The background of the entire slide is a close-up photograph of parched, cracked earth. The cracks are deep and irregular, creating a mosaic of polygonal shapes. In the lower right quadrant, a small, vibrant green seedling with two rounded leaves is growing out of one of the cracks, providing a stark contrast to the dark, arid landscape.

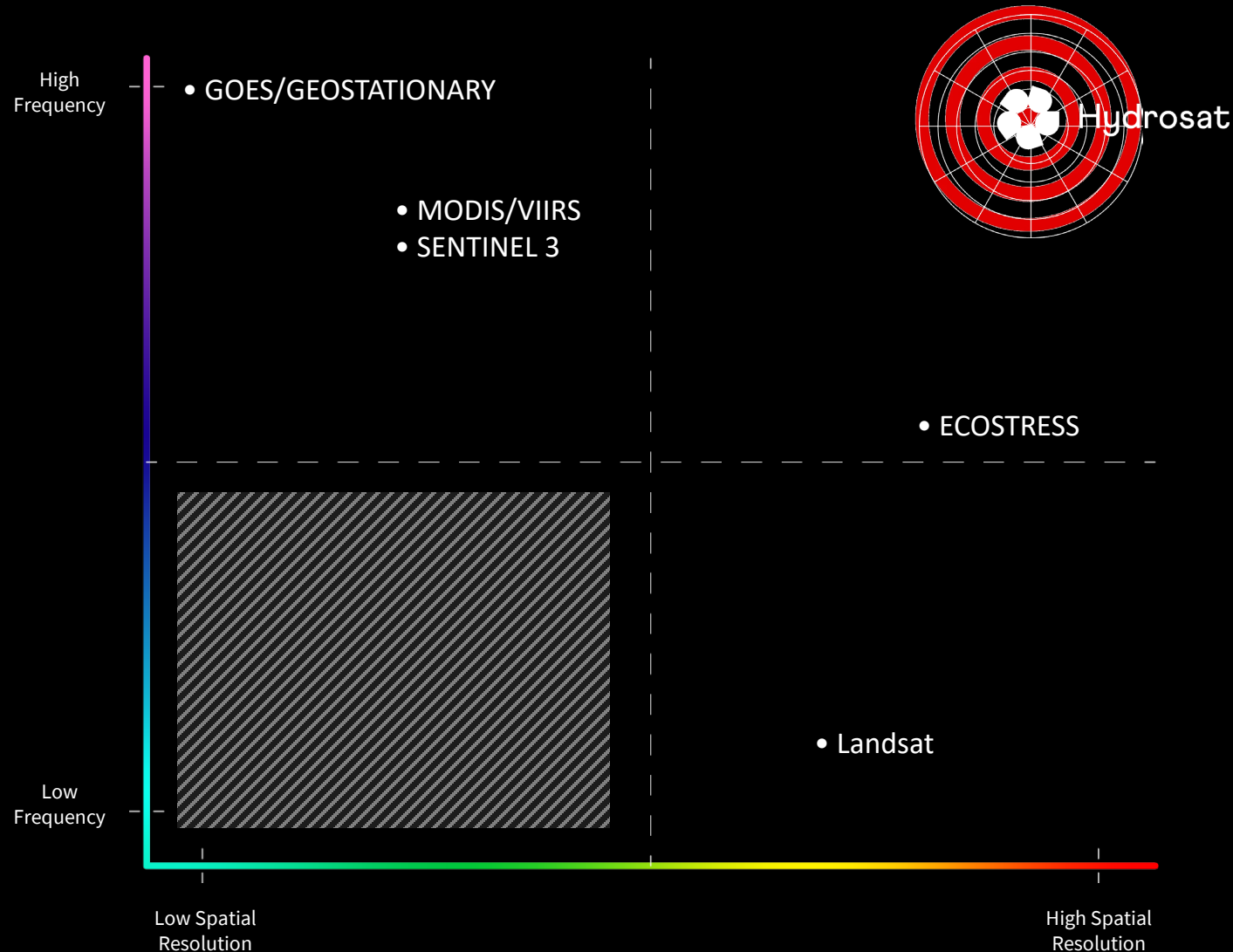
Hydrosat

Helping Earth manage its most
precious resource: Water

Madera County
July 2025



Demand for high resolution, high frequency



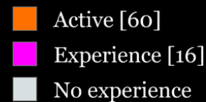
High spatial and high temporal resolution fills a longstanding gap in the EO industry for users across agriculture

Global coverage, always-on

Constellation will provide the most complete record of Earth's surface temperature variability to date

