

Maximize the Available Water Supply for Efficient Irrigation on Athletic Fields

One of the first questions I ask when starting a discussion with an athletic field manager, is how much area will be irrigated initially, and if there are plans for future expansion. The reason this information is so important is to keep the water window manageable, allowing for maintenance (fertilization, seeding, mowing, etc.), playing time, and irrigation.

Determining Water Supply Requirement

Most athletic field turf managers I have worked with ideally like to be able to complete all the watering in four to five days per week, and in less than an 8-hour watering window. Typically, we're applying a specific amount of water on a weekly basis, which could be anywhere between 1" and 1.5". The type of turf, soil, and climate are the key factors in determining that amount. Using the above factors helps determine the water supply requirement; either, the size of the water service line and water meter; or the size of the pump station and discharge piping, if pumping from an alternative source, such as a pond or lake. If this is an option, consideration also needs to be given to a recharge well, as drawdown can be substantial after an irrigation cycle is completed.

Achieving Efficient Irrigation

Modern irrigation equipment can activate multiple areas or zones simultaneously based on system flow capabilities. This maximizes the available water and condenses the water window and overall system run time as compared to watering an individual area or zone separately.

The control systems that help you achieve this are two-wire based systems, such as the <u>ESP-LXD Two-Wire Decoder Controller</u>, and cloud or webbased irrigation control systems. Rain Bird's <u>IQ Remote Water Management Platform</u> is a good example of this type.



When a flow sensor is also installed these control systems measure the flow rate and use this information to schedule multiple zones to run at the same time based on the system's allowable flow rate.

Remote and Mobile-friendly Capabilities

When flow sensors and master valves are installed these systems can also identify problems and react, by turning off the zone or system, preventing water from running until someone discovers the problem. The IQ Platform also gives you and other people on your team the ability to monitor, operate, and make changes to the system remotely from any place with an internet connection. You can also configure IQ to automatically send email alerts to the appropriate individuals when the system detects problems. The mobile-friendly IQ-Cloud and IQ-Enterprise also allow you to access the information and turn zones on or off on your smartphone or tablet.

These features offer the benefit of helping you manage your irrigation more effectively and efficiently, but it all depends on understanding your watering requirements and designing the system to meet these requirements.

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