

HOW DOES PUC ADDRESS WATER CONSERVATION ON CAMPUS?

PACIFIC UNION COLLEGE (PUC) IS COMMITTED TO WATER CONSERVATION ACROSS CAMPUS. THE FOLLOWING INFORMATION PROVIDES DETAILS ON THE COLLEGE'S WATER USAGE, AS WELL AS CONSERVATION AND SUSTAINABILITY MEASURES IN PLACE.

■ WATER USAGE REDUCTION

PUC's system of onsite utilities means the campus runs independently of local water companies, though the college is not exempt from conservation regulations. PUC monitors daily and currently meet, and often exceed, all State of California guidance for water conservation since a 2015 mandate went into effect. This mandate requires a 25% reduction, and PUC has maintained a steady 25-31% each year. Water usage data is monitored and tracked daily by PUC's Facilities Department.

■ RECYCLED WATER

Treated wastewater from PUC's own wastewater plant is used to water all the college's agriculture fields. Run-off water from campus lawn irrigation is also captured and added to the treated wastewater reservoir, using it in combination with the treated wastewater to irrigate the fields. This process of capturing and recycling this run-off water for irrigation use, PUC is recharging the aquifers onsite and keeping the water levels up. In addition, everything that goes into PUC's wastewater plant is recycled.

■ SPRINKLERS

For more than 10 years, the irrigation sprinklers on PUC's campus have been automated on a system that includes time clocks, as well as moisture and weather sensors. The clocks are connected to a centralized computer that allows the Landscape team to monitor and control the sprinklers at all times. The moisture and weather sensors feed data from locations across campus into the system, which can make automatic watering adjustments based on that data. There are close to 50 irrigation clocks on campus, which are managed by PUC's skilled Facilities Department, allowing minimal downtime for maintenance or equipment repairs.

■ WELL LEVEL MONITORING & RESTING

PUC's Facilities Department has monitored well levels weekly, even more often during summer months, since 1991. Due to this, PUC proudly boasts the best well monitoring records in Napa County and there has been no drop in water levels in monitoring history, even during times of drought. Even so, the college takes water conservation very seriously and continues to take every action to make monitoring and maintaining high aquifer water levels possible.

In addition to monitoring, wells on PUC's property are given a daily break of several hours to allow the recharging of aquifers. This is a practice that the college started in 1992, which has made an enormous difference in summer months. Given the variety of soil types on campus, irrigation practices may appear as run-off or waste to a casual observer, but all are appropriately planned, monitored, and adjusted as needed. Any run-off that does occur is captured and sent to the wastewater plant, allowing it to be used again for watering PUC's agricultural fields and for recharging the onsite aquifers.

■ A SELF-SUSTAINING CAMPUS

PUC has a sophisticated system of utilities and processes on campus that allows the college to be uniquely self-sustainable. Water resources include the wastewater treatment plant that recycles water and recharges the colleges aquifers and an independent water system. In addition to the water resources, a cogeneration plant generates the college's electricity, and steam recaptured from that cogeneration plant runs the college's chillers. There is also a campus-wide software system in place to monitor and control loads and airflow in buildings. All of the college's utilities and resources are monitored, managed, and maintained onsite exclusively by PUC's skilled Facilities Department, which includes student employees who gain valuable training and hands-on experience.

IF YOU HAVE QUESTIONS REGARDING PUC'S WATER CONSERVATION OR OTHER TOPICS OF SUSTAINABILITY ON CAMPUS, PLEASE EMAIL PR@PUC.EDU.