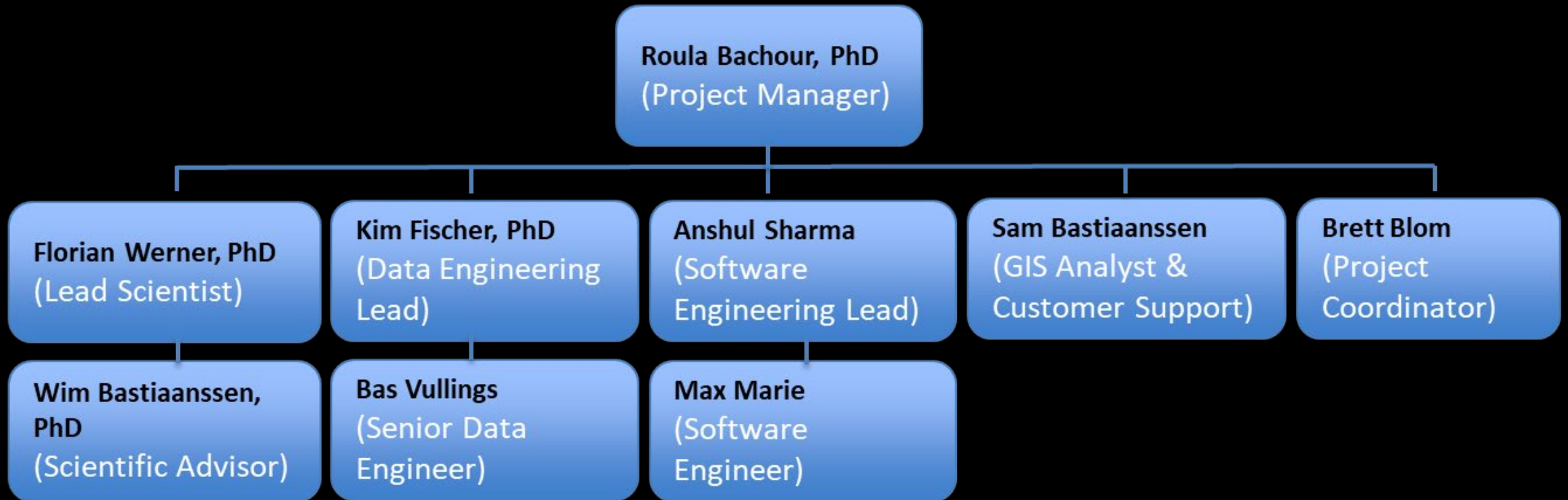
Satellite Data and Water & Crop Solutions for Sustainable Agriculture





5

Project Organizational Chart



Irriwatch Founder / SEBAL

Wim Bastiaanssen,
PhD
(Scientific Advisor)



Globally renowned expert in remote sensing and water resource management.

Among his most notable achievements is the development of the Surface Energy Balance Algorithm for Land (SEBAL), which revolutionized remote sensing by enabling the precise estimation of evapotranspiration and energy fluxes at field and regional scale.

He has also founded multiple remote sensing companies, including WaterWatch, eLEAF, CropZoomer, and IrriWatch.

Dr. Bastiaanssen holds a Ph.D. in Agro-hydrology, Soil Physics, and Groundwater Management from Wageningen University. He has over 26,000 citations to internationally peer reviewed journal papers (as of January 2025).

