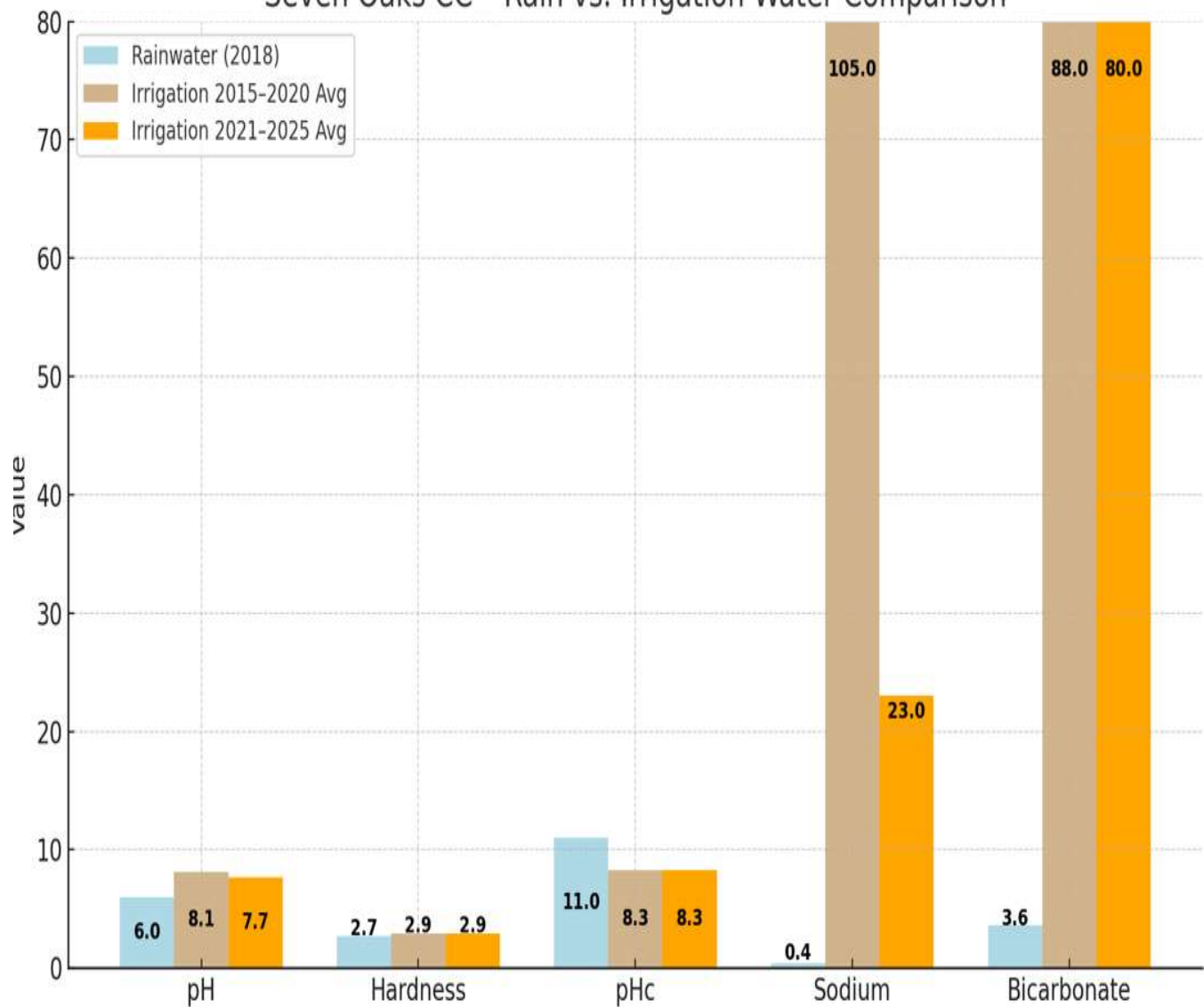




IRRIGATION WATER

Seven Oaks CC - Rain vs. Irrigation Water Comparison



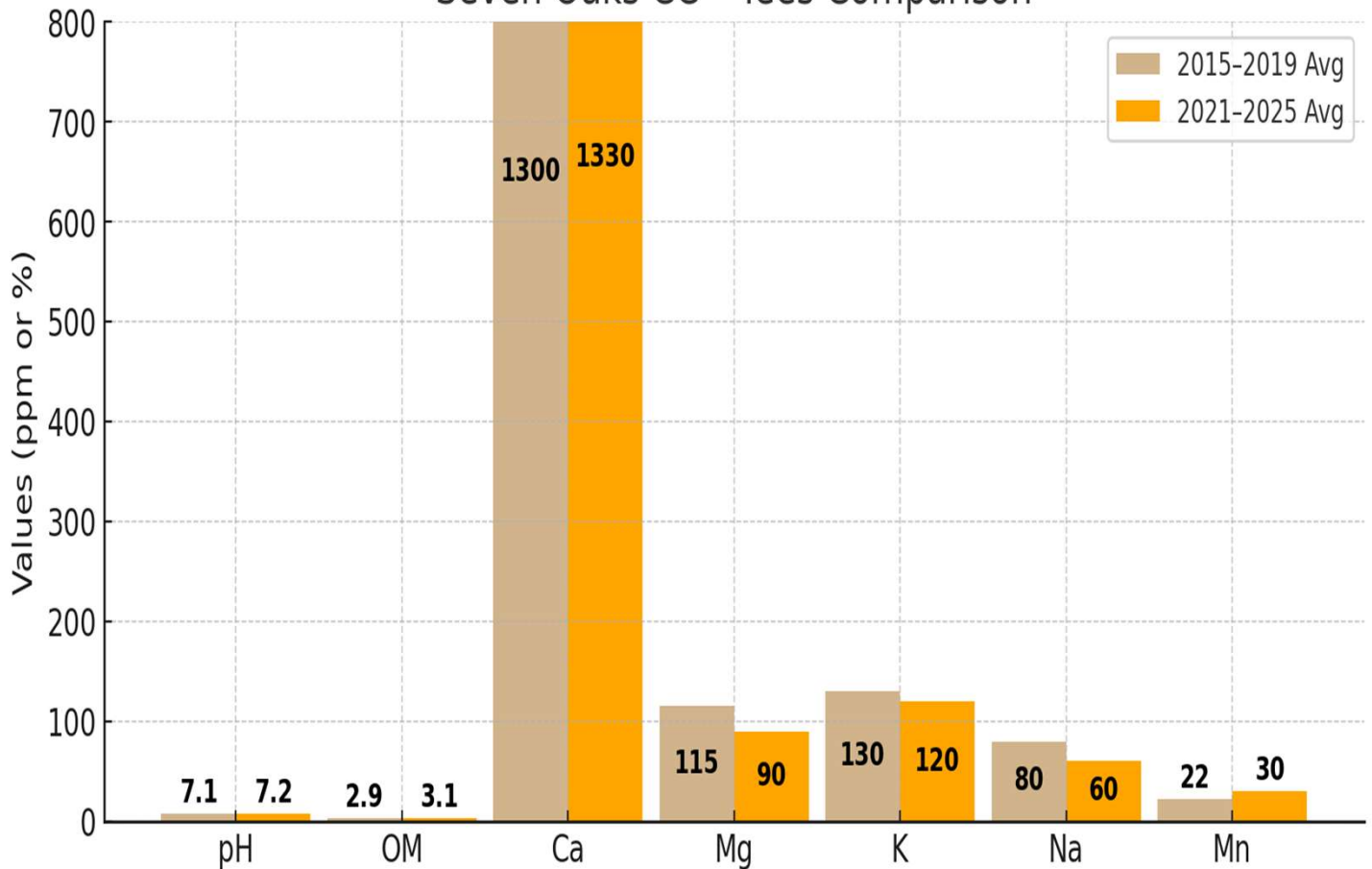
- The best irrigation water any golf course can receive is rain. I have never thought there was a perfect irrigation water and therefore setting acceptable ranges is not quite accurate enough. As this sample is average for your water source, I have compared your water sample to rainwater samples I have collected in Bakersfield from 2018.
- I used 2020 as the year for before and after. There was no significant water treatment before you arrived and what has changed since you have been treating the water?





