

HORTAU

"This has been the most important agronomy tool we've used to date."

- Dave Gill, Golden Eagle Farms



IRRIGATION MANAGEMENT SERVICES

R R. M. M.



A team of Ag professionals



Hortau at a glance

- 22+ years in the industry
- 75 employees
- Local Offices in Modesto & San Luis Obispo
- More than 1,000 farms currently serviced
- 6500+ monitoring stations deployed
- Full-service irrigation management

For more on the entire Hortau team, visit hortau.com/staff





Services currently offered

Irrigation Management	Autonomous Irrigation	Weather	Flowmeter Monitoring
 On-demand, tension-based, irrigation management service including Equipment, Wireless, Data storage, Apps and access Crop stress anticipation with forecasted schedule a week ahead Field tech support Grower support 	 Autonomous irrigation operation and control service including Equipment, Wireless, Data storage, Apps and access Three automation mode: remote start, schedule and fully autonomous Field tech support Grower support 	 Local weather monitoring service including Equipment, Wireless, Data storage, Apps and access Access to Hortau weather network (in development) Field tech support Grower support 	 Wireless flowmeter monitoring service including Equipment, Wireless, Data storage, Apps and access Remote access to flowmeter data from multiple locations Field tech support Grower support





Field Monitoring







Irrigation Managed with Soil Tension leads to multiple benefits

Better input efficiency

- Water •••
- Nutrients •••
- Pesticides •

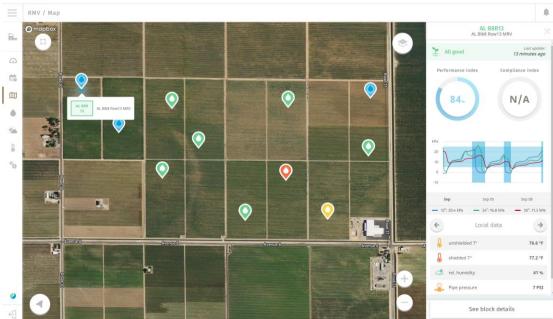
Increased crop health

- Better quality •••
- Better uniformity •
- Better yields •••

Better reporting and traceability

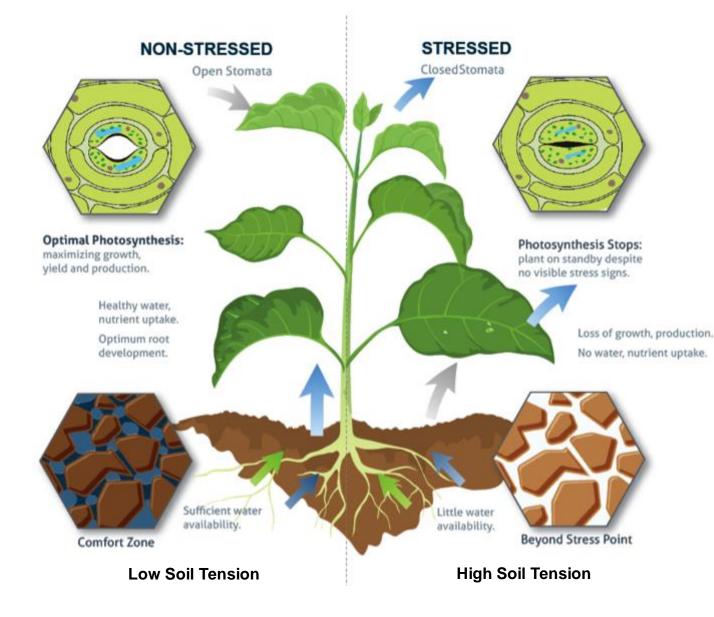
- SIGMA •••
- Repeatability of best results •••







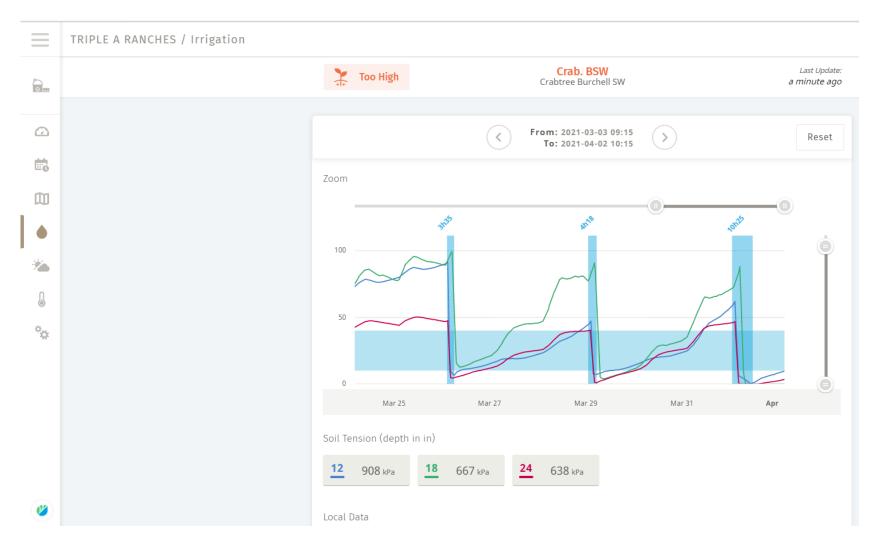
Plants regulate growth based on available water



