically altered or sacrificed in the name of conservation.

A Green Industry without irrigation? Yes, it could happen, says Todd Magatagan, president of the Texas Turf Irrigation Association (TTIA), a 40year-old organization of licensed irrigators based in Plano. That's the bad news.

"Too often, the politicians have turned a blind eye on water supply and building new infrastructure and the irrigation industry is paying the price for this," says Magatagan.

The good news is it needn't happen. Apart from California or Florida, no other state in the union has a broader and deeper array of public and private agencies and entities (Green Industry associations included) focused on protecting and expanding the state's water resources. Encouragingly, many of these groups, especially industry groups, are starting to communicate. Case in point: the growing cooperation between the TTIA and the Texas Nursery & Landscape Association and also with the 10 regional irrigation associations in Texas.



Time to act is now

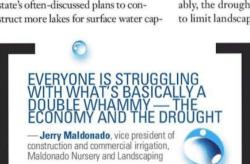
Everyone in Texas, it seems, understands the stakes. But Magatagan asks, do these entities have the will and foresight to spend the money to address its water needs?

"So far, cities have been spending money on what they see as sexier projects," he says. "There's nothing more vital to our state than water."

Consider this warning from the Texas Water Development Board's 2007 State Water Plan: "If Texas does not implement new water supply projects or management strategies, then homes, businesses, and agriculture enterprises throughout the state are projected to need an additional 3.7 million acre-feet of water in 2010. By 2030, this figure rises to nearly 5.9 million acre-feet and by 2060 it increases to 8.8 million acre-feet. In 2060, slightly more than 85% of the state's population is projected to have water needs." (Note: an acre foot of water = 325,851.4 gallons.)

In light of the realization the state's future economic health is dependent upon adequate supplies of fresh water, a sense of urgency is creeping into the state's often-discussed plans to con-

struct more lakes for surface water cap-



ture and storage and also to consider desalination plants on its Gulf Coast.

Fueling that urgency, like kerosene on a bonfire, is a devastating drought, now approaching its third year, which this summer teamed up with weeks of triple-digit temperatures to ham-

mer south central Texas. By August. 20% of the state was experiencing "extraordinary" drought, reminding some old-timers of the withering 7year (1948-1955) "drought of record" that caused huge losses to the state's agriculture and livestock.

San Antonio in south central Texas sits at Ground Zero of the current drought. Visitors to this, the seventh largest city in the United States, cannot appreciate the severity of the drought by touring its two most popular destinations, the Alamo, the historic shrine featuring two verdant acres of grass and gardens, and its world-famous Riverwalk. Sitting at an outside cafe and watching flat-bottomed riverboats filled with tourists leisurely motoring by, one can be forgiven for not guessing the engineered waterway, snaking just below the bustling city overhead, replaced the original San Antonio River long ago.

The progressive San Antonio Water System (SAWS) provides water to more than 1.2 million customers, and aggressively protects the region's primary source of fresh water, the Edwards Aquifer. Predictably, the drought has caused SAWS to limit landscape irrigation to a

single day a week.

For the most part, the Green Industry is adapting and works closely with SAWS, says Michael Brown, owner of The Grass is Greener Landscape Inc., and past president of the San

Antonio Irrigation Association. San Antonio offers more than its share of challenges to the Green Industry, thanks to an incredible range of landscapes, from older designs loaded with subtropicals to more recently installed drought-tolerant xeriscapes, Brown

says. The topography of the region is just as varied.

"There are some areas in the region where you only have an inch or two of topsoil over rock," he says. "You can't grow landscapes on rock."

Hydrozoning, the concept of selecting and grouping plants with identical water needs within a landscape, is the only option when designing and installing landscapes in San Antonio, Brown says.

Jerry Maldonado, vice president of construction and commercial irrigation for Maldonado Nursery and Landscaping, says he can't remember a hotter or drier summer than the one San Antonio experienced this year. That's saying something. The company he, his two brothers and his father founded almost 25 years ago has grown through just about every condition central Texas has thrown at it.

"We've been through this before and have experienced some sort of irrigation restrictions just about every year, but never this bad," Maldonado says. "Everyone is struggling with what's basically a double whammy — the economy and the drought."

"Once-a-week watering isn't enough to save a lot of landscapes in this heat," Maldonado says. "And we're losing a lot of trees, too."

Irrigating big commercial properties is especially difficult because some of them are too big to water in one day a week, he adds.

SAWS instituted the once-a-week watering restrictions to protect the region's principal source of fresh water, the Edwards Aquifer. SAWS bases its action on the level of the aquifer, which can rise or fall rapidly depending on rainfall within the aquifer's 8,000-sq.-mile boundary. SAWS taps 92 wells to draw its water from the aquifer, although it was the aquifer-fed springs and rivers that originally drew the first settlements to the region hundreds of years ago.

The drought has shriveled demand

TEXAS RESEARCHERS INVESTIGATE 'SMART' IRRIGATION

OVERTON, TX — A new study being conducted by Dr. Karl Steddom, AgriLife Extension plant pathologist, and Dr. Lloyd Nelson, ryegrass breeder with Texas AgriLife Research, compares the effectiveness of different irrigation systems using smart controllers to prevent overwatering of home lawns, athletic fields and public parks. Steddom and Nelson are conducting the study at the Texas AgriLife Research and Extension Center. The East Texas Irrigators Association is cooperating with the study.

"Water conservation is a big issue in Texas," Steddom says. "Legislation is coming that will require professional turfgrass managers—and eventually homeowners, too—to install smarter irrigation systems."

Though the study is being done in East Texas, the results should be applicable to much of the state.

"Turf irrigation demands in East Texas are highly variable," Steddom says. "Our sandy soils and intermittent rainfall patterns result in frequent fluctuations between periods





of low and high water demand. This makes this location an ideal or a worst case scenario to evaluate these new approaches to irrigation scheduling."

Professional landscapers and irrigation installers are some of the most important stakeholders in the research, says Todd Magatagan, president of the Texas Turf Irrigation Association and past president of the East Texas Irrigators Association. As smart controllers become used more widely, it'll be the commercial installers like Magatagan who'll need to know which products and technologies prove to be the most reliable for customers.

"We're in phase one of this project," he says. "Phase one creates a baseline, but phase two will run actual products that are on the market and give us an independent testing method where this type of intelligent controller or this one works better."

In commercial systems, the sophistication of off-the-shelf smart controllers ranges from those that try to estimate evapotranspiration to those that actually measure soil moisture.

"The number of (commercially available) smart controllers is growing every year," Magatagan says. "(At this time), we expect to be testing about a dozen smart-controller systems."

for residential irrigation systems, Maldonado says. "They figure if they can't use them, why put them in," he says.

But Maldonado's company continues to install systems on commercial sites. And even though the San Antonio market has been aware of the efficiencies of drip irrigation for landscape beds, its popularity among property owners remains much less than Maldonado wishes.

It's almost nonsensical to discuss the average weather for central Texas, says Deborah Cole of Greater Texas Landscapes (GTI), which has locations in Austin and San Antonio. This is especially true for the region's average temperature or precipitation. After all, what does average mean in a state where Beaumont, on the state's humid Gulf Coast, averages 55 in. of precipitation annually and El Paso, in the rocky West, receives 10 inches of rain?