TEES

Seven Oaks CC - Tees Comparison



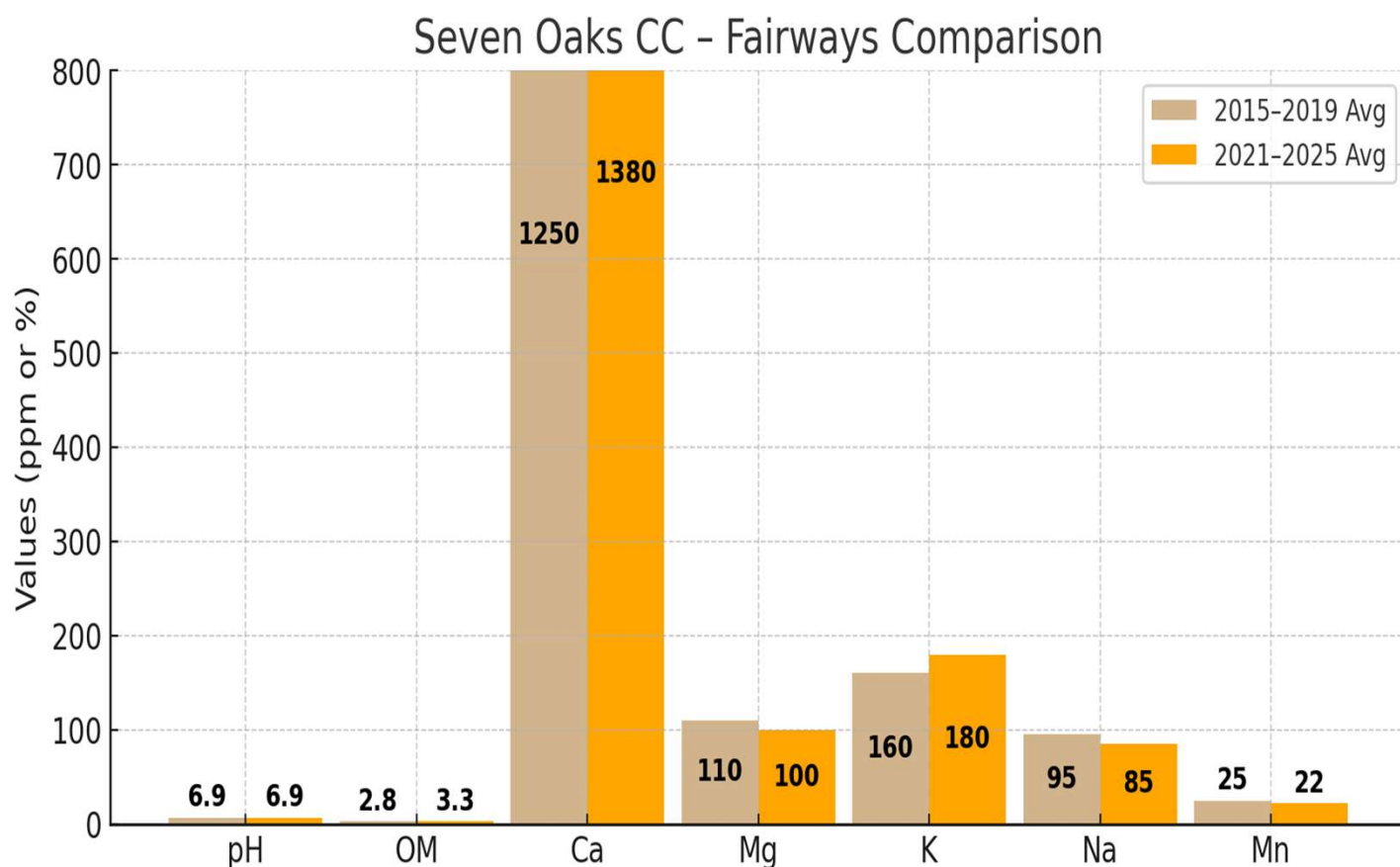
Benchmarks: pH = 6.8 OM ≤ 5% Ca ≥ 500 ppm Mg ≥ 100 ppm K ≥ 75 ppm Na ≤ 60 ppm Mn ≥ 75 ppm

- The tees need no applications currently. The soils chemistry is very stable over the previous 10 years. Manganese can be supplemented using a foliar spray through the winter.





