OUT ON A LIMB

'Water, water ever where'

By: Roger Davis, Landscape Architect Davis Design Group, Augusta, Georgia

There's water everywhere; streaming into the street, running into the neighbor's yard and tumbling into the storm sewers, all from the irrigation system. That's not where the water is supposed to go. An automatic underground irrigation system is a must for landscapes in the Augusta area, with our long hot summers where we can go a month or so without rain. The idea is to apply the water to the shrubs and turf in our yard and not to waste it off site.

Many times the irrigation system is so poorly designed that wasting water is unavoidable. Some areas have to be over watered so that other areas on the same zone are watered enough. The foundation plantings on the southern and western sides of the house should not be watered on to the same zone as the plantings on the northern and eastern sides. While trying to adequately wet the southern and western exposures, you over water the northern and eastern.

Many systems waste a lot of water through improper management. I operate my system manually when I see the need and I only operate it on the automatic cycle when I'm out of town for a week or so. Many people spend way more for irrigation than is necessary. Just because your watering days are Tuesday, Thursday and Saturday doesn't mean that you <u>must</u> water on those days. The optimum is to apply 1" of water per week. How do you know how long you need to water to apply 1" per week? Place a few pie plates in the irrigated areas and let the system run for 30 minutes, then measure the depth of the water. If it is 1/3 of an inch, then you need to water three times a week for 30 minutes or one time a week for 90 minutes. However in our heavy clay soils, if you ran your system for 90 minutes, much of the water would run off. If the water from your system is running off, then obviously you have run the system too long.

To be responsible, install a rain/freeze sensor, which will not allow you automatic irrigation system to operate during or after a rain or when the temperature drops below freezing. I hate to see irrigation running while or just after a rain event or running during freezing weather causing sidewalks and streets to ice over, not only is it a water, but a liability.

Somewhere around the middle of November, turn off your automatic operation and start it back again in the spring. After doing that, if you see that the area needs to be watered, run a manual start. Each year at spring start-up, check out each head for proper operation. Funny things seem to happen over the winter. Heads or risers have been mysteriously broken; rotor or impact heads are not rotating; heads are tilted or are spraying in the wrong direction; heads are clogged; plants grow and now block the sprinkler spray pattern causing one plant to be flooded while surrounding plants are not receiving any irrigation; or a valve may be leaking (not shutting down when the zone is cut off). It is not a bad idea to periodically run through the system, especially at start up and also during the season to make sure everything is working properly. You may have a leak and not know it, wasting a lot of water.

Many systems have been installed where the water pressure is very high. Although your system may appear to work great, the velocity of the water running through the pipes will eventually cause leaks at underground fittings. High water pressure will cause spray heads to mist and the slightest breeze will blow the spray out of pattern. I've seen impact heads operating so fast that the water hasn't even hit the ground before the head has rotated back to its starting location. This will also damage the head and cause the need for replacement. Often, pipes keep breaking and nozzles blow off because of the high pressure. Many times you hear the pipes under the house make noises, a condition know as 'water hammer, when the system comes on. The solution is the addition of a pressure reducing valve installed just behind where the system is tied in.

Install a separate water meter. By doing this you will be able to avoid the sewer charges on your water bill. The separate meter will be an additional cost of a couple of hundred bucks and there will be a base charge on your water bill whether your meter is in use or not. So, it is best to have the irrigation water meter cut off by the municipality for the winter and pay a \$25 fee to have it cut back on in the spring. Consider adding a hose bib to your irrigation system where you regularly wash cars or hose down your driveway to also avoid the sewer charges.

Water, water every where is not the answer.