



## **Improving Water Use Efficiency in Outdoor Landscapes – a Time for Change**

### **By Bob Costa**

The need to design, maintain and manage water efficient landscapes has never been more critical. With water supplies stretched nearly to the limit throughout our region, and the cost of water on the rise, conserving water in outdoor landscapes is no longer an option, but rather an essential component of our current and future water use.

Water use efficiency in outdoor landscapes can be achieved through a variety of strategies, some of which may include: balancing the water requirements of the plants in your landscape, use of water conserving cultural practices, maximizing irrigation system performance and effective irrigation system management.

In existing landscapes, the greatest water savings generally occur when the uniformity of the water, which is being applied to an area of the landscape, is improved. When a landscape irrigation system has poor uniformity it requires extra water to compensate for areas where the coverage is poor. Conditions related to inadequate design, installation and maintenance will result in poor uniformity.

In addition, poor system management, particularly in the area of scheduling will greatly impact a sites water use. Utilizing weather based scheduling techniques, interrupting irrigation during and immediately following rainfall and limiting, or terminating irrigation during the winter can produce significant savings.

Conducting an audit of your outdoor water use is an effective way to evaluate the performance and management of your irrigation system, as well as various cultural practices that may influence water use. At the completion, a list of water savings recommendations can then be developed and evaluated for their water savings potential.

In many cases, simply retrofitting existing irrigation systems with water saving devices can produce significant water savings. Installing a rain shut off device is an effective and inexpensive way to interrupt a programmed irrigation cycle during, or following a rain event. The device, which can be purchased for \$20.00 or so, installs easily to a new or existing controller and is a must for every system.

Traditional irrigation scheduling methods that rely on pre-set run times tend to overwater landscapes, particularly in the late summer and fall. Weather based controllers, which utilize historical or real time weather information, automatically adjust daily run times matching the application of water to the daily plant water needs.

Matching the right sprinkler to the soil and the plant type can improve water use efficiency as well. Sprinklers that apply water in a fixed spray pattern are a poor choice for shrubs and trees and on soils that drain slowly or are sloped. These types of sprinklers can be easily converted to more efficient drip irrigation with retrofit kits that are designed just for this purpose.

Individually, and collectively, the opportunity to reduce water use in outdoor landscapes is significant. Embracing these and other water savings strategies will provide the means to meet the challenges of a limited and increasingly expensive water supply.