

IRRIGATION INDUSTRY REPOSE TO DROUGHT IN SEVERAL SOUTHWEST STATES

Laurence Budd, Allison Irrigation, CLT, CLIA

Introduction:

Hello, I'm Laurence Budd, owner of Allison Irrigation in Ft Collins, Colorado, and the inspiration of Water Efficiency Magazine, published by Forester Communications out of Santa Barbara. I am a CLT in Irrigation and a CLIA. My main business focus is water efficiency, water management and conservation. My website is www.urban-water-conservation.com.

In 1992 I had come back into the irrigation world, working as a contractor in the Albuquerque area. A combination of population growth and low snow pack were resulting in a drought situation. I found my business shifting quickly to xeriscape and vast drip systems, moving quickly away from large turf installations.

In 1998 I was hired by a large design/build office complex firm in the Boulder area, and in 2002 I noticed that Colorado was going into the same scenario as New Mexico, and for the same reasons. I became known as the boy who cried "drought" among the Colorado water districts. The same forces were acting upon them as in New Mexico, but there was a strong resistance to admit that mother nature had any effect on the water supply.

Now, the same movie is playing in the North Texas region, with cities like Plano in stage 3 drought, while Dallas, 20 miles away, is mysteriously in a no drought mode.

All of these regions had several of the same forces acting on them- an increase in population, no real surplus in water storage, and a drought.

Having been in all three of these markets during their droughts, I noticed consistent trends among the water providers and the landscape industry. In all 3 markets, The water providers were very reluctant to set watering restrictions or landscaping guidelines- at first. There was a great concern that the residents would become angry with the providers, whereas in actual experience the reverse has been true. Homeowners in each market were quick to realise the importance of conserving, although many were misdirected as to where their biggest water uses were. On the same day a water provider would tell me they could not possibly enact restrictions, a homeowner would be telling me we must have restrictions. In New Mexico and

Colorado smaller high end residential contractors began quickly responding to customer desires for less turf, more beds and other features.

Large landscape companies specialising in ICI type new landscape installs did not react well to the quickly changing water situation. This was largely because the designs has been done and approved well before the drought hit, the job was bid on that design, and, (as we all know), there was no extra money in the budget to revise anything. I noticed that large ICI type installs based on the "turn the desert into Kentucky" theme continued for about 2 years after the drought hit in each area. This caused a lot of concern among the public- "Why is my HOA installing 20 acres of decorative irrigated turf, and why are we paying for it?" This large scale landscape portion of the industry did not respond well, simply because of lag time between design and installation, and- money.

So, the public was becoming educated about xeriscape and water conservation more quickly than our industry, and was a major factor in driving the industry to more xeric designs. The smaller contractors, dealing with residential, reacted much more quickly, since there is no lag time between design and install. The proof in the pudding- Denver Water has just announced rate hikes due to low water sales, caused by continuing residential conservation.

New Mexico:

Since Albuquerque region was the first in this drought cycle, you will notice as you drive through the city that it is now largely xeric. New subdivisions in the Albuquerque area have almost no turf, many have gone beyond xeriscape to zeroscapes. Santa Fe has had three years of no outdoor water, which has had a strong effect on the local landscapers. New subdivisions in Santa Fe are allowing irrigation only within the small courtyard area. A few large properties, such as the U of New Mexico in Albuquerque, are still fighting the trend, but now find themselves the object of scorn by the community. I asked John Seaver, of Just Sprinklers in Albq., how the drought affected his business-

John says he saw a change in customers needs- he began doing more drip, now doing as much drip as turf. Consumers were becoming more educated. The city water conservation program helped a lot on this- several companies jumped on this xeric approach. He notes that he started charging more for his services as the cost of water went up. So, going xeric was profitable for his business.

I also spoke to Bob Englund, a long time high end residential landscape contractor. He feels he was well before the trend, focusing on native plants and drip long before they became buzz words. He feels it is very important to install sustainable landscapes, and to create hydrozones within the landscape. He feels that native type landscapes are the only way to go, and I will bet you that in 20 years we will know he is exactly right.