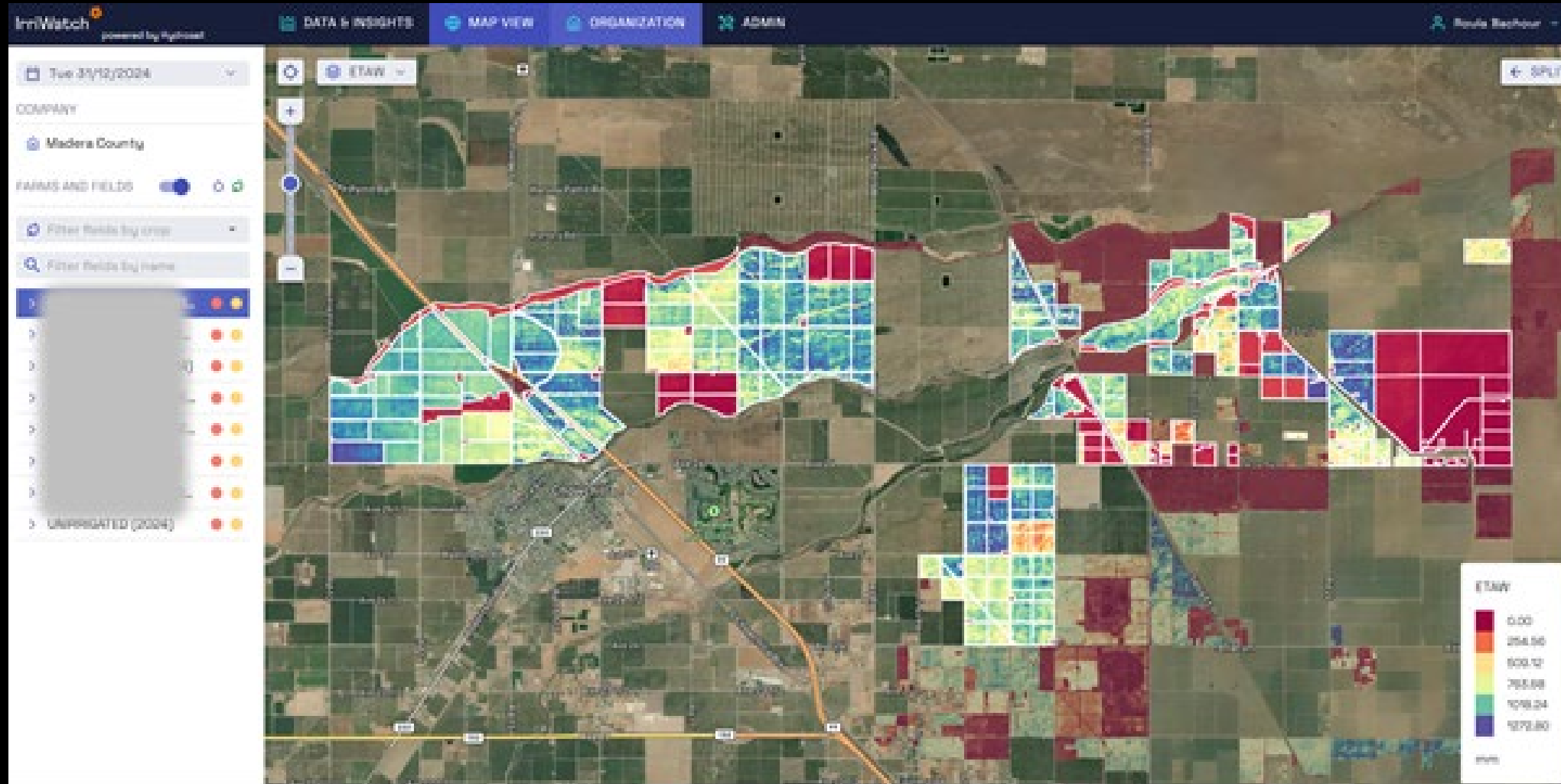
Irriwatch History with Madera GSAs

Over the past 5 years, we have closely worked with Madera County GSAs to provide our satellite measurement services for calculation of water use based on evapotranspiration from applied water (ETAW). This concept has been tailored to respond to the requirement of the county.

We have tailored our product, web portal, and API output to best serve the requirements of Madera County GSA(s) and its growers.

Working alongside the GSAs, we've made model improvements and aligned the methodologies to make sure the different measurement methods for growers are comparable. In addition, we have revamped our web portal to make it as easy to navigate and quickly gain value.

Overview of One Sub-Basin from the County Level (pixel maps showing ETAW)



Deliverables

1. Annual update of the land use raster files which will be also aggregated to parcel-field level to determine the majority crop of each parcel-field.
2. Daily ET and ETAW raster files at 10-meter spatial resolution (real-time via portal and API).
3. Monthly ET and ETAW raster files at 10-meter spatial resolution (provided within 1 week of the end of each month).
4. Daily precipitation data provided at field level (real-time via portal and API).
5. Monthly precipitation maps at 10-meter spatial resolution (provided within 1 week of the end of each month).
6. Full implementation of a tailored version of the IrriWatch platform.

Overview of Each Sub-Basin with Budget Tables Updated on a Daily Basis (downloadable PDF reports for each parcel generated at the end of each month)

