

Arizona Buildings

Solutions for Building Owners & Managers

Winter 2010



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Arizona Office Market Outlook 2010

By Craig Henig

As Arizona's economy continues to battle back from the effects of a recessionary hangover, several indicators – including a handful of new high-profile projects and increased value opportunities – show promise for the 2010 office market.

Here's a snapshot of what's happening around the state:

METRO PHOENIX Central Corridor/CBD

By the middle of 2010, downtown Phoenix will

have done something it hasn't done since 2001: welcome two new office high-rises into the fold. Mesriow Financial's One Central Park East, at Central Avenue and Van Buren Street, delivered in late 2009. Meanwhile, RED Development is progressing with 568,000 square feet of Class A office space at CityScape, a mixed-use project adjacent to U.S. Airways Center scheduled for completion by mid-2010. Combined, the projects represent 1 million square feet of new office space.

The towers are expected to join other celebrated

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Water Conservation

Reduce Landscape Water Consumption Without Eliminating the Grass

By Matthew Johnson

When you think about water conservation in landscaping, what comes to mind? Some may think about Turf to Xeriscape conversions (Grass to Granite and low water use plants), while others may take it to the extreme and think about dormant areas from severe water cut backs. Depending on the form of water conservation, both, some, or neither could be true.

When formulating a conservation plan, first you must define your goals. For most, unless desperate measures are needed for financial reasons, you have two general objectives: save money on water and keep the aesthetic beauty of the landscape intact. How this can be done? First, are there areas of turf that do not contribute to the functional attributes of the landscape? Of those areas, what does not contribute to the aesthetic features of the overall landscape design? You may reverse this process to further determine the answers.

If there are areas of turf that can be converted, this can be set up as objectives to meet the goal. To dive deeper into the conversion process, are there areas of shade, slope, or poor turf growth areas that could be converted? These are the areas that either turf will not grow much of the time, or areas that take extra water, fertilizer, and time to maintain that could be converted providing additional benefits beyond the water savings. By simply converting these small sections, the overall aesthetic and functional features have been preserved yet the problem areas within these sections have been eliminated leaving better aesthetics with equal function. Sometimes these areas need

shrubs or trees to enhance them, however many do not. Low water use shrubs and trees can be sparsely installed to add color, texture, and shade. Conversion of the irrigation in both cases is usually simple.

The next scenario is where the landscape design and installation are very fitting for the circumstances. Just enough turf to soften noise and appearance, yet not too much to consider a conversion. The first step is to balance the irrigation system. Most irrigation systems were professionally engineered for their specific application. Over time, many unintended modifications could have been made. The modifications could have been as simple as replacing rotor or pop up heads with heads not meeting the specifications intended for this application. This causes wet or dry areas in the turf due to insufficient coverage. While the fix for this is easy and simple, many times the fix has been to increase watering times. This was done by the inexperienced because they don't know how to balance the system back to original specifications. Balancing the irrigation system can be the difference between breaking water usage budgets and saving water. The cost of the balancing is soon recovered in the realized water savings.

Once the system is balanced, a baseline watering amount can be determined. Baseline means 100% of the water needed to properly water the intended area. Often the baseline is less than current watering amounts due to improper irrigation balance, improper programming, and ineffective water management. Once the baseline is established, it is often revealed that

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consistent watering over the baseline amount was taking place and the water savings moving forward will save enough to pay for the irrigation repairs. To go a step further, water usage can be reduced an additional percentage depending on aesthetic needs. For example, a 10% reduction in water usage may not sound like a significant amount, however consider that the reduction is in addition to the savings already achieved with the irrigation repairs. This 10% reduction results in very little change to the shade of green you have now by over watering and results in more black on the books or green in your pocket. Bermuda Grass has been successfully watered at a 25% reduction which resulted in a lighter shade of green but is still visually acceptable.

Recently a public utility, SRP, needed to address the green “island” effect. This incorporates a couple of water conservation techniques. Since

the goal was to only water a pre-determined number of acres based on a proposed water budget number, yet provide areas of commonly used turf with an acceptable amount of green grass, there had to be some creative planning. With the help of SRP to convert the budget dollars into the number of acres that could be watered for the year, the landscape contractor was able to designate the higher use areas to be watered at a particular deficit from baseline. Using park shelters as a guide with observed patterns of use, green “islands” were created making it possible to water certain valve stations that would attract the most use adjacent to playgrounds and shelters. This was achieved during the summer and winter by leaving much of the Bermuda dormant or with a high percentage of deficit and overseeding the “islands” for the winter. The end result was the areas where people

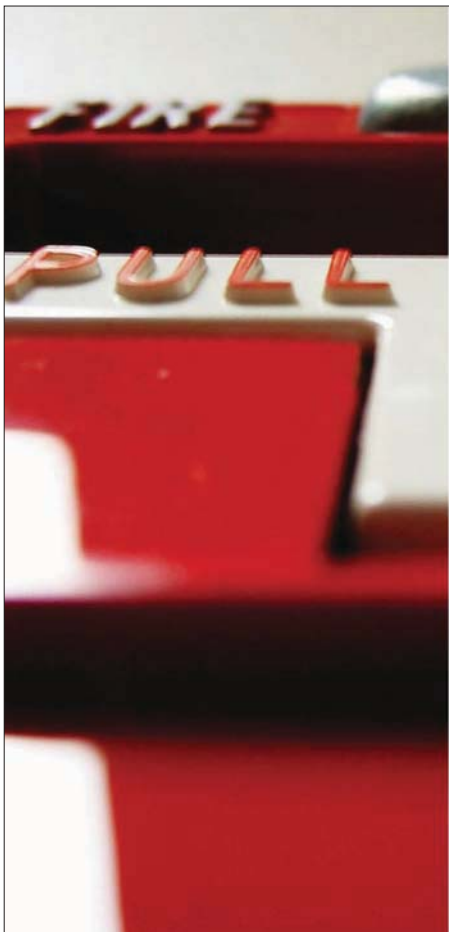
wanted grass was green without wasting water on the areas that had no functional purpose. Monetarily this has allowed for improvements in other areas with the savings.

Technology can be used in any of these scenarios. The simplest is a moisture or rain sensor that is installed on the existing clock. The basic sensor has materials or parts inside that expand or contract with moisture which disconnects the activation signal to the valve effectively shutting off the irrigation when it is raining or wet from rain. More advanced have a soil moisture probe that is buried and signals when it is too wet to irrigate or dry enough to irrigate.

More sophisticated are “smart” controllers that are irrigation timers which read the weather either by onboard sensors or even receive their information via wireless transmission. Smart controllers, while named appropriately, react to the garbage in garbage out cliché. The system must be balanced and a baseline established, otherwise there is no accurate information for the controller, especially if deficit irrigation is used. There must first be an amount that equals 100% of baseline to effectively program a 10% deficit. If done correctly, the return on investment for a smart controller can be achieved in less than one year in most turf scenarios.

There are other variations and methods used for water conservation, however those mentioned are time tested and have proven to pay for themselves over time. It is important to remember that water conservation is a challenge but with the right people managing the process, success is possible.

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