Water Conservation and Irrigation

Coyote Run Golf Course is fortunate to be located near Lake Michigan, sits atop a reliable aquifer and annually averages over 38" of rain. Despite this seemingly endless supply of fresh water, we realize that water is still a precious natural resource, making its conservation important and necessary. We use a variety of techniques in our efforts to conserve water:

- Our irrigation philosophy is to apply water for turf survival and plant health, not for aesthetics. Managing for "firm and fast" conditions keep water applications to a minimum. A little brown grass or dormant rough is accepted and even appreciated.
- Coyote Run's computerized irrigation system is designed to conserve water through:
    - o Cycle and soak: an irrigation system feature that eliminates run-off by allowing water to be applied gradually and allowed to soak in
    - o Water applications based on evaporation/transpiration data, a measurement based on daily climactic conditions, that totals the amount of water that naturally evaporates into the atmosphere plus the amount of water used by the plant for cooling and respiration
    - o A flow management system that keeps the irrigation pumps running at their maximum efficiency, allowing water to be applied quickly during times with low evaporation potential, making maximum use of the water and saving electricity
    - o Individual sprinkler run times that can be adjusted for various micro-climates, such as low wet areas, shade, poor soil, slow infiltration rates, elevation changes, etc.
- Irrigation is applied infrequently to the depth of the deepest turfgrass roots
- Irrigation heads in the rough are used infrequently, allowing the rough is allowed to go dormant during periodical droughts
- The Coyote Run pump station is inspected and maintained on a yearly schedule by an outside contractor to ensure optimal performance
- All irrigation heads are formally inspected twice per season and informally inspected on a daily basis to ensure optimal performance
- The 15 acres of tall grass are never irrigated
- During the construction of Coyote Run, grass varieties were selected for tolerance to dry conditions reducing the need for constant irrigation
- Grass is maintained at heights of cut that are optimal for deep roots and drought tolerance
- An aggressive aeration program helps maintain a healthy root system and improve water penetration into the soil
- Bio-solid fertility improves the soils ability to hold plant-available water
- Wetting agents, (basically soaps similar to dish detergent), are added to the irrigation water to aid in penetration of compacted or hydrophobic soils, keeping a uniform moisture profile
- All of the flowers and trees used on the course are native and can easily survive our climate without irrigation
- The grounds maintenance building has storage for 355 gallons of rainwater. The rainwater is used for watering flowers, watering new trees, and for other daily grounds maintenance functions