

CASE STUDY

BROOK-LEA COUNTRY CLUB BETTER INFILTRATION AND WATER SAVINGS



OVERVIEW

Brook-Lea Country Club's championship golf course was designed by Donald Ross in 1926 and continues to be regarded as one of the finest tests of golf in Upstate New York. The golf course and clubhouse are in a spectacularly scenic setting, which includes upland meadows, a meandering creek, ponds, and mature woodlands.

The diverse membership includes families, individuals, and corporations who all share an admiration for exceptional sports and social fellowship.



METHODOLOGY

In addition to using Turfbolts on hoses, one 6" stainless steel Turbulator was installed at the pump house at Brook-Lea Country Club in Rochester, New York, who relies on Ewing Irrigation and Landscape Supply for their needs.



DATA RESULTS

Five-year water usage & rainfall data two year summer (June-July-August) water usage & rainfall data

FIVE YEAR WATER USAGE & RAINFALL DATA

	2015	2016	2017	2018	2019
Water Usage	10.7	18.9	6.6	15.7	8.1
Rainfall	21.53"	17.45"	31.45"	22.67"	23.12"

Superintendent reports an increased root depth on greens (~1"). Mowing heights on tees and fairways were dropped from 500ths to 450ths with no added signs of stress, indicating a more vital and vigorous turfgrass, even with less foliar nitrogen use.

TWO YEAR SUMMER (JUNE-JULY-AUGUST) WATER USAGE & RAINFALL DATA

	2018	2019	Notes
Water Usage	11.5	9.2	- WATER USAGE IS MEASURED IN MILLIONS OF GALLONS, AND IS RECORDED VIA PUMP USAGE ON A MONTHLY BASIS. - RAINFALL DATA COLLECTED WITH AN ELECTRONIC RAIN GAUGE, RECORDED ON A MONTHLY BASIS.
Rainfall	10.3"	6.7"	

Water savings after installing Magnation as a water softening treatment device proved to be substantial over similar rainfall years in 2018 & 2019, using 8.1 million gallons in 2019 with only .45" more rain, verses 15.7 million gallons in 2018.

Using a Spectrum dedicated EC meter, EC readings were higher below the root zone and lower at the surface versus previous years. Moisture readings were higher at surface and lower below root zone. The type of readings are not indicated in the bulleted list provided.



CONCLUSION

Turfbolts significantly improved infiltration where the Superintendent previously saw puddling in syringe areas despite chemical/wetting agents that typically get applied. Although they did not change their chemical/wetting agent schedule in 2019, the results are definitively attributed to Magnation. Healthier roots were reported as well as more vigorous and better-quality turf, in addition to no yellowing or loss of leaf foliage on deciduous trees and arborvitae that are hit by irrigation water.

