Lawns with Compacted Soil:

To improve a lawn with compacted soil, aerate the lawn and apply about 1/2 inch of compost. Spread the compost evenly over the lawn while the holes created with the aerator are still open. Aerators are available to rent or schedule a lawn care professional to aerate and spread the compost. If aeration is not possible, the addition of compost will still help. For best results, add compost after the lawn starts growing in the spring and early summer and again in the fall before the lawn goes dormant.

Planted Beds:

Maintain a 2 to 4 inch mulch layer in all planted beds. The mulch layer keeps the soil surface from hardening therefore the water enters the soil more efficiently. Mulch also helps avoid evaporation, erosion, moderates soil temperature, controls weeds and eventually breaks down to become part of the soil and nutrients for the plants.

Cycle and Soak

Most of north central Texas has heavy clay soils which becomes compacted with lawn maintenance, foot traffic, and both rain and sprinkler water. These heavy clay soils cannot absorb water as quickly as most sprinkler systems are applying water which increases the chance of water runoff resulting in a waste of a valuable resource.

This unabsorbed water running down the street from sprinkler systems ends up in local storm drains which then spill into local creeks and rivers and ultimately into lakes. This runoff water carries harmful things like:

- Fertilizers
- Pesticides
- Pet waste
- Soil sediments

*Many cities have made irrigation water running down the street a fineable offense.
The cycle and soak method of applying water to the landscape drastically reduces and in some cases eliminates runoff.

This method of applying water to the landscape is made up of multiple cycles for each station with 30 to 60 minute for the water to soak into the soil between cycles.

1. The first cycle will break the surface tension of the soil and saturate the top layer of soil.
2. The second cycle infiltrates the soil more efficiently and deeply after the first cycle.
3. A third, and sometimes a fourth cycle, is beneficial if a slope is involved or if runoff occurs after the sprinklers run for just a few minutes.

For example: if you have determined you need to run a sprinkler station 12 minutes, schedule your controller run the station 2 times for 6 minutes, or 3 cycles for 4 minute

If a slope or runoff is involved, run the station 4 cycles 3 minutes.

Understanding Your Controller:
Many irrigation controllers have the ability to have several start times. Some controllers have up to four start times and within their multiple programs the ability to have up to 16 start times. Each controller is different, so investigate the instruction manual for your controller. If you cannot locate the manual, it may be available online at the manufacturer’s website or call the manufacturer’s customer service for instructions to set a cycle and soak schedule or have a licensed irrigator set the controller. For best assistance when calling customer assistance, use a cordless or cell phone while standing in front of the controller.

For cycle and soak to be effective, set multiple start times with short runtimes for each station. Take some time to determine just how long each zone can run before runoff occurs. Remember every zone of your irrigation system may be different, so spend a little time “testing” each zone and calculate the maximum amount of minutes the zone may run until you see runoff. Use this information to set a short runtime for each station. Now set multiple start times 30 to 60 minutes after the last station finishes.

For example: Station 1 is set to run 15 minutes, station 2 for 20 minutes, station 3 for 15 minutes, station 4 for 20 minutes, station 5 for 25 minutes and station 6 for 25 minutes for a total of 120 minutes, 2 hours. If you set 2 start times, set the runtime for each station to half the runtime currently set. The total runtime is now 60 minutes or 1 hour. Therefore, set the second start time 2 hours after the first start time. If you set 3 start times, set the runtime for each station to one-third the current runtime (40 minutes total) and the second start time 2 hours after the first start time and the third start time 3 hours after the first start time.

Some new irrigation controllers have a cycle and soak setting. For these controllers you set the maximum runtime for each station and number of cycles. The controller will automatically divide the runtime into the number of cycles you set. If your controller does not have multiple start times then it may be time to upgrade to a new controller. The replacement cost is quickly returned in water savings!