That's a lot to ask of average in a landmass of 268,000 sq. miles and a climate that varies dramatically with 10 recognizable climate divisions, Cole says. You work with the weather Texas gives you, which can be just about anything, including drought.

"People have finally decided it's OK to have things in their landscapes other than grass and other green plants," Cole says. "For years, we've had a hard time trying to convince people to consider options other than grass. They didn't understand we weren't talking about just rocks and cactus. Now people are beginning to see we're able to do creative things with different textures and colors of material, including rocks, boulders and gravels, and the many native and adapted plants that are now readily available," Cole says.

"Actually, we've had nurseries supplying beautiful native and droughttolerant plant material for years, thanks to the late Lady Bird Johnson and her love of wildflowers," she adds.

But, as healthy as the Green Industry remains in the state in spite of the drought, its long-term future is problematic.

If water authorities and local politicians don't address the water needs of their cities' growing populations and development, some industries will almost certainly be denied access to fresh water. First on that list could very well be irrigation for landscapes and turfgrass, says Magatagan.

Actually, he says, the stakes are much greater than that.

Heed the words of the Texas Water Development Board's "2007 Water Plan" in assessing the state's potential water shortfalls:

"Needs of this magnitude are projected to cost businesses and workers approximately \$9.1 billion worth of income in 2010. By 2060, this figure increases to roughly \$98.4 billion. Forgone state and local business taxes associated with lost commerce are projected to amount to \$466 million in 2010 and \$5.4 billion in 2060." LIM

SAWS at a glance

The San Antonio Water System covered 620 sq. mi. and, as of the end of 2007, served 344,261 customers and had a water capacity of 899.7 mgd. Here is how that water was distributed.

CUSTOMER TYPE	NO. OF CUSTOMERS	CUSTOMER TYPE BY %	% OF WATER DEMAND	
Residential	321,177	93.29%	54.92%	
Commercial	18,575	5.40%	23.74%	
Apartment	3,447	1.00%	15.49%	
Industrial	153	0.04%	4.22%	
City of San Antonio	808	0.23%	1.20%	
Wholesale	7	<0.01%	0.20%	
Bexar Met	1	<0.01%	<0.01%	
SAWS Mtrd.	113	0.03%	0.23%	

Source: San Antonio Water System

Future Texas water needs

Population in Texas is expected to more than double between the years 2000 and 2060 and demand for water there is expected to increase by 27%. Even so, the amount to be used for irrigation (agricultural and urban) is expected to decrease by more than 15% during the same period.

YEAR	POPULATION	TOTAL DEMAND (acre ft.)	IRRIGTION DEMAND (acre ft.)
2010	24,915,388	18,311,828	10,345,131
2020	29,117,537	19,010,876	9,980,301
2030	33,052,506	19,567,048	9,585,833
2040	36,893,267	20,104,592	9,206,620
2050	41,071,409	20,758,602	8,843,094
2060	45,588,282	21,617,274	8,559,244

Source: "Water for Texas 2007"

The Colorado's uncertain future Contraction State South

ESIDENTS OF Las Vegas and its surrounding areas are all too familiar with them. Residents of other Southwestern states who rely on the Colorado River might be familiar with them sooner than they think.

They're water restrictions.

Even though there aren't mandatory widespread restrictions in states such as Utah, Colorado and Arizona, water authorities and landscape contractors

are keenly aware of how the precious resource is used. They are taking steps to educate their customers.

"It's only a matter of time before regulations and standards for irrigation are implemented in the residential market," says Jason Isenberg, owner/landscape designer of Tucson-based Realm (formerly Urban Organics Landscaping). He adds that some restrictions and guidelines in the commercial sector in Tucson exist already. "It horrifies me ... the situation we're in and how far we let it go."

"Even though we have a lot of extra water in Mesa

Contractors in the Southwest are changing how they work with landscapes, thanks to a drought stricken Colorado River.

BY JOHN WALSH

County, there's a lot of associations pushing conservation," says Dan Komlo, partner and landscape manager of Brookcliff Gardens, Grand Junction, CO. "We need to teach the public about conservation today and down the road."

"Limits on water will increase, and there will be conversion from traditional landscaping," predicts Bob Johnson, an affiliate with Loveland, CO-based Water

Consult, which offers advice and assistance to water agencies about water development programs.

Though regulations vary from city to city, drought restrictions in Nevada, for example, include:

- > Assigned watering days and seasonal watering restrictions;
- > Limits on decorative fountains and driveway car washes;
- Development codes prohibiting turfgrass in front yards and restricting it in back yards; and
- Incentive programs that rebate money to people who make other water-efficiency improvements.

Colorado River at a glance

- > 1,450 miles long
- > Begins in the Rocky Mountains and flows into the Gulf of California in Mexico.
- > Supplies water to more than 25 million people, and irrigates about 3.5 million acres of farmland.
- More water is exported from the Colorado River's basin than any other river basin in the world.
- > Flows through Utah, Wyoming, Colorado, New Mexico, California, Arizona and Nevada. All of these territories have rights to the river under the Colorado River Pact of 1922.
- > Approximately 87% of the water leaving Colorado flows out of the Colorado river basin toward the Pacific Ocean. The remaining 13% flows out of the Missouri, Arkansas and Rio Grande river basins toward the Atlantic Ocean. The Colorado River accounts for 25% of the stream flow leaving the state.

UNCERTAIN FUTURE



A little bit of logic

To be effective, restrictions need to make sense, asserts Doug Bennett, conservation manager of the Southern Nevada Water Authority in Las Vegas.

"Dictating the time you can water doesn't make sense, because different systems deliver water differently," Bennett says. "When people create laws and policies that are hard to enforce, it drives me nuts. They are knee-jerk reactions. Then things go away, and people try something else."

Those "knee-jerk reactions" can be avoided, he adds, by working with people in the Green Industry.

"The Green Industry has the biggest stake in water conservation," Bennett says. "People need to understand their choices."

Since 2002, the Las Vegas Valley has reduced its overall water consumption by about 20.5 billion gallons, despite the arrival of 400,000 new residents and almost 40 million annual visitors. Landscape contractors can, and should, use the regulations to sell other services. After all, they are equipped to lift the burden of water restriction compliance from their customers.

Understanding the river

People in California, New Mexico, Utah, Colorado, Nevada and Arizona depend on the Colorado River, which has suffered historic drought the past nine years (two-thirds its normal average), Johnson says. Arizona and Nevada, both of which have led population growth in the U.S., are more dependent on the river than Utah and Colorado, which haven't used their allotments.

The Colorado River, which nourishes Lakes Powell and Mead, has two basins: The Upper Basin includes Utah, Colorado, Wyoming and New Mexico. The Lower Basin includes Nevada, Arizona, California and Mexico. The Colorado River Compact, which was made in 1922 and ratified by Congress in 1928, divided the Lower and Upper basins equally, each receiving 7.5 million acre-feet of water



- 1. Planning and design
- Efficient irrigation systems, properly designed and maintained
- 3. Use of mulch
- 4. Soil preparation
- 5. Appropriate turf
- 5. Water-efficient plant material
- Appropriate maintenance

For more information about these principles, visit XeriscapeNM.com.



per year. In 1944, Mexico was allocated 1.5 million af. The Lower Basin states can't buy from Upper Basin states.