FAIRWAYS



Benchmarks: pH = 6.8 OM ≤ 5% Ca ≥ 500 ppm Mg ≥ 100 ppm K ≥ 75 ppm Na ≤ 60 ppm Mn ≥ 75 ppm

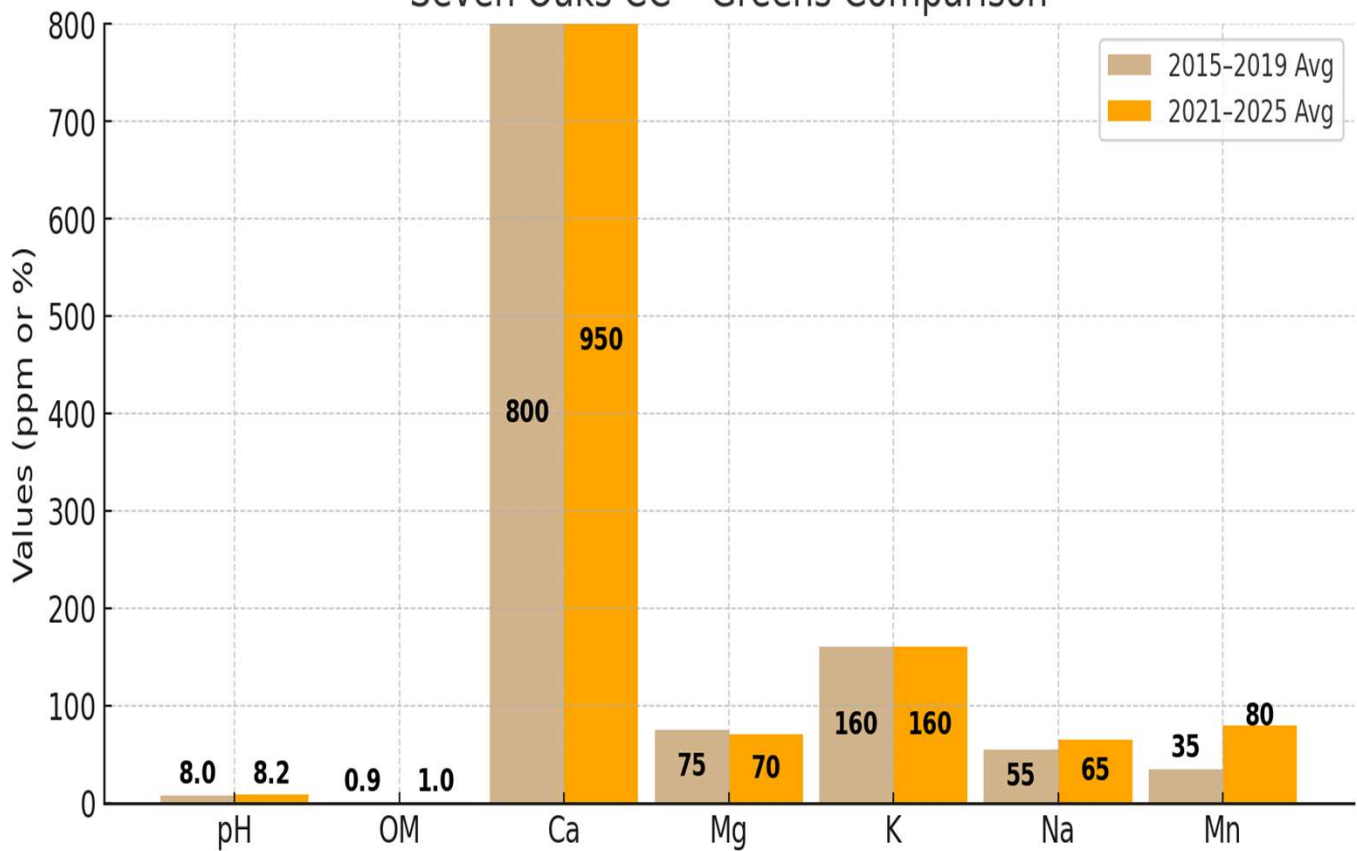
- The area I sampled on #5 Fairway on the Islands Course, is like the fairway soils chemistry on other parts of the curse but the pH is low. I had collected a sample in your rough a few years ago and found that same issue.
- The organic matter has increased slightly over 10 years, but I would consider that your cultural practices (aerifications, Fraze mowing and reducing overseed “litter” has been helpful.