Colorado:

On to Colorado, 2002. The concept of xeriscape was already well known in the area, but ICI type new installs were still going for the Kentucky look. The largest water agencies were in a full state of denial when the drought hit, which slowed down the response by the industry. Once again, I saw a two year lag in ICI installs becoming more xeric. To make it a bit more confusing, the water agencies have been going back and forth on the water situation, when they should stick to conservation consistently. They are doing this because their budgets are too tight to allow for low water sales. This has been confusing for the public and the contractors. In August this year Denver water announced a rate increase because of low sales, caused by residential conservation efforts.

The large landscape install companies in Colorado did not want to hear about conservation, budgets and audits. There was no room in their budget for it. There persisted a "get it in, get it green, get gone" mentality. As water prices start to creep up in Colorado, the market for upgrading irrigation and xeric conversions is now becoming established. Once again, the smaller contractors are quicker to respond to the desires of the market. I was working in this market during this drought, and asked Paul Harrington of rocky Mtn Landscapes how his business changed. Paul is the premier landscape contractor in the Winter Park/ Vail area.

Paul points out that he is in a different climate zone than the Colorado front range, with more precipitation and lower temperatures. He has noticed a shift to more native trees and plants.

I also spoke to Dale Morehouse, the CID at EDAW Fort Collins. Dale notes that compared to five years ago, their designs are becoming more xeric, far less turf, more beds, and a focus on native plant types that have a high survival rate.

Currently in Colorado, the market for xeriscape on all types of properties is still emerging. The primary interest comes from high end residential. This is a market going xeric for aesthetics and water costs, because they want to, not because they

have to. Water is still so cheap in Colorado- \$1.50 per thousand gal., that there is virtually no attraction from the property management sector. Most have stated bluntly that when the city arrives at their door with a fine for overwatering, they will do something- not before. The main ICI sectors that are thinking about water management are multifamily and HOA type properties. The reason is simple- their residents have watering restrictions on their own lawns, they pay for the common areas, and want the common areas to obey the same rules. This is the market that I work in, and it is very similar to Southern California. HOA and multifamily properties are still a little hesitant to take the leap of faith and hire a water manager for \$10,000, and critical decisions still often die in committee.

Dallas and Northeast Texas

Starting in late 2005, this region began going into a drought. Lack of precip was not the only factor in this. The DFW area had doubled in population over 20 years, from three to six million. This area is one of the largest spots of irrigated turf in the SW U.S.

Storage capacity and distribution were already at limit in numerous areas. The drought brought this into sharp focus. While City of Dallas had enough reserves to avoid any restrictions, the smaller cities around them went into stage 3 in early Summer, now going into stage 4- no outdoor water use. Historically, this area has never had to think about water use levels. This is well illustrated by Highalnd Park's website, which mentions a GPCD level of 360 gal. The website states they hope to reduce that by 2%. What a sharp contrast to the efforts in Austin and San Antonio.

Landscape contractors in the area are at this moment learning about xeriscape design, BMPs for irrigation, and so on. Gene Reagan in Austin notes that there is a strong need to start certifying contractors locally to ensure BMP practices. He also says that water management of ICI and large residential needs to become a reality. He feels that water base prices are too low, a comment heard around the region.

Tony Rizo, president of the Dallas Irrigation Assoc., says there has been a little bit of progress pushing conservation. Homeowners are becoming aware of ET, drip, water budgets, etc. Homeowners are learning to use their controllers better, actually looking at their systems for the first time. It is fascinating to look at the city websites for the DFW area. Some cities have full blown conservation advice, while others never mention it.

Tony feels scheduling and budgets awareness is starting. The drought has done a lot to make homeowners think about their systems- heads straightening, stopping runoff, adding heads, etc. This has been a positive move from homeowners, and of course is driving the contractors. Local distributors are saying more about BMPs for irrigation. Printed material from the city on scheduling is helping. A lot has happened in a short period. The DFW area still has a lot of bad installers, who need to be brought up to speed on conservation. Tony is now using low volume nozzles, smart controllers, much more drip systems vs. turf.