"That has been debated for years," Johnson says. "Some want to allow it; others are vehemently against it."

The average flow of the river during the past 100 years has been 15 million af, but 16 million af have been allocated, Johnson says. Other studies, using tree growth, indicate the average amount of water annually during the past 500 years is 12 million to 14 million af. But no matter the study, they all conclude there's less water.

"Some people say the water amount in the 100-year study was unusually high," he says. "Modeling scientists say climate change will reduce flows. Reservoirs are at 50% of capacity, which is 60 million af. The system is half-full now. The Upper Basin hasn't developed its allotment. It has used only 4 million or 5 million af."

Some people are optimistic about water levels; some worry what will happen if the droughts continue. Others say climate change is having a negative impact on the river.

"We should take a conservative approach and say it won't get better," Bennett says.

Implementing restrictions

Any regulations put on end users would come from water entities in the basin, Johnson says, adding that municipalities and water districts have a responsibility for water management. How aggressive they are with end users in urban areas is up to them.

When it comes to restricting water use, landscape is one of the first because it's not a health or human safety issue, Bennett says.

"It's considered a luxury, and will make a sacrifice before other industries do," he says, adding that about 75% of all the water from the Colorado River goes to agriculture. "There are many rules and regulations that dictate who gets what and when in urban areas. Agencies can shut off water if there are chronic violators. The property owner is responsible."

Unlike Las Vegas and Phoenix, Grand Junction, CO, in Mesa County is lucky to have two major drainage systems flow through it: the Gunnison and Colorado rivers.

"We do have an incredible water supply," Komlo says. "We're blessed. Denver envies us. Our annual rainfall ... if we can get 9 in. a year, it's a wet season. Without a river

flowing through here, we'd have unusable landscape."

There are other sources of water other than the Colorado River in Mesa County, of course. There

are huge aquifers in the Front Range, and 0.05% of the water in the county comes from wells, which are expensive to drill.

Contractors step in

More homeowners and commercial properties will be converting to desert landscaping because of water-use concerns, and that's a boon to landscape

contractors, Johnson says. Some landscapes were designed 30 or 40 years ago and need to be redesigned.

Bennett recommends contractors work with water authorities to make it easier for customers to get rebates and understand laws and policies.

Isenberg agrees. "From a design standpoint, we consider water with every step we make," he says. "Design is the first important step in water conservation. The use of invasive and non-invasive plants, how to make space usable, how water moves through a space, minimizing erosion and pooling ... these are the things we think about."

In the commercial sector, there are standards for new construction in Tucson — and similar standards are in the works for the residential sector, Isenberg says.

"Water is a central issue, yet people don't take a conservation approach to water because it's been taken for granted for so long," he says. "Now we don't have a choice. People are resistant to limit water use. The city of Tucson could pull in revenue by fining people who misuse water."

Many people may still think of xeriscaping as just cactus and rock, but that's not so, Isenberg says.

"That's the biggest hurdle for us," he says. "We usually say xeriscaping isn't a style, it's a tactic, an approach. For example, our xeriscaping award project (see photos) is a super-modern, chic landscape with concrete, glass and steel. It didn't fit the typical model of xeriscaping. You can apply xeriscaping tenets to any landscape.

"The key is that the water conservation efforts and landscape can't be bohemian," he adds. "It has to be approachable and appropriate. It needs to have sex appeal."

Technology

There's a lot of smart technology that can save homeowners money on their water bills and protect their landscape investment, Eisenberg says. Envirotranspiration (ET) clocks with in-ground sensors in which soil moisture dictates

watering is an example.

"We need to divert water to where it's needed, and capture water to save it for later use," he says.

Komlo cites match precipitation, drip irrigation, smart clocks and twowire systems for better computer control as examples of technology that will help guide the Green Industry toward the future of water conservation.

"There's always innovation with turf and shrubs and plants for drought tolerance," he adds.

The river ahead

Most cities in the Southwest will continue to grow, so there will be more pressure on water sources. In addition to the Colorado River, other water sources exist. Aquifers are an example, but they tend to be located in unpopulated areas and are distant from demand. Many predict that water will become more expensive, too.

"Water rates in Vegas have increased 500% since 1990," Bennett says. "Landscape contractors need to understand their customers' water sources and rates."

Water conservation needs to be a national effort, Komlo says, adding that drip irrigation, which has been used since the 1980s, has been a big turnaround for the Green Industry.

"Before that, we were watering (flower and shrub) beds like lawns," he says. "It started in California. Rain Bird, Toro, Ewing and Hunter worked to help contractors conserve water and make money." LIM

WALSH is a Cleveland-based freelance writer. Contact him at info@landscapemanagement.net.



A climate change of attitude

Australian policymakers are talking global warming and its implications for the country's fresh water resources.



BY RON HALL EDITOR AT LARGE

Australian water at a glance

- > Population 22 million; projected population of more than 39 million by 2056
- > Continental area of 2,680,000 sq. miles (10 times larger than Texas)
- > On average, 90% of rainfall is directly evaporated back to the atmosphere or used by plants; only 10% runs off to rivers and streams or recharges groundwater aguifers
- > Household water consumption, about 75 gal. per person per day
- Household water use decreased by 8% from 2001 to 2005
- > Household use of reused or recycled water increased from 11% to 16% from 2001 to 2006

Source: "Australian Water Resources 2005," Australian Government, National Water Commission

USTRALIA, THE driest inhabited continent on earth, is a testament to man's industriousness, creativity and, perhaps, to his arrogance by choosing to live wherever he desires.

International attention is focusing on the water issues facing this continent, 80% of which is desert or semiarid. In a sense, it's the Earth's test tube for global warming, especially in terms of water resources.

Australian scientists and policymakers are taking climate change seriously. They're preparing the country's water and energy sectors in anticipation of significant environmental changes.

"I don't care if you believe in climate change or not, but you're a bit of a fool if you don't manage the risk," says Dr. Bryson Bates chief scientist with the Australian Commonwealth Scientific and Research Organization (CSIRO). "We're seeing strong evidence from climate research, and we seem to be locked into a drying cycle into the future."

Evidence of rapid, global change

is impossible to ignore, Bates says. It's most obvious manifestations are:

- > melting ice sheets and caps
- > melting glaciers
- > melting permafrost
- > ocean acidification
- > atmospheric circulation changes
- > ecosystem changes.

Bates' belief is supported by a recent report from the Australian Climate Change Science Program, claiming, that during the past 30 years, there has been a dramatic shift in the country's climate, which is affecting storm tracks in southern Australia. The shift has resulted in a 30% reduction of storm growth rate, meaning less rainfall throughout southern Australia.

Put in perspective

While it's believed the continent has been inhabited for about 50,000 years, it wasn't until 1788 when ships began disgorging England's excess population that today's Australia began taking shape. The newcomers quickly set about attempting to transform the vast island continent into a facsimile of their former homeland.

But Australia, apart from the common language, isn't like England. The two are quite different geographically and climatically.

Australia's 22 million people are concentrated in and around a few cities on the eastern, southern and southwestern coasts. And Australia is drier, much drier. Much of the most inhabited and agriculturally important areas of the continent are in the grips of a withering 7-year drought.

For all of these obvious differences, Australians are finding old habits are hard to break, especially when it comes to landscape irrigation. They are, like today's garden-loving Brits, passionately attached to their landscapes, lawns, golf courses and sports fields.

