

Valley Scheduling helps grower avoid over-watering



- LOCATION:** Mark Larson Farm  
North of Sunnyside  
Yakima Valley, Washington
- SITUATION:**
  - Farms 250 acres on rolling ground
  - Raises row crops: hay, wheat, corn, alfalfa seed crops and juice grapes
- CHALLENGE:**
  - Varying terrain
  - Determine proper amounts of water to place on different crops
  - Establish correct sprinkler packages
- DEPLOYMENT:**
  - Install a probe in alfalfa field
  - Use Valley Scheduling™ mobile app and website to accurately calculate irrigation needs
  - Change sprinklers based on data gathered from Valley Scheduling
- EFFECT:**
  - Water more effectively
  - Reduce over- and under-watering
  - Gain valuable insight and confidence in irrigation decisions from gathered data
  - Use data to switch to more appropriate sprinkler package

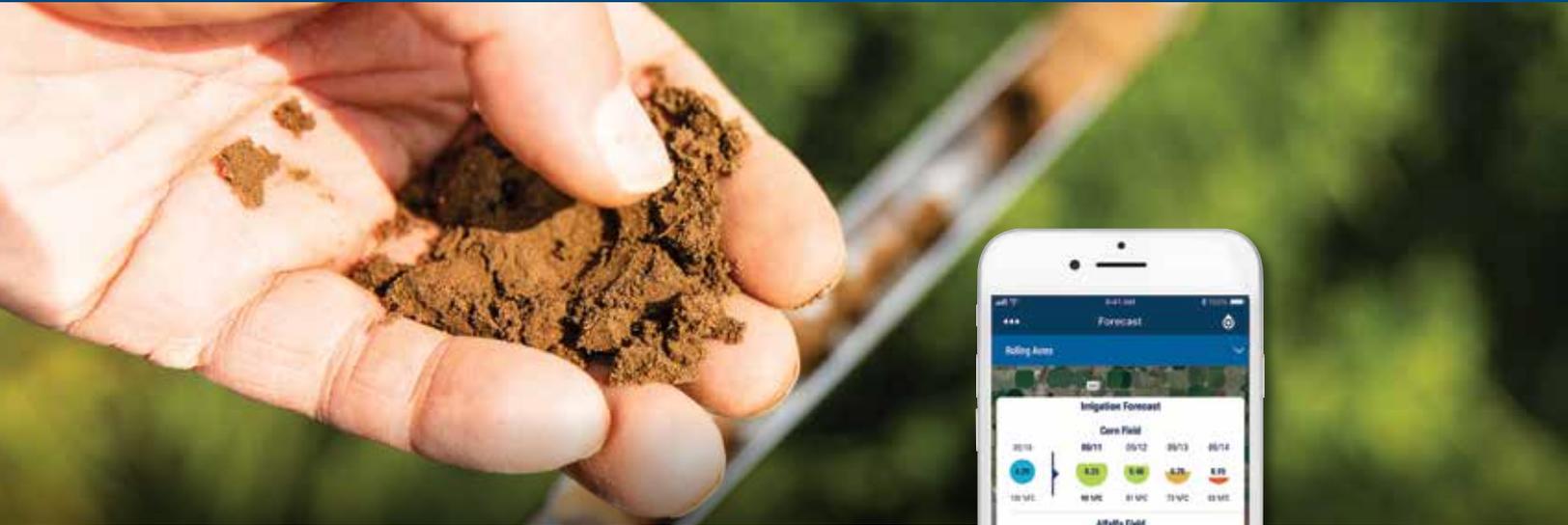


When Mark Larson went to talk to his Valley dealer in Pasco, WA, about some irrigating challenges on a particular hilly field, he ended up with a more comprehensive solution than he expected.

That's because Dan Burgard and Jake Fox from Cascade Earth Sciences (CES), a Valmont® company, partnered with Valmont Northwest in leveraging new options available with Valley Scheduling.

“They were talking about this enhanced scheduling management software, and I asked if it could help with my sprinkler issue,” says Larson. They tried it, and then “they went over and above to help. CES put the soil probe in the field and I instantly liked it. It gave really in-depth information.”

Larson wasn't new to soil moisture monitoring. He's been using probes from his chemical company for a couple of years, but Valley Scheduling provided a lot more information, which led to changes in the way he irrigates.



## Implementing better irrigation methods

"I discovered that I had been over-watering," he says. "It's so easy to go out and push that button and start irrigating, but I backed off on watering when I saw the data from Valley Scheduling."

With features that include aerial imaging, a weather station and weather forecasting, historical data and productivity results all in one place, Larson could choose to use as much or as little data as he needed on any particular day to make irrigation decisions.

"At first I was just looking at certain parts of it, but later I started using more and more information," he says. "The aerial imagery is the most helpful for me. It shows me at a glance if my field is at capacity or if I'm over-watering. By having a probe, I could see that I don't need to be at 100 percent full capacity 36 inches down. I just need to keep the profile happy, and then my crops are happy."

By avoiding over-watering, Larson says he also reduced wheel ruts in the field, his crops are healthier, and while he hasn't yet crunched all the numbers, he believes he benefited from water savings and a better yield.

"I'm confident that Valley Scheduling paid for itself over the year," he says. "Plus, water rights are important here, so any water savings we see is a big deal."

As the growing season progressed, Larson would periodically check in with Burgard from CES to make sure he was reading the information and implementing changes correctly.

"Dan always answers texts, even on weekends," says Larson. "He addressed any questions I had and takes care of technical issues. He's extremely helpful."



## Getting the right package in place

Larson is also using Valley Scheduling to address his original questions about sprinkler packages. The data he receives ensures he has the correct sprinklers in the right places.

"We changed out some of the sprinklers on the pivot in the field that has Valley Scheduling, and it helped," Larson says. "We even addressed some sprinkler problems we didn't know we had that was pinpointed with the aerial imagery. Valley has good sprinkler packages for my soil conditions and pivot size, and with the data gathered, we could change out to exactly the right sprinklers."

Next season, Larson looks forward to adding probes and using Valley Scheduling with his grapes.

"They're juice grapes, so we can't over-water because that can affect the sugar content," he explains. "We have to be very careful with our irrigation there, and I can count on Valley Scheduling to give me the information I need to make good irrigation decisions."