Los Angeles Area:

I spoke to Nick Mrvos in Irvine Ranch, and Bob Galbreath in Santa Monica. Both feel that their public landscapes are doing very well on water management, thanks to lots of attention and central control systems. Mr. Galbreath says residential and ICI properties have not been looked into by the city. In the San Fernando Valley, I found many HOA and institutional properties that are very concerned about landscape water use levels and runoff, but unaware of existing programs. I noticed that xeriscape is being promoted in the press, but it is so easy to grow tropicals in the area, most residents are not looking for a desert/native landscape. I see a market for tropical xeriscape- a contradiction of terms, but a viable alternative to turf.

John Weidman of the Southern Cal metro water district says water management is a critical need, but the controllers will have to be firmly locked to ensure no tampering with the schedules. Southern California is a major year round market for ICI water management.

Manufacturers

The irrigation equipment manufacturers did not seem to notice the drought in New Mexico, maybe just too small of a market, and no one knew the drought would become so wide spread. The drought in Southern Cal really got everyone's attention, and by the time the Colorado drought hit, there was a major focus from the manufacturers for smart controllers, better drip components, etc. The situation in Los Angeles seemed to be the turning point for the industry. Now, with the state of California focused, and the EPA ramping up the watersense program, water efficiency is finally becoming a major market. Several manufacturers who saw this early on and invested are now seeing good results, such as Weathermatic, Calsense, and Walla Walla.

Summary:

The xeriscape remodel theme and efficient water turf market is already well established in NM, is now growing in Colorado, and will really emerge in Texas one or two years from now. It might not emerge in the Los Angeles area.

All of these markets are in different levels of water conserving landscaping, with NM ahead of the others. All of these markets need to encourage the practice of water management of large landscapes. This will take a shift in thinking from the property owners, who have relied on the mowing service to manage their water, and a shift within the landscape maintenance contractors, to switch from "green at all costs" to a water budget mentality.

As water prices rise in Colorado and California, this service will become seen as a necessity, and ICI property owners will respond.

We have seen a consistent disconnect on commercial properties- often the water bills for a property in Denver are paid in New York- they have no idea if their water use levels are correct, they just pay it. There is a steep learning curve for many ICI property managers re water conservation. In 2005 approximately half of all Boulder commercial customers went into their 4th tier- \$10 per thousand gal.- most without noticing. Boulder goes to mandatory water budgets for all properties in 2007, but at this moment the ICI market there seems completely unconcerned about reducing use levels. The good news is our industry is already tooling up for this market, with the IA offering certification in water management.

There is a caveat here regarding water management- There has to be ongoing stewardship. A new mowing crew or sprinkler tech might be tempted- perish the thought- to turn the water up again to speed up turf growth. Therefore, initial savings could vanish without ongoing supervision.

Paying for water management as a new line item is a new and expensive proposition for ICI properties.

One novel approach is to offer the ICI property water management services in exchange for the realised savings for one or two years. This prevents the property from paying for services up front. The water manager spends \$5000 up front, saving the property \$20,000 per year, which is his pay for two years. After that the property goes on saving the same amounts. Sounds good on paper, but it is a path strewn with ball bearings- call backs, tampering, etc.

Some cities in the region are being very proactive, such as Albuquerque, San Antonio, Westminster Colorado and Austin. These cities use their monies to pay for toilets, audits, and so on. Other cities, such as Boulder, are very proactive, but relying on the property owners to pay for conservation upgrades. In these cities, the residential market has responded well, but the ICI sector has not. This is bad, since the ICI segment uses far more water per property than residential. The cities are torn between using a club or sugar cubes to get the properties moving.

So, large ICI type new install contractors are still lagging in xeric or water efficient designs, whereas the high end residential market is moving quickly towards sustainable low water landscapes.

I have not seen any of these cities really targeting the local contractors to enlist their help, but Gene Reagan in Austin, and the CLCA in California are working on this now. In my classes for contractor BMPs I stress to them that it is time to stop being an irrigation installer, and become an irrigation conservation consultant. I notice that currently about 30% of the contractors in Colorado are very concerned about conservation, uniformity, and runoff. About 5% in the Dallas area. The IA and CLCA water management cert. Programs will help this immensely, bringing the concept to the forefront.

The market for water efficient landscapes and water management will continue to grow throughout the southwest, and will even spread into the wetter parts of the country, as treated water costs rise and the need to conserve treated water and energy.

Water management has been a focus for a handful of us for several years, it's great to see the movement take off now, providing growth for our industry.