Changing habits

But break those habits they must. They're starting to get the message, says Greg Stewart, General Manager Total Eden, Chair of Irrigation Association — Western Australia Region.

Stewart cites a water emergency in the region in 2001 as a wake-up call

to the Green Industry in terms of landscape irrigation. The water corporation in Perth, the region's capital with a population of about 1.7 million, threatened a complete lawn-and-garden watering ban as the dams that supplied water to the city approached all-time lows.

Thanks to the action of a coalition of Green Industry associations, headed by the Irrigation Association of Australia (now Irrigation Australia), the water corporation agreed to twoday-a-week watering. Even with the restriction, the problem of landscape water waste persisted. Property owners merely increased their watering times and watered on days they

ADVANCES IN WATER-EFFICIENT IRRIGATION

Greg Stewart offered these product and product-use suggestions for boosting irrigation efficiency in Australia landscapes:

- Automatic controllers must come on when required, otherwise the watering day or period is lost. Controllers must not be overly complicated. They should have large, clear display screens.
- Low precipitation output and high uniformity rotary-type nozzles are becoming more popular for all the right reasons. They must be designed and installed correctly, and programmed for the correct run times.
- Inline drip and a mixture of well-placed bubblers, drippers and emitters are replacing the traditional spray method. Be advised, drip systems require more education, training and maintenance.
- > Soil moisture and rain sensors should be made mandatory for every automatic system in Australia, The price point needs to be under \$100.

weren't allocated.

What was needed and implemented was an aggressive, joint industry/water corporation effort to educate property owners about products and practices to allow them to water only twice a week while

> Greg Stewart

still maintaining attractive gardens and lawns, Stewart says.

The resulting media blitz focused

on convincing the public to restrict watering to 15-minute intervals during allotted times, adjust controllers regularly, use soil wetting agents and mulch, select and install water-efficient plants and implement proper maintenance

practices. These changes began to reduce landscape water waste, says Stewart.

Meanwhile, retailers were encouraged to train their garden staffs about efficient irrigation practices and products. Not only did it improve the advice retailers could offer garden product consumers, it resulted in increased sales of higher-priced, better-quality irrigation products.



Looking ahead

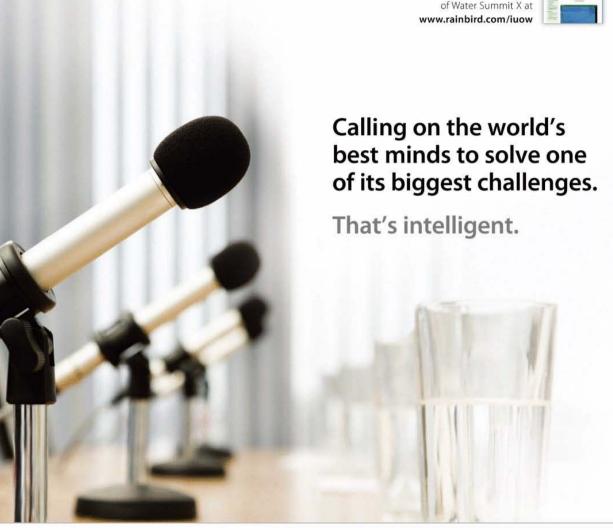
Water authorities and government agencies are united in preserving and adding to Australia's precious fresh water supplies. They're working with the Green Industry on a range of programs,

including irrigation-product testing and certification, to ensure citizen's have healthy lawns, parks and gardens.

Even as the nation brings alternative supplies of water on line, including using more reclaimed wastewater and construction of desalination plants, it'll continue to seek increased water-use efficiencies from the public.

"There's absolutely no point in putting in systems which reuse water, which capture rainwater, which recycle storm water unless we have maximized efficiency levels first," says Dr. Stuart White, director of the Institute for Sustainable Futures at the University of Technology, Sydney. "This is the largest and quickest contribution we can make to future water sustainability or energy."

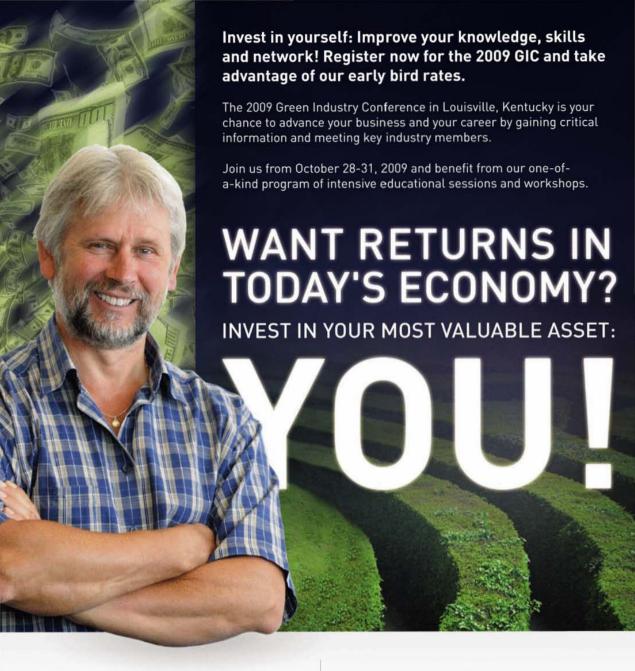
NOTE: Much of the information used in this article came from Rain Bird's "Intelligent Use of Water Summit X" in Melbourne, Australia, March 19, 2009.





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WORKINGSMARTER

JIM PALLICE

The author is president of JP Horizons Inc. Visit www.jphorizons.com.

How's your follow through?

n September 2008, Landscape Management ran the first Working Smarter column. Since then, we've discussed topics such as better understanding processes, adding value for customers, improving internal communication, getting (and staying) organized and bringing more celebration into your organization.

You've also been given a Monthly Challenge to move your company toward Working Smarter. I wonder how many of you accept our Working Smarter Monthly Challenge.

How many of you not only read it, but also follow through and improve something about yourself, your team and/or company?

There have been many a speaker, philosopher, athletic coach and parent who, having the opportunity to mentor an individual or an entire group, make the following prophetic proclamation: "There are three types of people: Those who watch things happen, those who make things happen, and those who ask, 'What just happened?"

After a year of Working Smarter columns and Monthly Challenges, let's pause and ask ourselves, "Which one of the three types of people best describes me?" and "Which one best describes my team?"

The 'Watch Things Happen' group

For you, the past year likely included reading this column (and Kevin Kehoe's, Bruce Wilson's and other tips in this key information resource), and thinking, "I need to start doing that."

Unfortunately, that thought usually leaves you the instant you set the magazine down, because you have not yet developed a discipline to follow through and turn ideas into action. Because of this, you have hundreds of ideas bouncing around in your head that now confuse and frustrate you more than help and guide you.

You will often mutter phrases like, "We tried that before," "We aren't doing too bad now, so let's just keep on doing this" or the all-too-popular "We are too busy and just don't have time." As a result, you continue to struggle and never reach your full potential. One day, you'll say, "I should have ..."

The 'Make Things Happen' group

When is the time to start getting better? Ask this group, and it will be answered with an enthusiastic, "Now!" Those people who make things happen simply have the courage to try something. Even if it does not work, they've had learning experiences that helped them or their companies expand their awareness of the need to Work Smarter.

