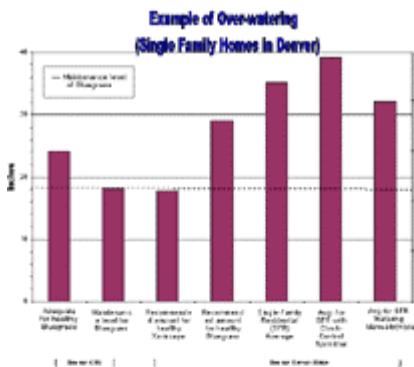


Landscape Water Efficiency: A New Profit Center for Green Industry Businesses

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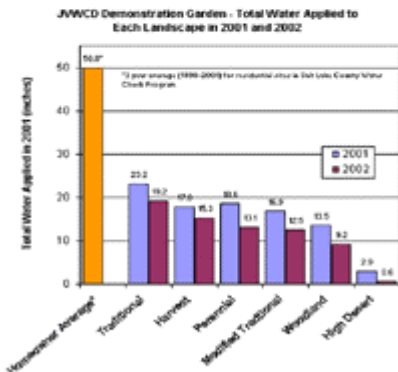
Water Moves the Green Industry?



Landscape water use in Denver by single family homes is nearly twice as much as Kentucky Bluegrass needs to be healthy and attractive. This represents a significant opportunity for the landscape industry to save water and offer high quality business services to clients as well as to attract new business.

What are the market forces that will move the green industry in years to come? How will the green industry react to those forces? And what should the green industry be doing to make sure it is positioned and can take advantage of any shift in market needs?

As a Cooperative Extension horticulturist, I was placed by the University at public water agencies 15 years ago. My role was to help green industry professionals and water users, such as homeowners, homeowner associations and cities, understand what an efficient landscape was and how to achieve it. Why? Water, as it turns out, comprises about 50% of total urban water sales. Yet, it has been found that as much as 50% of the water we are applying may not be needed by the landscape. In other words, water is being wasted in urban landscapes and it is hurting the landscape industry, nation-wide.



This second graph shows water use on homes in Utah with typical landscapes (mainly turf). The actual use is twice the amount these landscapes need in a year. This pattern, shown from water district customer use histories in Denver and Utah is similar to water use patterns on landscapes around the country.

Water is the #1 issue facing the green industry today and out into the future. Why? Communities are paying customers to remove landscapes (Las Vegas). Public agencies are restricting water for landscape use (Colorado, Georgia, Utah, New Mexico, Texas). Some communities tell landscape water customers to expect shortages/shut-offs during peak-use summer months (San Diego County). Some communities are looking to ban new development (Lake Arrowhead, Las Vegas, Santa Fe, parts of central California). Whether it's drought, peak use beyond the ability of the water infrastructure, or population growth that outpaces the ability to deliver water to end users. Any way you slice the water supply pie, wasting water is bad for green industry business. Because, when there is not enough water to go around, the landscape irrigation will be the first use to be restricted.

In Colorado for example, the population growth is estimated to be 30% over the next 20 years. At the same time landscapes use approximately 40% more water than the plants really need. Denver Water calculated that homes use 40" of water on their gardens per year. Yet cool season turfgrass only needs 20" of water per year to be green and healthy. That led Denver Water District to enact public policies that severely restricted planting and landscape irrigation during the recent drought. Those restrictions cost the landscape industry 11,000 jobs and hundreds of millions of dollars in revenue. But what if the landscapes did not waste water? There is the

likelihood that Denver Water would not have had to create painful landscape ordinances if landscape water were used efficiently. What can you do to protect your business and the landscape industry from more regulation and restriction?

Making Water Efficiency a Profitable Core Business

How much water are your sites using? How much water should they use? How can every landscape site be made water efficient? How can you sell water efficiency to your customers?

Based on the experiences in California, where the green industry came under severe economic hardship due to drought and water restrictions in the early 1990's, here is a formula for success with respect to making landscapes efficient and creating new business opportunity:

- Measure each site (square footage) to help determine a site water budget
- Find the local ET (from university or public agency websites)
- Understand the water needs of the plants on your sites (crop coefficients)
- Use the following formula to determine a site water budget

$(ET) (Kc) (LA) = \text{Site Water Budget}$

ET = Weather in terms of inches of water
Kc = Crop coefficient (or a plant factor)
LA = Landscape area

Southern California Example for cool season turfgrass over 1 acre of landscape:

$(48") (.8) (1) = 38"$ of water need for the year

- Compare the sites actual water use to the site water budget

Is more water being used than is needed by the plants? How much more? This is the water, and the money for your customer, you can help save. Develop a business attitude that looks to use water as efficiently as possible. Market that skill and service to your customers.

- Landscape irrigation system upgrades (retrofitting aging, leaking, poorly designed irrigation systems)
- Landscape maintenance practices (evaluate how you manage sites, how you keep irrigation systems in-tune and how cultural practices play a part in water management and site appearance)
- Consider how retrofitting plant materials can reduce water demands
- Learn about and become trained on the installation and use of "smart" irrigation controllers

The combination of irrigation system retrofits, plant materials upgrades and "smart" controllers results in (1) more attractive landscapes, (2) water efficient landscapes, (3) new green industry business and (4) more satisfied customers. In one southern California community, landscape water use has been reduced by 57%. Yet green industry business has **increased** in response to water efficiency needs.

Do not wait until the coming water shortages hits the green industry and your company. Find the ways you can reduce water use on sites. Look for opportunities to retrofit landscapes and irrigation to save customers money. Use the new technologies now available that can save water in landscapes. Become part of the water solution as opposed to being part of the high water use problem. Remember, the water you save can be turned into marketing your services to new and

existing customers. Develop your business strategy around a pro-active, water efficiency strategy.

This is the 1st in a series of articles on water and landscapes. To learn more about retrofitting landscapes and the new "smart" irrigation controllers, attend the **Irrigation Design** session at **LANDS**Expo on March 23, 2005 in Las Vegas.

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