Soil tension is the proven way to directly measure available water. Hortau's technology allows growers to anticipate the water needs of their crop ensuring maximum photosynthesis



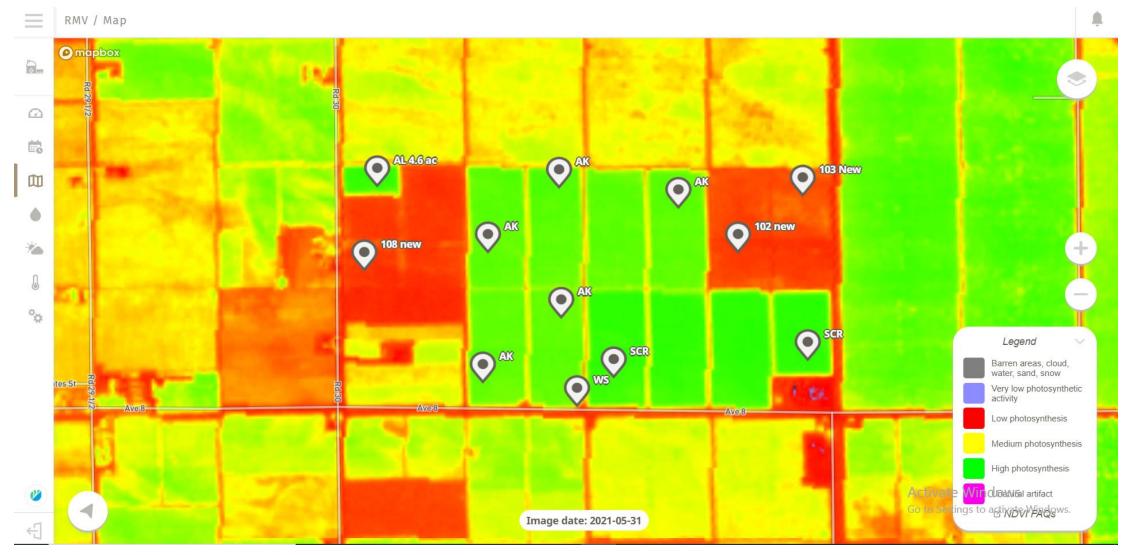
Field Monitoring Graphs







NDVI





Taking action: Easily turn field data into irrigation schedules

 \equiv RMV / Schedule Advanced Mode WEEK VIEW 1 WEEK 2 WEEKS 1 MONTH DAY VIEW ۸ Fantasies Fantasies SCHEDULE \square $\langle \rangle$ (>)9 Sep - 15 Sep kPa Ē Μ W Т F S S NOTES т Name 9 10 11 12 13 14 15 20 Ш Blk 3 10 Thompson \bigcirc 16h 16h Blk 3A А 3h56 ſ AK Blk5A AK B5 Aug 29 Sep Sep 04 Sep 07 16h 16h Row77 MRV AR77 — 12": 11 kPa — 24": 12.9 kPa — 36": 18.2 kPa °o-Blk7A R19 AK BIk7A Row19 MRV Fantasie Fantasies 16h 16h kPa D 30 BIk7A AK Blk7A 18h 18h Row19 MRV R19 20 10 AK B7 AK Blk7B 18h 18h Row71 MRV BR71 Sep 07 Aug 29 Sep Sep 04 SRB1B SR Blk1B — 12": 17.3 kPa — 24": 19.6 kPa - 36": 21.6 kPa 18h 18h Row30 MRV R30 V



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Hortau's Complete Solution



Irrigation: Soil Tension Patented 1000 kPa polymer tensiometer



In-Field weather and frost conditions Temperature, humidity leaf wetness



Irrigation system operating conditions Pressure, run-time

Flowmeter

Weather

Weather Stations Weather Forecast Evapotranspiration Pest models



Smart Wireless Devices



Over-the-air updates Software updated remotely

Edge Computing Ability to bring decision criteria in the device for fast and off-line reaction.

Solar Powered

Wireless connectivity 3G/4G LTE Soon 5G with modular connectivity Device-to-device communication

Cloud and Apps

AWS Cloud

React Native app development



Actionnable Output

Operational Focused on simplifying management decision

Management byexception approach Highlights areas where attention is needed

Irrigation scheduling and run time

Optional advanced agronomic advices



Automation

Based on plant demand

Based on forecast schedule

Remote control