This group realizes setting aside time to implement a new idea, train the team and communicate goals and accomplishments delivers a hundredfold payback in customer satisfaction, personal growth and improved business performance.

The 'What Just Happened?' group

Consider this: Why will some companies have their best year ever this year and some just get by — if they're lucky?

Ask that question of this group, and they will give you their scientifically verified answer of "luck." They never realize they are part of this group until it's too late. A year from now, they will ask, "What just happened to our business, our best customers and our top employees?" They will act surprised, but deep down they know the truth.

So what's it gonna be — Door 1, 2 or 3?



More than 250 Green Industry companies have participated in JP Horizons' Working Smarter Training Challenge (WSTC), typically saving tens of thousands of dollars annually. To learn whether your organization qualifies to participate in the WSTC, visit www.jphorizons.com/LM.htm today.



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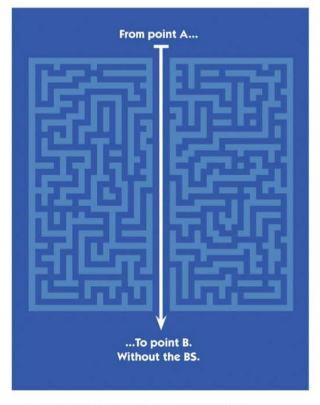
Aquascape ->

Like its larger predecessor, the Small AquaBasin is made out of black high-density polyethylene with an octagon shape that allows for maximum strength when installing and backfilling into the ground. It measures 30 in. front to back and left to right, with a depth of 10 in., and will hold 40 gallons of water. This smaller basin has a pre-drilled hole in the center of the reinforced deck, making it easy to connect the plumbing to the decorative feature. A 9- by 12-in. grated door on the top allows quick access to the pump to

adjust water flow. The deck can accommodate decorative features weighing up to 300 lbs. AquascapeInc.com or 866/877-6637

Sof'Solutions

With health and environmental concerns surrounding polyvinyl chloride (PVC), Sof'Solutions proactively has converted all of its surfacing products to a 100% "green" material, thermoplastic elastomer (TPE). The product lines include the colorful, flexible Sof'Shield Indoor/



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Sof-Solutions.com or 800/523-8690

Rain Bird

With its new self-extracting coil feature, Rain Bird's XQ 1/4-in. Distribution Tubing makes the dreaded task of untangling a thing of the past. It can be installed both above

and below grade, and features a textured finish for easier handling. Constructed of UV-resistant polymers, the tubing boasts a rating of 60 psi and is compatible with all 1/4-in. transfer fittings and barbed outlet ports. Available lengths include 100-, 250-and 1,000-ft. options; the 1,000-ft coil is

also available in a patentpending XQ Bucket for efficient use and storage. RainBird.com or 800/RAIN-BIRD

Vista Professional Outdoor Lighting

Models 2114 and 2115 are two new LED light fixtures designed for underwater use. The compact, rugged units are just 2-in. in diame-



ter. Both models are available with either 2.5- or 3.5-watt LED emitter packages to provide high impact light with minimal energy consumption. The fixture housings are available in brass or stainless steel, and feature a 15-ft. pigtail of 18/3 double-jacketed, water-resistant cable. VistaPro.com or 800/766-8478

Primera Turf

Myst continues as the season-long, premier wetting agent in the PrimeraTurf lineup. But the cooperative's expanded lineup now includes new Hydrate wetting agent for monthly maintenance programs



LMREPORTS

and new Gateway irrigation injectable wetting agent. Like Myst, Hydrate and Gateway contain wetting and spreading agents as well as re-wetting agents. The wetting and spreading agents allow applied water to enter the root zone, including areas previously affected by Localized Dry Spot. The water-conserving, surfactant-based, re-wetting agents included in

all three products were developed as part of a water conservation project in Europe and the United States. These water conserving agents help give consistent wetting properties over an extended period of time, to help improve water use efficiency and thereby reduce total applied water requirements. *PrimeraTurf.coop or* 440/748-0177





Honda Power Equipment

Honda's high pressure pumps are designed for moving clean, uncontaminated water - excluding drinking water or flammable liquids - from one place to another. Typical applications for the general purpose pump series include irrigation, flood control, light construction, fire fighting and swimming pool drainage. Leveraging Honda's quiet four-stroke engines, the pumps feature low-decibel use levels. The WH15 and WH20 (pictured) model pumps offer high pressure with a lower flow, designed for sprinklers, irrigation systems or use with hoses and nozzles. HondaPowerEquipment.com or 770/497-6400



Greenlee

Quickly and accurately track buried irrigation system wiring and valves with Greenlee's 521A wire and valve locator. Locate wire paths, buried valve solenoids, wire breaks and more. A high power transmitter allows for extended long range locating and use on higher resistance wire paths. Adjustable transmit power allows you to select the best signal for maximum performance. A lightweight, long-nose receiver wand lets you move quickly and locate long wire paths. Greenlee.com or 800/435-0786

Underhill

To help irrigation contractors save time and labor on large residential and commercial jobs, Underhill now offers 2Wire Decoder Modules that convert Hunter ICC Controllers to two-wire operation. With a 2Wire system, just a single pair of wires extends from the controller to



each valve in the irrigation network. The technology has proven to be a cost-saving alternative on sites with a quarter-acre or more because it requires less copper wire, reduces installation time and labor, and facilitates system expandability. When a system is expanded, the installer connects additional wire to the last field decoder in the network and can add as many zones as needed. No trenching back to the controller is required. Underbillus or 866/863-3744



King Innovation

Designed for low-voltage landscape lighting system wire splices, DryConn Black Series Waterproof Connectors are corrosion-proof, rated 600V, and are UL 486D listed and UL 1838 compliant. Each connector is pre-filled with dielectric silicone sealant that never hardens; instead, it tightly seals and waterproofs splices exposed to condensation, water, vapors or dust. The DryConn line of original black connectors includes Black/White, Black/Gray and Black/Blue. Multiple sizes and quantities are available. With one-step installation, no pre-twisting of wires is required. KingInnovation.com or 800/633-0232

Netafim USA

Originally developed for the row crop market, new DripNet PC provides an economical heavy-wall solution for irrigating permanent plantings with long runs and steep topographies with high uniformity. Its large filtration area prevents the penetration of dirt particles into the dripper, while the chemical-resistant, self-cleaning, self-flushing dripper diaphragm removes debris throughout the irrigation cycle. The dripper delivers

precise water applications at the industry's lowest regulating pressure: 6 psi. It's available with a wide range of flow rates and dripper spacing for spe-

cific application rates and control of wetting pattern in different soil types. NetafimUSA.com or 800/777-6541

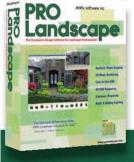


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THEBENCHMARK

KEVIN KEHOE

The author is the owner-manager of Kehoe & Co. Contact him at kkehoe@earthlink.net.

Mid-sized battle pricing pressures

t's hard to make money these days, but it's particularly challenging for mid-sized companies — those in the \$1 million to \$5 million annual revenue range. Aggressive pricing by players large and small is squeezing the middle, where overhead usually is a larger percentage of revenue.

Addressing this pricing/overhead problem is a matter of survival for some. For the rest, it's at least a matter of reassessing their business plans. Survival and success for the rest of this year and next for mid-sized companies requires focus, tenacity and no small amount of courage to implement changes.

