

Simple irrigation data changes irrigation practices



<b>LOCATION:</b>	VB Homestead Farms North of Sunnyside, in the Yakima Valley of Washington
<b>SITUATION:</b>	<ul style="list-style-type: none"> <li>— Grows alfalfa, corn silage, grain corn, mint and triticale hay</li> <li>— Remotely manages and controls 17 irrigation machines, including pivots, linears and corner machines</li> </ul>
<b>CHALLENGE:</b>	<ul style="list-style-type: none"> <li>— Varying terrain and soil types</li> <li>— Find easier-to-read information from soil moisture probes</li> <li>— Simplify data for more effective irrigation plan</li> </ul>
<b>DEPLOYMENT:</b>	<ul style="list-style-type: none"> <li>— Install five new soil moisture probes</li> <li>— Employ Valley® Scheduling™</li> <li>— Use data to determine proper irrigation scheduling</li> </ul>
<b>EFFECT:</b>	<ul style="list-style-type: none"> <li>— Simplified data viewing with user-friendly platform</li> <li>— Changed irrigation practices in each field based on easy-to-read algorithm</li> <li>— Improved crop health</li> </ul>

Chris Van Belle and his son, Joey, have their hands full, growing a large variety of crops on their own land and rented land. They irrigate alfalfa, corn silage, grain corn, mint and triticale hay, and remotely manage their 17 irrigation machines. And recently, they added Valley Scheduling to make even better irrigation decisions.

With smart irrigation solutions from Valley®, the Van Belles have the ability to manage all of their pivots from their smartphones, tablets or desktop computer.

“We’ve been remotely managing all our machines for at least five years,” says Chris. “We manage center pivots, and some linears and corner machines. Since we’re looking at [them] every day and we already like the way it’s set up, we really wanted to tie in all of our data on [one] platform.”

That’s where Valley Scheduling comes in. The Van Belles already use soil moisture probes; however, they wanted an easier way to read the data provided and to gain better support. Valley Scheduling added an entirely different level of information with soil moisture monitors and advanced management software that was easy to use.



“Other soil moisture monitors don’t provide as much data. It’s strictly visual,” says Chris. “So far, we haven’t even used everything Valley Scheduling has to offer, but it was a big step for us in predicting needed irrigation.”

“Dan and Jake from CES (Cascade Earth Sciences) worked with us to place the probes,” adds Joey. “Then we plugged in information like crop variety, the date we planted, the development stage of the crop, soil type and more. The algorithm in the Valley Scheduling software takes it all into account to recommend your irrigation scheduling.”



### Changing irrigation mindset

Valley Scheduling provides a good snapshot of what’s happening in their fields, along with recommendations for where, when and how much they should be irrigating. They said trusting it took some adjustment in the way they thought about irrigation.



“It really helped us out as we gained confidence in it,” says Chris. “We are now trying to determine how many more probes we need in our fields to get even better accuracy. By following the recommendations, we saved water and power, especially earlier and later in the season.”

Valley Scheduling also showed the Van Belles that ground moisture changed at times they weren’t expecting.

“We needed little water in spring, a lot in summer and less again in the fall,” explains Chris. “But we also found, for example, during the first week of August, the ground started holding water better, so we could cut back. We wouldn’t have known that without this data.”

Joey says the changes they made were obvious when they looked at their irrigation history.

“We could see it in inches,” he says. “We found that we had been over-watering at times, and under-watering other times. Now with proper water, our crops are less stressed and healthier, and that led to better yields.”

The Van Belles use Valley Scheduling for day-to-day decisions, and they intend to sit down with all of the data available on the Valley Scheduling website during the off-season. They plan to work with their agronomist and utilize the data as they put a plan together for next year’s growing season.

“The user-friendly platform really helps,” says Joey, “and there’s data to back up the recommendations. If you’re trying to make good decisions, all you have to do is go back to the website to get even more information. It’s just so simple.”