



# Bowles Farming

A Winning Combination – High Integrity & Easy to Use

## Overview

When Danny Royer joined Bowles Farming as the vice president of technology in early 2016, he inherited a portfolio of irrigation technology investments that weren't being fully utilized or even deployed. His mission was to assess the existing infrastructure, find complementary technologies and deploy solutions that provided real benefit to operations. To that end, Danny attended the Royse Agtech 2016 conference where he listened to a presentation made by WaterBit about soil moisture sensors. What struck Danny as both refreshing and unusual about WaterBit was that "lots of other technology companies were trying to do too much, while WaterBit focused on doing one thing – soil moisture sensors – and doing it well."

## A Trustworthy Partner

When Danny began to work with WaterBit to address Bowles' irrigation needs, he found a partner who was "honest and transparent, and never promised anything that wasn't being delivered. WaterBit wouldn't put out products before they were ready. We put the soil moisture probes in the ground, and they worked." After working with vendors who provided technologies that were complex and hard to navigate, Danny was most impressed by how easy to use and intuitive WaterBit was. "With just a few clicks of a button, we got what we needed."

## Real-Time Irrigation Data

Based on these early interactions, Bowles expanded their relationship with WaterBit to deploy a complete irrigation platform. This included communication devices and cloud-based data delivery, which would allow them to further automate irrigation across their crops.

Bowles' crops, which include cotton and processing tomatoes, are drip irrigated from a canal system. On a weekly basis, an irrigation manager creates schedules that determine how much water is delivered. Getting water delivered at the right time is critical to the success of a crop, yet water needs vary by crop along with variability of the fields. For example, cotton plants need to be stressed for maximum yield and WaterBit can help achieve just the right moisture level to create that stress.

Now, with WaterBit, Danny can see real-time if there is a more immediate need for water, or if moisture levels have already been achieved, and can make daily adjustments to the schedules accordingly. In the future, Danny envisions that WaterBit data will help to create a "live canal" that will adjust water delivery in real-time based upon fluctuating demand and soil sensor data from WaterBit in concert with other technologies used by Bowles.



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**Danny Royer, VP Technology**  
Bowles Farming



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DANNY ROYER, VP TECHNOLOGY

### What’s Next?

For the 2017 season, Bowles used WaterBit to gather baseline data on soil moisture levels and correlate that with crop yields. In the past, this was done manually, so now Danny will “get a better sense with sensors” in assessing the water needs of the crops. Moving into the 2018 season, WaterBit will be used to make real-time irrigation decisions for other crops in the typical Bowles rotation, and also be instrumental in assessing water needs for new crops like watermelon and garlic, where they need to gather baseline data.

In areas where land is relatively consistent, fewer sensors will be deployed, perhaps one sensor per 100-acre-block. Whereas terrain that has more variation will get a sensor for every 3-acre-block. The ability to create “microblock” target areas is very appealing to Danny, as he is now be able to easily assess soil conditions and water needs based on the data WaterBit delivers.

Bowles Farms is on the cutting edge of WaterBit technology, being one of the first to have a WaterBit wireless autonomous valve control installed. This valve can be operated remotely with input from the real-time WaterBit sensors. Currently, there is a team of irrigators who go around turning valves on and off. This team will be refocused on more technical, higher value activities. Danny says, “Bowles will realize significant efficiencies using WaterBit by being able to more effectively deploy people to higher value activities and better manage its water needs.”

WaterBit is more than an irrigation solution to Danny – it’s a trusted partner who continues to work with him to deliver real solutions that work.



### About WaterBit

WaterBit autonomous irrigation solution (AIS) enables control of local irrigation taking into account plant stage, soil conditions and weather at a level of granularity and accuracy that is not possible with current methods. WaterBit translates technology into tangible value for growers to improve yields, optimize water usage and implement labor saving strategies. [Learn more at www.waterbit.com](http://www.waterbit.com).



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