

# **Groundwater Accounting Platform**



Madera County Groundwater Sustainability Agency

#### Submitted to:

Aleta Allen

Madera County Groundwater Sustainability Agency 200 West Fourth Street Madera, CA 93637

#### **Statement of Confidentiality**

This RFP and supporting materials contain confidential and proprietary business information of United Tracking Systems. These materials may be printed or photocopied for use in evaluating the proposed project, but are not to be shared with other parties.



Dear Ms. Allen,

On behalf of United Tracking Systems, I am pleased to express our interest in partnering with the Madera County Groundwater Sustainability Agency (GSA) to provide a robust and proven solution for groundwater accounting and compliance. As a California-based company with deep roots in both agriculture and software innovation, we have developed the most advanced Groundwater Accounting Platform available, purpose-built to support GSA operations under the Sustainable Groundwater Management Act (SGMA).

Our Water Dashboard Accounting Platform offers a comprehensive suite of tools that empower GSAs and growers alike. Designed with usability and adaptability at its core, the system supports real-time water usage tracking, precise credit accounting, and transparent billing processes. It also enables your agency to implement custom rules and adapt quickly to evolving policies or basin-specific needs.

Currently in use across several GSAs in California, the platform facilitates end-to-end groundwater management—from parcel-level usage and credit allocation to grower-facing dashboards, appeals processing, and detailed reporting. It incorporates private metering, real-time ET data, precipitation data, and land use tracking into a single integrated interface. This streamlines operations while maintaining full audit compliance and supporting proactive outreach to stakeholders.

What truly sets us apart is the level of partnership and support we provide. Our team works closely with GSA staff to tailor the system to your operational structure and governance policies. We offer direct consultation, responsive support (with typical resolution within 24 hours), and monthly feature updates based on user feedback. Our goal is to serve as an extension of your team, providing the technology and guidance necessary to meet your goals efficiently and transparently.

Our team has a long track record of success. We have supported over 6,500 grower accounts, facilitated tens of thousands of credit transactions, and maintained 99.9% platform uptime. More importantly, we have built lasting relationships with GSAs through open communication, trusted technology, and a shared commitment to sustainable groundwater management.

We believe United Tracking Systems is uniquely qualified to support Madera County GSA with a solution that is powerful, flexible, and built for long-term success. We appreciate your consideration and would welcome the opportunity to present our platform in more detail.

Sincerely,
Scott Steinbeck
Chief Technology Officer
United Tracking Systems

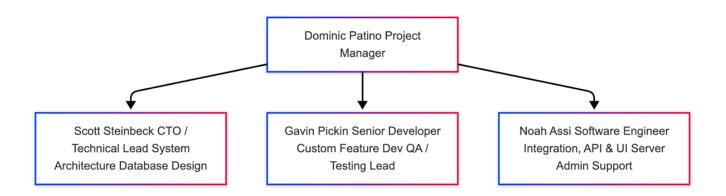


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## 1. Organization Chart



## 2. Qualifications

## **Dominic Patino, CEO and Project Manager**

Dominic brings innovative leadership to the team, challenging outdated norms in agriculture with practical, forward-thinking solutions. He is a licensed Pest Control Advisor with over 28 years of experience, a Certified Crop Advisor for 15 years, and a licensed Custom Pesticide Applicator for 10 years. His commitment to improving agricultural practices led him to assemble a highly skilled team to develop the programs described above. A hands-on leader who lives and works within the agricultural community, Dominic believes teamwork and local insight are key to lasting success.

#### Scott Steinbeck, MBA, CTO, Lead Software Engineer

Scott oversees all software development and leads the engineering team with precision and vision. With more than 22 years of experience, he has built over 100 applications—many of them centered around field tracking, irrigation, compliance, and GIS mapping. Scott also has over 10 years of mobile development experience, incorporating features like mapping, offline access, and push notifications. Whether personally coding or managing tasks, Scott ensures every technical solution meets the specific needs of the agriculture industry.