GREENS

Seven Oaks CC - Greens Comparison



Benchmarks: pH = 6.8 OM ≤ 2% Ca ≥ 500 ppm Mg ≥ 100 ppm K ≥ 75 ppm Na ≤ 60 ppm Mn ≥ 75 ppm

- Overall, the sand under the turf has not been changed. The renovation process included some additional sand that was matched at the time of use. There was till and no-till used in the project. So, it doesn't surprise me that the before and after soils chemistry is stable.
- The Manganese levels are in a perfect spot from your diligence over the previous 2 years.
- Magnesium is lagging and could be worked on over winter with ProMag36 or K-Mag applications.



SUMMARY

Seven Oaks Country Club – Fall 2025 Overall Soil Health Summary

TEES

- pH averages 7.2 – slightly above the 6.8 benchmark; stable across 10 years.
- Organic Matter averages 3.1%, within the $\leq 5\%$ benchmark for sand-based tees.
- Calcium and Magnesium both remain high, supporting strong soil structure and CEC balance.
- Potassium near 120 ppm is above the 75 ppm target, ensuring good turf resilience under traffic.
- Sodium averages 60 ppm – at the upper acceptable limit; continue periodic flushing cycles.
- Manganese up to 30 ppm, still below the 75 ppm target – consider foliar Mn support to improve uptake.
- Overall tee soils remain well-balanced with excellent nutrient reserves and moderate salt load.

FAIRWAYS

- pH stable at 6.9 – close to ideal benchmark of 6.8.
- Organic Matter $\sim 3.3\%$, slightly above ideal but improving infiltration and nutrient retention.
- Calcium ~ 1380 ppm, Magnesium ~ 100 ppm, and Potassium ~ 180 ppm – balanced macronutrient ratios.
- Sodium 85 ppm – trending lower from previous years; maintain leaching events and acid program.
- Manganese steady in the low 20s; supplemental Mn may help color and disease suppression.
- Fairway soils show strong base saturation and improving salinity management compared to 2015–2019.

GREENS

- pH averaging 8.2 – elevated, typical for Bakersfield water chemistry; continue acidification treatments.
- Organic Matter averages 1.0%, well below $\leq 2\%$ target – ideal for gas exchange and firmness.
- Calcium and Potassium both strong; Magnesium slightly low for optimal nutrient balance.
- Sodium trending higher (~ 65 ppm) – monitor for salt stress; periodic flushing recommended.
- Manganese improved significantly (80 ppm), now exceeding the 75 ppm benchmark.
- Greens exhibit excellent structure, consistent OM control, and balanced micronutrient health.

Overall, Seven Oaks soils show strong nutrient balance and steady improvement in sodium and manganese trends. Continued emphasis on flushing, acidification, and micronutrient balance will maintain soil health heading into 2026.

Advantages of Not Overseeding Ryegrass into Bermudagrass — Central California

Faster and Cleaner Spring Transition – Bermudagrass greens up quicker without rye competition; avoids scalping and herbicide cleanup.

Lower Water Use – Eliminates heavy winter irrigation demands, saving 20–40% water during restricted months.

Reduced Salt/Sodium Load – Less irrigation with marginal water reduces soil salinity and maintains infiltration.

Healthier Bermuda Base – Better carbohydrate storage and root integrity through winter; stronger spring density.

Lower Cost and Labor – No seed, topdressing, or extra mow cycles; staff time freed for projects.

Improved Winter Playability – Firm dormant surfaces provide faster roll; pigments can substitute for color.

Sustainability Optics – Aligns with California drought and water conservation goals while maintaining play quality.



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