The Role of the Landscape Contractor to Conserve Water

By Richard Restuccia, Sales Leader Western U.S.
ValleyCrest Landscape Maintenance
rrestuccia@valleycrest.com

Abstract
Opportunities abound for property owners and managers to respond to challenging economic conditions by proactively deploying smart landscape services. Community boards and property managers increasingly seek landscape services partners who drive value and serve as a maintenance strategist rather than a vendor. It is critical in today's budget sensitive environment to count on a team of landscape experts who are aligned with your objectives and help maximize value on your property.

Some of the key points of this paper include:

- Why a landscape services partner is the best ally in helping customers reduce water usage and water costs
- Knowing why a water savings recommendation makes sense from both a financial and landscape best practice
- Identifying the collateral benefits that impact the total cost of ownership from implementing a water conservation program

An integrated landscape management program is the cornerstone for producing landscapes that help reduce the ecological footprint of a property. This management approach focuses on best management practices that include developing a water conservation program, irrigation efficiency, soil stabilization, plant health, and waste reduction while minimizing environmental impact.

Key Words
Irrigation, rebates, drought, landscape, turf, conversion, water management, water shortage, repairs, annual beds, controller, water budget, audit

How can you be an ally for property owners who are trying to be more environmentally-friendly and efficient with their water?
One area of potential high impact and significant ROI is a landscape plan that is grounded in efficiency and sustainability and is aesthetically polished. A key component of a smart landscape is water conservation. For owners and managers in arid regions, it is a fact of life. But for some, water may not be perceived as a precious resource simply because it seems to be plentiful in the area in which they operate. Even though water is relatively inexpensive, it is a limited natural resource. Adopting a smart water management program now is a critical component to operating a commercial site at peak efficiency at all times, not just when drought conditions or irrigation restrictions exist.

Forward-thinking companies are already implementing sustainable landscaping practices in an effort to reduce operating costs, minimize the environmental impact of

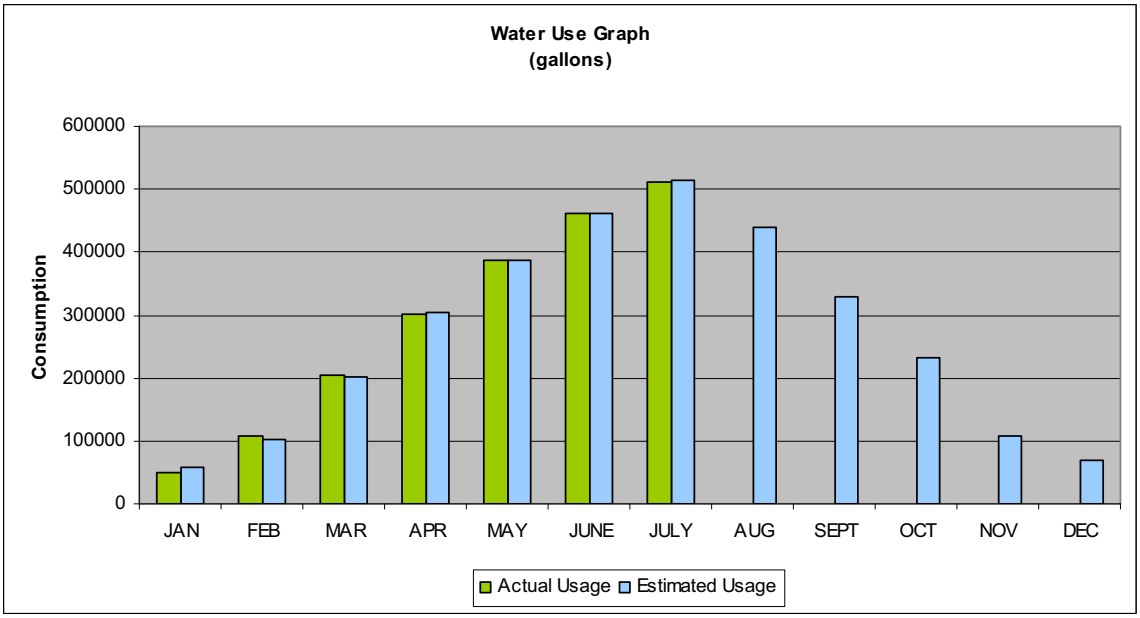
their property, and improve their return on landscape dollars invested. They are turning to their landscape partners who are knowledgeable about irrigation which is often a major concern, both to manage and to budget for the expense of repair and upgrades.

Grounds managers should get involved in the landscape design and planning process to avoid landscapes that are costly and difficult to maintain. Any landscape undergoing extensive rework typically involves designers who know what looks good, but may not consider long term maintenance requirements. Bringing the maintenance team in early in the process helps maximize potential growth for landscape, while minimizing cost and environmental impact.

What are the priorities?
By proactively deploying smart landscape services, property managers can reduce landscape costs, while still improving the sustainable elements of a property. Applying some simple measures and best practices can provide cost-savings and other benefits. The impact of a smart landscape and maintenance plan can be significant, as we've seen annual savings in the 15% to 20% range. When making decisions about how to achieve your customer's goals, an obvious starting point is to assess the existing design, irrigation system and planting materials before developing a plan to improve and enhance a property.