#### **Gavin Pickin, Senior Software Engineer**

Gavin is a seasoned full-stack developer with more than 22 years of experience creating robust web applications. His expertise spans MySQL, ColdFusion, JavaScript, HTML/CSS, responsive design, ecommerce platforms, DevOps, and server infrastructure. As a senior engineer, Gavin focuses on the design, development, and testing of key modules, ensuring scalable and secure performance across all systems. His depth of knowledge strengthens both frontend functionality and backend reliability.

#### Noah Assi, Software Engineer

Noah is a versatile full-stack developer and systems administrator with 6+ years of experience. He is proficient in JavaScript, ColdFusion, C++, Java, MySQL, and PostgreSQL. Noah also manages and maintains servers across multiple platforms including AWS, VMware, Solr, Windows Server, and Linux. His ability to bridge application development with infrastructure management ensures smooth, dependable operation across our services and deployments.



## 3. Project Understanding and Approach

The Water Dashboard Accounting Platform is a powerful and user-friendly system built specifically for GSA's to meet the challenges of groundwater regulation, compliance, planning, and billing. The platform combines cutting-edge technology with practical features to support accurate tracking, efficient billing, and strategic oversight. It delivers timely insights and robust tools for growers, GSA staff, and stakeholders alike.

**Core Data Integration** -To ensure accurate water usage management, the platform integrates vital datasets:

- High-resolution (30-meter or finer) annual land use data.
- Monthly evapotranspiration (ET and ETAW) data primarily from LandIQ.
- Monthly precipitation raster data.
- Private metering data accepted through a structured appeals process.
- Built-in tools to update and validate parcel boundaries and land classifications.

Farm-Level Analytics - Enables growers to manage their operations with clarity:

- Intuitive field and crop mapping tools.
- Analytics to review historical data and compare water usage.
- Real-time field-level tracking across multiple parcels.

**Credit and Allocation Management** - Simplifies complex credit and allocation workflows:

- Automated management of Native, Transitional, Surface Supply, and Penalty credits.
- Automatic Carryover Credit Rules and Credit Transfer Management.
- Custom penalty and late fee tracking with configurable rules.
- Customizable allocation logic for native & transitional water per GSA.
- Tools to define, manage, and publish annual allocation tables with historical context.
- Grower controlled Adjustments/Appeals with GSA review including long-term and seasonal fallowing.
- Priority-of-use management growers to prioritize which credits get used to satisfy usage.
- Purchase election to give growers the opportunity to pre purchase carryover credits for future use.

Meter Integration and Appeals - Promotes transparency and fair reporting:

- Structured process to appeal and verify private meter submissions.
- Integration of accepted meter readings with full traceability.
- Appeal process and decision logs available for audit and reference.



## Automated Invoicing and Payments - Streamlines financial management for GSAs and growers:

- Auto-generated invoices with QuickBooks integration.
- Supports historical corrections via credit memos and rebilled or corrected invoices.
- Online or Mail-in payments with automatic syncing between platforms
- Billing & invoice dashboards for growers to easily access updated account charges.
- GSA customizable payment options for credit reservation or pay-on-use terms.

#### **Real-Time Dashboards** - Delivers actionable insights at a glance:

- Personalized dashboards for growers, showing allocations, credits, and usage.
- GSA-level dashboards summarizing water usage, parcel data, and account metrics.
- Interactive filters and sorting to identify trends, outliers, or compliance issues.

## Detailed Reporting - Facilitates planning, compliance, and board-level review:

- Prebuilt and custom report generation for key metrics.
- GIS parcel data exports for integration with mapping and spatial tools.
- Full audit trail of credit issuance, usage, and transfers.
- Scheduled report delivery to board members and key stakeholders.

#### **Data Integrity and Management** - Maintains trust in the data and workflow:

- Water Year based accounting down to the parcel level but managed at the account level.
- Automated handling of APN changes, credit transfers, and parcel updates.
- Parcel management tools for splits, mergers, and ownership shifts.
- Role-based permissions and full edit histories for system transparency.

