

PEPSICO

Tolleson Gatorade Water Use Reduction

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Project Sponsors:

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PepsiCo, Inc. is a Fortune 100 food and beverage company that has publicly committed to 2025 and 2030 Sustainability Goals which include significantly reducing the amount of non-product water used in the Gatorade production process. These goals are particularly important to Tolleson Gatorade, located outside of Phoenix, which is experiencing record drought conditions that are expected to worsen due to climate change. The Tauber team developed a path for Tolleson Gatorade to achieve PepsiCo's 2025 and 2030 water use sustainability goals, by more than 65% and 80%, respectively, by quantifying the full extent of current water uses, recommending new water saving initiatives, implementing approved projects, and designing a cultural framework to ensure long-term success.

To understand the plant's current state, the team updated water usage data by taking measurements of flow and analyzing existing data to create a mass balance of all water consumed across 36 distinct end uses. Simultaneously, the team interviewed dozens of operators and supervisors to identify key pain points and opportunities to improve. These two sources of information were combined to create and prioritize 33 unique projects, representing 144.6M gallons per year of water savings, for implementation across the plant's nine production lines and associated water treatment system.

The Tauber team began execution of water savings projects to ensure the plant remained on target to achieve annual goals. Sixteen unique projects were implemented while onsite, including optimizing recirculation through heat exchangers, eliminating excessive conveyor sprays, and creating a system to notify high water use conditions in bottle coolers.

To support these new efforts, the team also performed a root cause analysis of historical projects which had not been maintained to identify and recommend key cultural and organizational improvements for PepsiCo and Tolleson Gatorade that will be necessary to achieve the sustainability goals. Over the project duration, the Tauber team implemented changes which resulted in annual savings of \$625,000 and 62% (89.5M of the 144.6M gallon) water use reductions required by 2025.