

CASE STUDIES



Battling drought in California's Ojai Valley with IoT

How The Thacher School uses smart water data to reduce campus-wide water consumption



"By implementing Banyan's smart water technology, we're not only able to conserve water and save money but can and have integrated water insights into our marketing strategy. The ability to closely monitor and save water became a competitive advantage to attract prospective students and families who might have concerns about the school's future, its sustainability plan or the state of its facilities because of where we're located."

- Ed Bennett, director of facilities for The Thacher School

A COMPLEX CAMPUS IN A DROUGHT-STRICKEN REGION

The Thacher School is a coeducational, college preparatory independent boarding school in Ojai, California, a particularly drought-susceptible region in Southern California. The constant and pervasive threat of widespread drought combined with the ever-present maintenance requirements of Thacher's sprawling and complex 427-acre campus created troublesome challenges for the school if left unchecked. For Thacher's staff and board of trustees—which view water scarcity as a top threat to the school's operability, sustainability, admission's process, fundraising efforts and to the student body as a whole—doing nothing was not an option.

Prior to Thacher's partnership with Banyan, the school's decision-makers set a target of 85 percent water usage reduction compared to 2013 levels. After making a series of common-sense decisions around water usage— watering later at night, qualitatively reducing water usage, installing sections of natural turf—the school had cut its usage significantly, but not enough to meet its goals. To achieve the rest of its water savings goals, director of facilities Ed Bennett began to examine IoT and data analytics technologies that could provide a total water management solution.

More than **24 million**

Californians are affected by drought



Thacher's water usage goal, in gallons, compared to 2013 levels

UNPRECEDENTED ACCESS TO WATER USAGE INSIGHTS

Bennett sought a platform that could monitor and control both indoor and outdoor water usage across the campus's 300,000 square feet and 123 buildings, as well as a data visualization component that enabled him to analyze and control water usage from his mobile phone as he was out and about on campus.

He's now able to do both with Banyan Water Central, Banyan's mobile-friendly water management dashboard. The results, Bennett says, have been great so far, with Banyan contributing significantly to Thacher's overall water savings of 40 percent. Located in Ojai, California, The Thacher School is an independent boarding school with dorms, athletic fields, academic buildings, horse stables and more.

427 123 acres buildings

TOP-TO-BOTTOM SUPPORT

The operational savings from which Thacher has benefited following Banyan's implementation have attracted support from the school's stakeholders at all levels, including:

- The board of trustees, which appreciates the macro-level benefits associated with Banyan's platform, including total water savings, related cost reductions costs and an increase in asset value.
- Alumni with an interest in sustainability whose contributions support the school through an annual fund.
- Prospective parents concerned about the school's staying power.
- Enrolled students, who compete with each other in dorm-wide contests to reduce water usage. Each dorm even has its water usage statistics displayed publicly around campus through Banyan's platform to remind students to build better water usage habits into their daily routines.

"Banyan's flexibility in data presentation and analysis cannot be overstated. Presenting students with micro-trends based on each individual dorm's usage and showing board members macro-level trends campus-wide from the same tool has been hugely valuable for both the facilities team and the school as a whole."

> --- Ed Bennett, director of facilities for The Thacher School