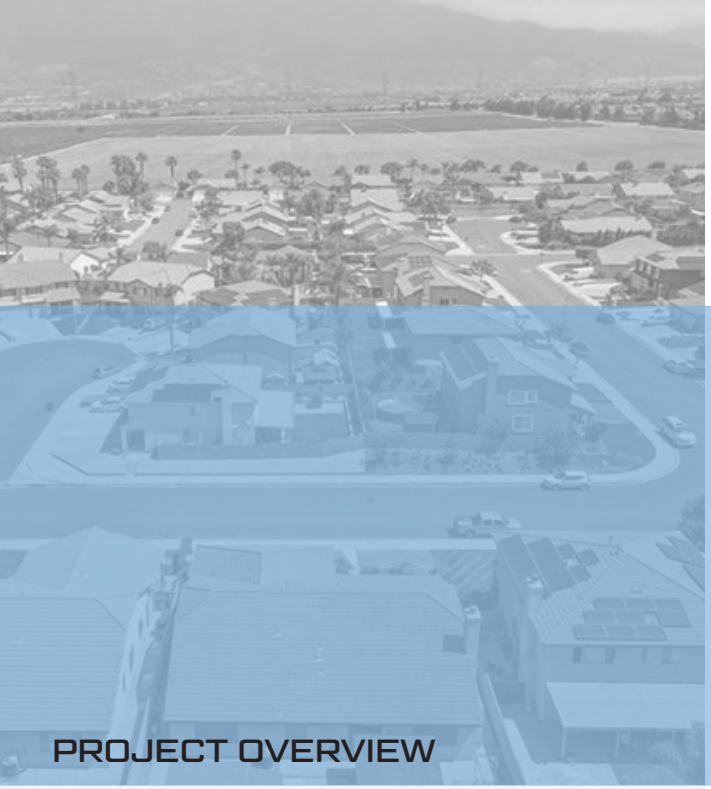

APPLICATION BRIEF

FONTANA, CA UTILIZES QS200 FOR WATER CONSERVATION PROJECT

August 9, 2022

PROJECT OVERVIEW

The City of Fontana, California suffered severe droughts in recent times, causing the conservation of water and the maintenance of valuable trees and shrubs in public spaces to be a major concern.

Many of the city's green areas on traffic islands use drip irrigation to water the plants and shrubs. City officials were monitoring the water usage via paddlewheel flow meters attached to a remote alarm system. The paddlewheel flow meters were ineffective because they were continually giving false positives—showing "no flow" when the flow was below the threshold which the meter could actually sense. Paddle wheel meters have an impeller that requires enough flow velocity to overcome the friction of the wheel on the shaft to sense any flow. In low flow situations, like drip irrigation, paddlewheel meters often cannot register low flow readings.

PRODUCT SOLUTION

FLOMEC®'s **QS200 Insertion Ultrasonic Flow Sensor** has no moving parts and requires much lower flow rates to register a reading. QS200 "retrofits" into most leading irrigation systems.

The city installed the FLOMEC QS200 in a single installation with bubbler head for drip irrigation with flow below 3 GPM, retrofitting it in the existing housing. The low flow alarms were reset for the QS200 ultrasonic flow sensors.

A low flow alarm from the QS200 occurred and was thought to be another false alarm, which occurred previously with the paddlewheel flow meters. When the alarm was investigated, it was found that there was blockage in the nozzle and no water was reaching the flow meter or plants.

The ability of the sensor to detect low flows, typical of bubbler head nozzles and drip line water velocities, saved the city the cost of replacing the greenery for the entire median strip—an expensive and difficult job when complicated with traffic flow. Savings were estimated by the City of Fontana Engineer in the thousands of dollars.

QS200 is designed to support commercial irrigation applications and measures flow rates five times lower than current flow sensors on the market, as low as 0.22 gallons per minute. It provides extended leak detection down to 0.1 feet per second.

- Flow sensors for or with PVC tees: 1 inch through 4 inch
- Saddle series: 6, 8, 10, and 12 inch