



*Recycled water provides a more predictable and affordable water supply while soil testing and supplemental maintenance practices prevent negative turf impacts.*

## IRRIGATING WITH RECYCLED WATER

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The only option for recharging the water supply at the University of Louisville Golf Club in Kentucky was to use city water, which required paying high fees. Running out of water was also a serious concern during periods with minimal rainfall. Decision-makers at the facility began searching for more cost-effective options to recharge the irrigation pond.

A plan was developed to receive recycled water from the local wastewater treatment plant to fill the irrigation pond. Water availability would no longer be an issue and the costs associated with using recycled water for irrigation are much less than potable water. While irrigating with recycled water would solve the quantity issue, water quality would now be a concern because recycled water is typically higher in salts.

To ensure that turf health is not jeopardized by water quality issues, soil and water samples are sent to a laboratory every month to measure bicarbonate and salt levels. Supplemental maintenance practices

that mitigate the impact of irrigating with recycled water are scheduled based on these test results. Applications of calcium have been particularly helpful in maintaining healthy turf and quality playing conditions.

Since installing the new recycled water feed, water quantity has not been an issue. Diligent testing has ensured water quality does not cause turf decline. Minor issues associated with water quality have been noticed during prolonged periods of dry weather in the late summer or early fall. Fortunately, the duration of these dry spells has not been too long, and timely rainfall has flushed the soil profile.

The recycled water feed was installed next to the pumphouse because this section of the irrigation pond is closest to where the feed enters the property. Looking back, routing the feed to the opposite side of the pond from the pumphouse may have been better because that would allow for dilution and natural filtration before the recycled water reaches the irrigation intake.

Irrigating with recycled water is typically associated with golf facilities located in the West, but the University of Louisville Golf Club has proven that it can be a viable option anywhere. While there may be water quality concerns when using recycled water for golf course irrigation, routine testing can be used to guide supplemental maintenance practices that help ensure turf health does not decline.



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