How tough is it? This year, commercial maintenance contract retention has declined from typical 90% rates to 80% and lower in many markets. In the past few weeks alone, I've witnessed commercial maintenance jobs going for half of last year's prices. And in the residential design-build segment, mid-sized jobs — once everyone's bread-and-butter — have disappeared, leaving a few large jobs and several small ones. This has caused budget shortfalls of up to 25% in revenue.

As demand dries up and supply increases, prices drop. Commercial customers seem willing to "try anyone" who can provide a low price — triggering surprise cancellation notices that upset cash flow. Residential customers are seeking multiple bids and negotiating everything, lengthening sales cycles and reducing margins.

To survive, landscape companies must play defense and offense equally aggressively. While cost cutting is key, it's often only a short-term fix.

In commercial maintenance, **go after mid-sized jobs**. Few are effectively and consistently calling on this part of the market — and **it's large**.

Besides, most companies already are lean in staffing, which is the primary overhead cost.

Defend your livelihood

Get in front of your commercial maintenance customers to understand their budget pressures and propose contract adjustments in services and frequency of delivery to address price concerns. Then pick your battles where you need to rebid to retain the work.

You might need to "buy" some jobs just to keep them. And you will need to let some go to save your margins.

On the residential side, accelerate your design and closing processes to tighten selling cycles. Too many jobs are lost when customers have time to entertain multiple bids. Focus sales staff on making price concessions early in the process to get signatures and deposits.

Score big in the mid-market

In commercial maintenance, go after mid-size jobs. Few are effectively and consistently calling on this part of the market — and it's large.

Leave the large jobs to the low bidders for now. Ramp up your sales staff's new-appointment activity. Double your estimating capacity by using part-time and production staff for measurement and data input.

Go after the middle of the residential market as well.

Mid-market homeowners are easy to find by ZIP code. Use monthly direct mail and flyer campaigns with coupons and specific offers for maintenance projects for fall and winter, promoting value purchasing instead of pleasure purchasing. Examples include lawn renovations, drainage fixes, tree removal and irrigation improvements.

In an economy like this, when the customer owns the power to drive pricing, winning new sales while retaining key business is important — not only financially, but also for morale.



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LM'S OPERATOR OF THE MONTH >> BY RON HALL



Tupelo, home to 36,000 people in northeast, MS, is best known as the birthplace of Elvis Aaron Presley (1935-1977). But it's also home to lawn care pro Harry Collins who, decked out in colorful costume, also entertained audiences for years while serving as the auctioneer to raise funds during annual Green Industry Conferences. Today, Collins and his talented team are "peacocking" — proudly showing off their work and hot pink rides.

How long have you been in the lawn care business, and how did you get started?

I have been in the lawn care business since 1989, when I went to work with my partner, Pete Poland, who has been in the landscaping business since 1982. I started as a construction manager and shortly after started our lawn maintenance division.

Describe the state of the economy in and around

Tupelo, MS. Our economy has suffered like most of the rest of the country; however, we simply refuse to let it affect us. We are the premier landscape design, installation and maintenance provider in our area, and we continue to strive to do high-quality work at competitive prices.

Has the construction of the Toyota manufacturing plant (the car maker's 11th in the United States) had any effect on your local economy?

The Toyota plant is under construction and estimated to open in 2011. We have been doing work for several suppliers who already are opening offices and look forward to the growth opportunities offered by Toyota. We feel Toyota will want a top-notch facility and we will, without a doubt, be the company to provide that level of service.

What steps have you taken to keep your company busy and profitable during this economic downturn?

We took a hard look at budgeting, jobs, employees and processes, then tightened our bootstraps and kept doing what we have always done: "Focus on doing high-quality work and keeping our customers happy." We feel the rest will take care of itself.

What do you think customers appreciate most about your company? After serving this area for more than 20 years, our customers know they

can count on us. We are a full-service company with landscape architects, land-scape contractors, turfgrass professionals, highly skilled employees and a certified arborist. Our people are trained well and have the knowledge to provide better services, which always boils down to higher-quality results. In the long run, our customers always win.

Your company uses pink service vehicles. Tell us what you feel that does for your company. Our customers know who we are, and everyone knows the guys in the pink trucks do the best job. We get a lot of jokes and attention from our trucks, especially when we are out of town. Without a doubt, pink trucks help people identify us, but it's our 20 years of hard work that makes them count on us.

AT A GLANCE

COMPANY: Landscape Services, Inc.'s Total Lawn Care, Tupelo, MS

FOUNDED: 1982

PRINCIPALS: Pete Poland, Harry Collins, Chris Winders

NUMBER OF LOCATIONS: 1

EMPLOYEES: 25

SERVICES OFFERED: Landscape design, installation and maintenance

HOBBIES: "I love old tractors."

FAMILY: Wife Kay and three children: Patrick, Amelia (a certified arborist) and Tatum ("hardest-working part-time employee")

WEBSITE: PinkTrucks.com

PINK TRUCKS HELP PEOPLE IDENTIFY US, BUT IT'S OUR **20 YEARS OF HARD WORK** THAT MAKES THEM COUNT ON US."





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BESTPRACTICES

BRUCE WILSON The author is a partner with the Wilson-Oyler Group consultancy. Visit www.wilson-oyler.com.

Accountability builds productivity

any landscape contractors go to conferences, read books and hire consultants, seeking the "silver bullet" that will make them instantly successful.

Many use the knowledge they acquire to develop great operational and administrative procedures, training programs, comprehensive safety programs, etc. But all too often, disappointment and frustration follow when they are unable to obtain the results they want.

I have seen a lot of companies invest loads of money trying to achieve results through trendy management processes like "Management by Objectives," "Total Quality Management" and "Lean," and all too often they do not achieve the financial and organizational improvements the business owners expected.

Many do a lot of things correctly: They invest in developing extensive short- and long-term plans annually. They make follow-up lists and charts.

7 STEPS TO BETTER ACCOUNTABILITY

- 1. Develop a comprehensive business plan that clearly identifies the direction and objectives of your organization.
- 2. Create a comprehensive organizational policy with a well-defined organizational chart, detailed job descriptions and an embedded progressive discipline policy.
- 3. Implement a wage and salary policy that is based on skills and responsibilities.
- 4. Link incentive plans to the success of the business plan, detailing the pivotal duties and success attributes of each job description.
- 5. Perform an objective, non tenured-biased assessment of the strengths and weaknesses of all key personnel, as they relate both to their current roles in the company and their future potential roles.
- 6. Once completed, build a skill set improvement plan for each employee, including a development timeline.
- 7. Last but not least, implement a process for the systematic purging, reassignments, eliminations and replacement of pivotal employees. This also must include a recruiting strategy that ensures the building of an absolutely accountable team.

They pledge - and attempt - to stay disciplined and on track. Unfortunately for many, if not most, the wheels fall off their initiatives before they demonstrate sustained improvement.

Why does this happen? I think there's one common, primary reason: accountability - or more specifically, the lack of organizational accountability.

Chain of command

The most-common reason for failure to hold people accountable is "chain of command" discipline — the ability to ensure everyone knows their roles and jobs to be done.

