

City of Woodbury

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City Background

The City of Woodbury is the largest city in Washington County. The city's Engineering and Public Works Department is responsible for the maintenance and planning of present and future infrastructure.

Intern Project

Implement and evaluate the effectiveness of water conservation initiatives for residential properties through the utilization of "smart" irrigation technology.

Incentives to Change

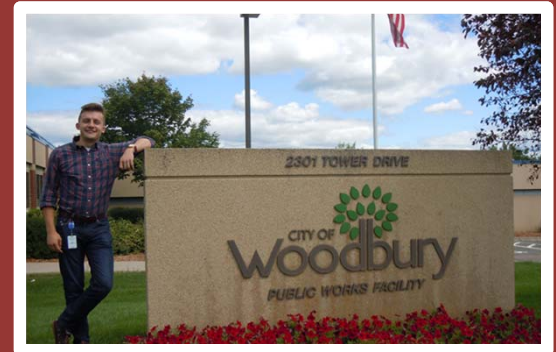
Woodbury's water demand rises as the population increases. Meeting rising water demands could represent a significant cost in the future as more wells may need to be drilled. Drilling more wells also puts additional strain on the aquifer, which may compromise its long-term sustainability.



Solutions

Distribute Smart Controllers to Residential Homeowners

- Fully subsidized by the City of Woodbury
- Uses lawn characteristics and local weather data to schedule and optimize irrigation
- Automatically skips irrigation if precipitation threshold is predicted to be met
- Savings determined by conducting irrigation audits
- Results show a 49.77% average reduction in water usage
- Savings are expected to be maintained throughout the watering season



Explore distribution of other irrigation optimization technologies

Opportunities include soil moisture sensors, rain sensors, pressure regulators, and flow sensors