Brentwood Country Club Uses Biological Soil Management to Regenerate Soil, Save Water and Improve Course Conditioning

Water Savings Incentive Program

CaseStudy | Brentwood Country Club - Los Angeles, CA



Brentwood Country Club

IMPACT

20+
million gallons of water saved in the first year

36%+
water savings

$300K+
labor savings to date



PRM System @ Brentwood

PROJECT DESCRIPTION

Facing challenges that conventional best management practices had failed to resolve, Brentwood Country Club (Brentwood) adopted an innovative soil-based approach in 2023 to resolve compaction problems in the “roughs” of their golf course. Brentwood turned to biological soil management (BIOS) provided by Performance Resource Management (PRM) to reduce soil compaction. If successful, the cost savings provided by BIOS for displacing rough aerification and labor alone would justify the annual cost of the program.

A Baseline Assessment was performed which included a physical examination and diagnostics of the soil conditions and the pump station that supplies the facility with water. PRM custom designed the BIOS system to meet the conditions for Brentwood, including the prescription of live biology to be applied and the injection and control systems. The main issue to be addressed with BIOS for Brentwood was compaction in the roughs. Compaction was alleviated, turf density and color increased, and stands of turf across the property benefitted from improved soil health.

Additional benefits came to light during the monitoring period. Brentwood realized enhanced water efficiency in their soil profile due to reduced runoff and evaporation, increased infiltration rates and an expanded root zone. Year 1 water savings achieved 20 million gallons, or 36%, savings. Overall conditions appear to have improved in year 2 of the project, equating to 22 million gallons of water savings, or 40% from the baseline. Brentwood hasn’t applied granular fertilizers in over 27 months due to increased nutrient availability from improved soil health, and chemical and fungicide applications have been reduced. Overall, Brentwood realized over a 5x ROI on their BIOS program in their first year alone and continues to see benefits from the program.

PROJECT BENEFITS

- Over 5x ROI in year 1
- 36% year 1 water savings; 40% year 2 water savings
- 60% annual electrical savings from reduced pumping
- Over $300,000 in labor savings to date from avoided aerification of roughs
- BIOS approach is customizable and scalable
- Improved playing conditions and performance of the golf course
- Reduced costs of operation, maintenance, and carbon footprint of the facility