In an organization where there is accountability, a crew leader who allows an employee to work unsafely will face disciplinary actions at least as severe as those faced by the offending employee. If the safety oversight continues to happen, the crew leader's supervisor also will face disciplinary action.

Too often, leniency is granted to tenured employees. Some, for example, are not sufficiently computer literate. It affects their performance, yet many organizations look the other way.

Truth be told, many organizations mold job descriptions to meet tenured employees' skill levels, rather than mold the employees to meet their organizational needs. What's the message here? Simple: We don't hold our people accountable to perform their jobs.

While a lack of eye protection or computer training might seem like minor infractions, dig deeper and you'll find they are symptomatic of a lack of overall accountability - and productivity. Once a company creates and enforces detailed policies and procedures, weaves pivotal responsibilities into each job description and disciplines to ensure compliance, good things start to happen and the organization starts to grow toward its potential.

Remember: Accountability must start at the top and permeate all levels. Equally important, there can be no "sacred cows."

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FIGHT plant disease

PLANNING, PROPER IRRIGATION KEY
TO CONTROLLING DISEASES IN THE
LANSCAPE. BY BRIAN ALBRIGHT

othing MARS the appearance of an otherwise attractive landscape like yellow, brown or wilted plants. Fungal and bacterial diseases can lay waste to ornamentals and perennial gardens if left uncontrolled, leaving plants deformed, stunted, defoliated or worse.

With proper planning and plant care, though, many common diseases can be effectively treated or avoided altogether.

This year, the eastern half of the U.S. has experienced unseasonably cool and wet summer weather, leading to an increase in fungal infections in many landscapes and gardens.

"We are seeing more bacterial problems than we normally do, as well as foliar leaf spots and blights on perennials," says Sharon Douglas, head of the Department of Plant Pathology and Ecology at the Connecticut Agricultural Experiment Station.

"The weather has exaggerated the diseases appearing this year," adds Margery Daughtrey, senior extension associate at Cornell's Department of Plant Pathology.

"These diseases are always around, but are much more obvious when you have this kind of rainy weather."

That's why it is important to be able to identify and treat the most common problems, and care for plants in a way that's unlikely to contribute to future infections.

Common disease types

The most common problems in the landscape are typically foliar leaf spots or blights. Leaf spot can be caused by both fungi and bacteria, and result in dark blotches or spots on foliage of perennials like irises, phloxes or hellebores.

Gray mold (botrytis) frequently appears on flowers, and is common on roses and geraniums. "Gray mold is very tough to control, especially when we have weather like this," says Steve Nameth, professor and associate chair of the Department of Plant Pathology at The Ohio State University.

PROUD SPONSORS









Bacterial leafspot on coralbell (Heuchera) can ruin the decorative foliage that make the plants popular.



BENARY VARIETY FOCUS: GOMPHRENA LAS VEGAS SERIES

At 16-20 in. tall, the Las Vegas series is perfect for 4.5-in. pot production. Three vibrant colors: plnk, purple and white offer a bright mix for any landscape setting. Quick crop times (9-11 weeks) and versatility in the landscape make this series a sure winner. Heat and drought tolerant, the Las Vegas series thrives in hot, dry locations throughout the country.

livescapes 👂 FIGHT DISEASE

Mildews thrive in the type of cool, wet conditions that have been present most of this spring and summer. Powdery mildew can be found on a wide variety of plants, including phlox, lungworts and peony, and causes plants to develop white and gray blotches on leaves. Downey mildew, on the other hand, appears as a fuzzy white or gray growth on the undersurface of leaves, buds, flowers and stems. It's often more difficult to spot and to control, and can affect black-eyed susan, speedwell, bluets, dead nettle, roses, and other plants.

Leaf and stem rust, as the name implies, causes rust-colored spots on leaves, and can be seen on hollyhocks, asters, pansy, phlox, hibiscus, and daylily.

More serious diseases, such as root, stem and crown rots, will make plants to turn yellow and droop, and often stunt growth. Vascular wilts, caused by fungi and bacteria, block water within the vessels of the plant, causing serious growth impairment or death.

Ornamental shrubs and trees can also be afflicted by mildews, leaf spot and wilt, along with Anthracnose (which causes spotting on leaves and defoliation), heart rot (which decays trunks and limbs), cankers, leaf curl viruses on ornamental trees, and monilinia fungus (brown rot) on fruit trees.

Proper planting can prevent infection

The best way to fight plant diseases is to avoid or minimize the risk of infection, starting with the initial planting.

"So much of prevention starts right at the beginning," Douglas says. "You have to select the right plant for the right site, and that can go a long way to help manage disease, regardless of the weather."

Plants should be placed in the correct soil and light conditions, and at the correct depth. Space plants far enough apart to promote air circulation, which can prevent many fungal infections.

Inspect purchased plants for any signs of disease, and try to install cultivars that have been bred to resist common pathogens.

Don't mulch too closely to stems or crowns, and keep plants properly fertilized. Also keep weeds out of the garden. "Not only are weeds competing for nutrients, but they also create an environment that tends to hold more moisture in," Nameth says.

By far the biggest contributor to many plant diseases is improper water management. While no one can control the weather during a rainy season, they can control the way they water plants under normal circumstances.

That means no overhead watering of plants in the evening, which leaves foliage wet for long periods and encourages the growth of many leaf spots, blights and mildews. "Irrigation should be done in the morning," Nameth says. "That's a hard one for people to follow, because it's nice and cool in the evening and people want to be outside. But if that foliage stays wet overnight, it's a disaster." He adds that over watering is another problem, and can encourage the development of root and stem rots.

Keep the garden clean, removing dead foliage at the end of the season and carefully disposing of any already infected plants or cuttings.

continued on page 40







Anthracnose on dogwood (top); Heterosporium leaf spot on iris (middle); downy mildew on Lamium (bottom) and powdery mildew on peony (left) are common diseases in landscape plantings.



BALL VARIETY FOCUS: VERSA™ COLEUS

Loves the sun... and shade, too! Vigorous and well-branched plants show off multi-patterned foliage that stays the center of attention all season in the landscape, thanks to the very late-flowering habit. Available in six colors and a mixture: burgundy to green, crimson gold, green halo, lime, rose to lime and watermelon. Heights vary by variety. Versa Coleus spreads from 18 to 22 in.



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🌅 FIGHT DISEASE

continued from page 38

"You should anticipate problems for the next season," Daughtrey says. "Any diseases you're seeing with higher impact this year will produce inoculum that will lead to more problems next season unless you are well protected. Find out what the proper timing is for treatment, and make sure you treat plants before you see a lot of infection."

Rx for plant diseases

Once a disease has set in, in most cases it is important to prune away the affected parts of the plant and properly discard the clippings to avoid spreading the infection.

Because many of the common diseases are caused by fungi, a broad-spectrum, copper-based fungicide can be used for many pathogens. However, applying them effectively in wet weather can be a challenge. Many chemical treatments are also designed as protectants, and have to be applied before the disease sets in.

"You have to be confident that if you apply a fungicide, it will stay on long enough to be effective," Nameth says, adding that chemicals should really be used as a last resort.

Perennials can generally tolerate many diseases, and when they do become infected (as is the case with rust or powdery mildew) the damage is often aesthetic — spots, or wilted or vellow leaves.