InnWatch powered by Hydrosat

DATA & INSIGHTS | MAP VIEW | ORGANIZATION | ADMIN

Tue 12/31/2024

COMPANY

Madera County

FARMS AND FIELDS

Filter Fields by crop

Filter Fields by name

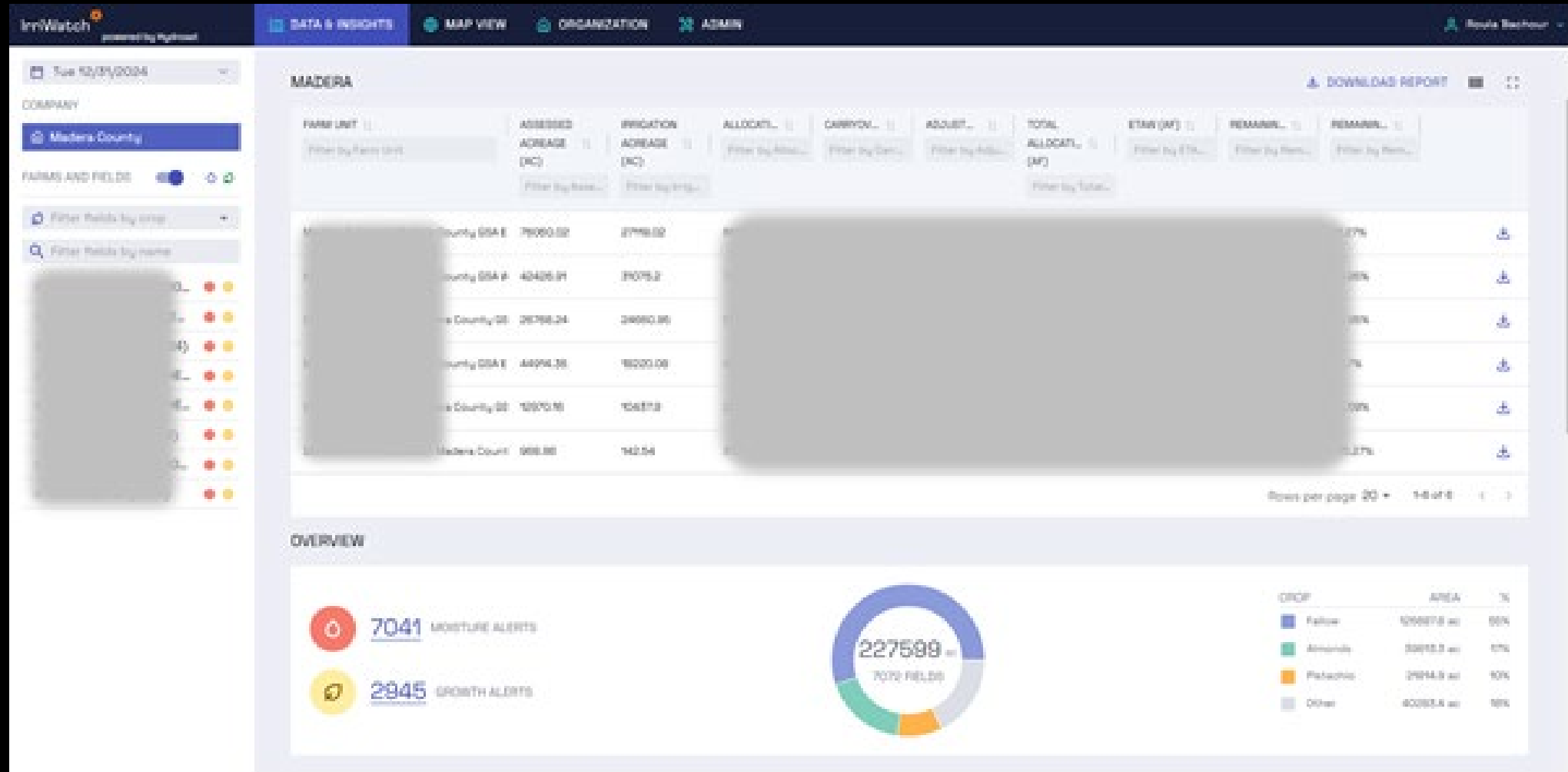
East (2024)

MADERA

DOWNLOAD REPORT

PARCEL	ASSESSED ACREAGE (AC)	IRRIGATION ACREAGE (AC)	ALLOCATL.	CARRIOW.	ADJUST.	TOTAL ALLOCATL.	ETWR (AF)	REMAINR.	REMAINR.
Filter by Parcel	Filter by Area	Filter by Area	Filter by Alloc.	Filter by Carr.	Filter by Adjust.	Filter by Total	Filter by ETWR	Filter by Rem.	Filter by Rem.
005	60	64.36						91.2%	
005	64	61.86						90.12%	
005	14.07	6						76.99%	
005	26.29	26.49						-1.86%	
005	16.26	14.77						-11.02%	
005	246.67	236.71						-28.82%	
005	0.06	0.06						-11.87%	
005	306	295.17						-24.92%	
005	164.09	162.14						90%	

Overview of all County Sub-Basins and Budget Tables



Highlights

- Hydrosat collects ET and precipitation on a daily basis, then provides a monthly summary. This daily collection increases accuracy as there is minimal interpolation.
- Farmers can use the application to help farm better, at no additional cost. Growers in California, and globally, are using this information to manage their irrigation, identify problems, scout, understand nutrient deficiencies, etc.

Irriwatch – Helping Farmers Make Better Decisions



Cost



Description	Price / AC / Yr	Acres	Total / Yr
Irrigate / yr	\$.83	220,000	\$182,600
2 yr discount (5%)			\$173,470
3 yr discount (10%)			\$164,340



Thank you

Brett Blom
Bblom@hydrosat.com