Properties constructed 20 or more years ago have common age-related elements that typically need to be addressed. First look at the irrigation system, which usually involves deploying more advanced technology. Smart controllers or sensors to detect when plants actually need water didn't exist when properties were built in the 1970s or 1980s. By investing in these kinds of improvements to an irrigation system, a property can generate the kind of savings that would expect to pay off within 24 months. We're seeing even shorter ROI periods, as property managers and their landscape partners continue to refine and respond to the need to drive immediate results in the current economic climate, while incorporating more sustainable practices such as turf conversations and drought-tolerant plant materials.

At one property just outside of Las Vegas, better irrigation practices contributed to a more efficient and cost effective landscape, not to mention a happier, more satisfied community. By upgrading the irrigation system, the water needs of each zone within the site could be better served. ValleyCrest installed six ET-based controllers that provide weather data to automatically adjust the irrigation. They also assessed the various zones on the property to determine irrigation needs based on plant requirements in each area. High-efficiency parts such as matched precipitation sprinklers and rotary nozzles also helped apply water to the landscape as efficiently as possible. In addition, about 20,000 square feet of turf was converted to native landscape with SNWA rebate covering the cost.



Sustainable landscape is good for the environment and can impact bottom lines as well. Replacing existing plants with native or drought resistant plants will help address a need for all to use water resources more wisely, even if a property is able to utilize a recycled water source or if one believes they are in a region where water is plentiful. As part of your evaluation, consider doing an irrigation site audit to identify potential water wasting practices and make the case for improvements on your customers' properties. For example, some of the areas to consider include:

1. Are there non-functional turf areas that are difficult to mow or irrigate that should be considered for conversion to other plant material such as shrubs?
2. Are stations properly hydrozoned or are some plants within certain zones being watered excessively?
3. Do any rotor nozzles need to be replaced to matched precipitation rates and desirable flow rates? 1/4's to 1/2's to Fulls?
4. Can spray nozzles be converted to MP Rotators? Is the water window long enough to use low application nozzles?
5. Is there a deficiency in pressure that prevents us from running multiple controllers, programs or valves simultaneously?
6. Can the existing irrigation system support a conversion to ET based controllers?
7. Would rain or wind sensors be beneficial? Do we shut all controllers off after rainfall or during periods of high winds?
8. Would moisture sensors be beneficial? Are there soils or areas that have poor drainage and are constantly wet?
9. Does the property have frequent mainline breaks? Should we propose installation of master valves, flow meters and isolation valves?
10. Is a full system or selective zone catch can test recommended?

Conclusion
Since you already have an established line of communication with your customer and are knowledgeable about water management, you can build on that trusted relationship by offering additional suggestions to help them maximize their landscape investment while minimizing costs. To determine the best water conservation strategies for property owners and managers, be sure to collaborate with building management, water agencies, and irrigation equipment manufacturers.

As experts in the irrigation industry, we need to lead the change in consumer mindset that water is an unlimited resource where indiscriminate waste is overlooked. While it is good to have best practices documented, they are little more than words if we don't put the actions into play.

You as the trusted landscape partner can offer recommendations such as the following that demonstrate your expertise and help your customers achieve their environmental and financial objectives.

- Analyze water usage trends and develop a water management plan to ensure irrigation systems operate efficiently, irrigation runoff is reduced and reclaimed water is used. Establish baseline usage and estimated water budget. Track usage before and after upgrades.

- Perform a site audit.

- Switch from overhead irrigation to a more efficient drip system; install smart weather-based controllers to measure precipitation, solar radiation and wind; adjust automatic systems, and look for ways to incorporate reclaimed water.

- Practice hydrozoning or grouping plants with similar water requirements on the same irrigation valve to reduce over-watering.

- Implement a rotation schedule for water features so fewer operate at one time, reducing energy costs.

- Retrofit your landscape with sustainable, water-efficient landscapes and native, drought-tolerant plant materials to reduce the use of natural resources and decrease the amount of maintenance required.

- Develop a long-term program that promotes a more water–efficient landscape.

- Maintain landscapes that are in harmony with the environment by reducing green waste, nurturing healthy soils, and reducing storm water runoff.

- Install flowering perennial plants to provide a sustainable and cost-effective replacement for seasonal color changes.

- Optimize the placement and health of trees around your buildings to increase shade and reduce energy costs.

- Maintain the landscape naturally by using pruning techniques that highlight the individuality of each plant.

- Explore public programs and grants offered by water districts, cities, or other entities that provide rebates or credits for upgrades on controllers, efficient irrigation, drip conversions, or rain shut-off sensors.

Richard Restuccia guides community boards and property managers through a strategic process that can result in reductions in landscape irrigation costs. Richard is the Sales Leader for ValleyCrest Landscape Maintenance for the Western United States. He has been associated with the Green Industry for over ten years working for ValleyCrest Companies and Rain Bird Corporation. Richard is currently working with Business Developers at ValleyCrest to help teach customers the advantages of proper water management. He helped organize a central control users group in Kern County whose goal was to reduce water consumption in landscape irrigation. He received his M.S. in Agribusiness Management from Arizona State University. He serves on the San Diego Water Conservation Action Committee. Richard consults with many private companies and public agencies concerning water management.