"In some cases, the disease will kind of pass and you have it every year any-how," Nameth says. "There's no need to treat the plant. You get powdery mildew on lilacs, for example, but the flowers are usually gone by the time you see it." Other diseases, like vascular wilts, typically don't



replant the same species in an area where there has already been a disease outbreak. Because the fungi that cause these diseases can live in the soil for some time, planting a disease-resistant cultivar may be the best option to replace damaged or

dying plants that have been infected with

a rot or a vascular wilt.

Douglas recommends keeping good records of what's going on in a landscape.

"If you have a perennial garden, and you know you had septoria leaf spot on rudbeckia last year, you need to watch those plants for the first symptoms of recurrence and either spray or monitor them closely."

"Whenever we speak about diseases on plants, you have to remember that diseases are the exception, not the rule. By and large most plants are healthy," Douglas adds. "You have to have that disease triangle — a susceptible plant, the right environment and a pathogen."



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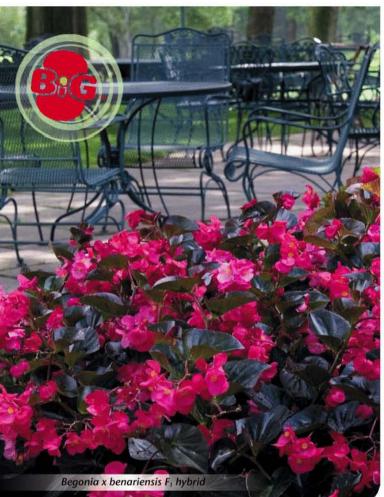
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Ball's Versa Coleus loves the sun — and the shade. With a spread of up to 22 in., this vigorous and well-branched plant displays multi-patterned foliage. It also has a late-flowering habit, adding interest to the landscape all season long. It's available in six colors and a mixture (heights vary by variety): burgundy to green, crimson gold, green halo, lime, rose to lime and watermelon. www.BallHort.com



Whorls of paper-thin, brilliantly colored petals fill each bloom of Jackson & Perkins' Persian Buttercup (Ranunculus asiaticus 'Aviv'), which offers up to a dozen flowering stems from every bulb. Easy to grow in containers north of their hardiness range (Zones 8-10), the 4-in. blooms are fully double. The 15- to 20-in. stems hold up in gardens and vases. www.JacksonAndPerkins.com



Hummingbird friendly

Among Novalis' 2010 Plants that Work collection is Weigela 'Rainbow Sensation,' an improved, compact and variegated variety with dense clusters of soft-pink and funnel-shaped blooms that attract hummingbirds. With compact, rounded foliage in green and yellow, the plant spreads 3 to 4 ft. and thrives in full sun in Zones 4-8. www.Novalis.com



features numerous, compact copper-colored daisy-like flowers that emerge freely over a low pincushion. It's ideal for containers, edging or mixed beds because it blooms continuously all summer, according to the company.

www.TerraNovaNurseries.com



Sunny delight

SunPatiens is the new hybrid impatiens bred by Sakata. Featuring thick, showy petals, they tolerate full sun or shade and can be enjoyed in the garden from spring to first frost — even indoors as a flowering pot plant. The Compact Trial Collection includes blush pink, coral, deep rose, lilac, magenta, orange and white. The Spreading/Vigorous Trial Collection includes salmon, coral, lavender, magenta, orange, red and white. www.SunPatiens.com



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ters and receivers powered up — and when fully powered, they can function for several weeks without sunshine. Aquaterr.net or 949/646-7274

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Gravely Turf's ProVac 1060 features a 3.5-cu.-vd. hopper capacity for large leaf collection jobs. The 60-in, adjustable intake scoop allows the operator to pick up thatch and wet leaves on turf or pavement. An optional hand vac unit provides an extra 10 ft. of reach to vacuum leaves from under shrubs or along a fence line. The unit features an 18-hp Kohler Command Pro Engine and a 6-gal, fuel tank for less refueling stops. Built for durability, the Gravely ProVac 1060 has an all-welded, rectangular structural frame, 14-gauge steel construction, 1/4-in. abrasion-resistant plate and a 17-in, diameter, 6-blade steel fan impeller. Ariens.com







H20 power

Turf Feeding Systems has added the WD700 injector to its professional line of fertigation solutions. Comprised of a water-powered pump and a solar-powered controller, the fertigation system is designed for a range of landscapes

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- that do not have access to AC power. The proportional WD700 injection system is controlled by water flow, with a flow sensor installed in the irrigation line. The pump capacity is determined by adjusting a metering valve. TurfFeeding.com or 800/728-4504



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WHIT'SWORLD

MARTY WHITFORD EDITOR-IN-CHIEF Contact Marty at 216/706-3766 or via email mwhitford@questex.com.

Got gratitude — for The Gift of today?

very day is a bonus. Tomorrow is promised to no one. I've had a few too many reminders of this during the past 12 months.

Adam Gaspar, my buddy from the first grade, learned - and taught me and many others - how to truly live, in the moment, during his 10-month battle with brain cancer. Adam died last year about this time, at age 42, encircled by loved ones including me. He left behind a wife, six children, two parents, a sister and many friends. He also left behind a legacy of living in the now, teaching guarded men like me how to pour out our love and laughter, along with our tears and fears, more openly.

Five months after Adam peacefully went home to God, my oldest brother Jim knocked on Heaven's door. Jim was 47 when he suffered a heart attack on Feb. 9. News of my beloved brother's death was shocking and devastating to many. That was the day my mom, my eight other siblings and I along with Jim's wife and three children realized Iim and my dad shared much more than just their names and birthdays. These intertwined souls had huge hearts, and both were called away too early, and too suddenly, for our liking and understanding.

Yesterday, a former co-worker of ours lost a loved one. Mike Seuffert, Landscape Management's associate editor from 2004 to 2008, and his wife Tricia and their 3-year-old Ava, said their final goodbyes to Parker Seuffert. Had Parker lived until tomorrow (Aug. 7), he would have been 5 months old. But no one is promised tomorrow.

Parker endured several heart surgeries and so-called minor brain surgery. After battling hard and long, he found himself much closer to God's home than ours. Last night after work, I went to the hospital to meet Parker for the first time, and to pray for him, Mike and his family — as I've done from afar for 10 months (ever since Mike told me Tricia was "with child"). But Parker had bigger

plans. Just an hour or two earlier, he got to meet his loving creator.

No matter the day's obstacles — at work or home - we owe it to Parker, Jim and Adam to cherish "The Gift" - to show gratitude throughout today, for today, by truly living in the moment. We must live today with faith, hope and love no matter the hurdles.

Fortunately, we can follow my brother's lead: Live large, laugh often, and love always.

When things get really difficult, like they are now for so many in this business, we must dig deep, band together and fight through it - one day, one moment at a time - just like Adam and Parker did.

At a rare loss for words, I'll close with a poem my mom and my sister Lisa gave me and my wife Bridgid 14 years ago — the day our second child, Jamie, was born with Down syndrome:

THE WEAVER

My Life is but a weaving between my Lord and me. I cannot choose the colors; He worketh steadily.

Oft times He weaveth sorrow. And I, in foolish pride, forget He sees the upper; and I the under side.

Not 'til the loom is silent and the shuttles cease to fly, shall God unroll the canvas and explain the reason why.

The dark threads are as needful in The Weaver's skillful hand, as the threads of gold and silver in the pattern He has planned.







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