#### **Technical Excellence and Support** - A reliable platform backed by seasoned experts:

- 40+ years of combined experience in agriculture and software development.
- 99.9% platform uptime ensures stability.
- Rapid-response customer support.
- Regular updates and new features based on user and GSA feedback.

The Groundwater Accounting Platform supports GSAs in meeting SGMA compliance with confidence. It reduces staff workload, eliminates manual reporting, and improves transparency with growers. By combining smart automation, customizable logic, and comprehensive reporting, it ensures water data is always accurate, up to date, and actionable. With flexible configuration and continuous support, this platform is built to evolve alongside changing policies, practices, and environmental needs.



## 4. Project Experience and Success

Every project we build is custom-tailored to the specific needs of our clients across agriculture, water, and related industries. Because each operation presents unique challenges, we typically begin with a time-and-materials approach to maintain flexibility, then transition to a long-term support contract once the solution is proven and in place.



## **GSA Water Dashboard**

Water Tracking, Analysis, & Accounting Platform

Monthly Subscription + Custom Development T&M

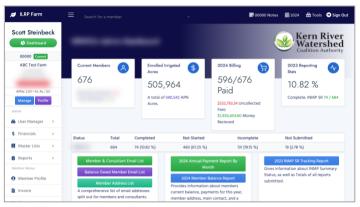
GSA Water Dashboard is a full featured tracking and accounting platform. The system is capable of using ET (Land IQ) and Direct meter usage information to Give GSA's and Growers insight and control over water usage.



## **Agri Tracking Systems**

Agricultural Tracking & Analysis
Monthly Subscription

Agri Tracking Systems is a farm management tool that keeps track of your farms, fields, crops, nutrient samples, and budgets within your farm and daily operations.



## **Irrigated Lands Reporting Software**

Regulatory Nitrogen Crop Reporting & Tracking

Monthly Subscription + Custom Development T&M

ILRP Farm is a custom reporting platform that allows growers to submit annual reports of farming practices, irrigation practices, nitrogen practices, cropping information, harvest yields, and applied nitrogen sources.



## Agri Mapping

Online Mapping Software

**Monthly Subscription** 

Agri Mapping makes it simple to build your maps without having to read through tons of help guides. We provide all the information and tools you need, and none of the ones you don't.

# **United Tracking Systems**



## **ATS Irrigation Tracking**

## **Mobile on Farm Irrigation Tracking**

#### **Monthly Subscription**

Stop guessing at how much water your putting on every season, with this simple app you can record accurate meter readings and instantly know exactly how much your putting on and when. Set up all your well location and field sets and within minutes you can start receiving up to date information on pump status and usage.



## Rec Tracker

#### **Recommendation Manager**

#### **Monthly Subscription**

Rec Tracker is a management tool for chemical applicators to automatically import and track pesticide and fertilizer recommendations. The application allows users to generate maps and notes associated with recommendations. Additionally, the program comes with a mobile app that allows for mapping directions and completing of jobs.

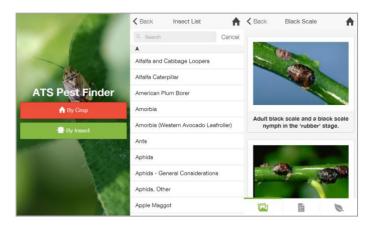


## **Crop Cast**

## **Hyper Local Weather and Pest Forecasting**

## Free w/ Upgraded Monthly Subscription

Crop Cast utilizes state of the art software to bring together data from multiple local weather stations and forecasts weather, degree days, chill hours, and location based pest cycle prediction based on highly researched pest models to equip you to anticipate



## **ATS Pest Finder**

#### **Insect/Pest Finder**

#### Free

ATS Pest Finder is a mobile application created to help identify insects by name, images, or associated crops. Each insect is displayed with a number of pictures, detailed information, and the crops it may be found in. The mobile application allows insects to be found by name or associated crop.



## 5. References

• Reference 1: Nicole Bell, nbell@krwca.org, 916-717-2179

• Reference 2: Becky Ortiz, <a href="mailto:bortiz@semitropic.com">bortiz@semitropic.com</a>, 661-337-9595

## 6. Cost Proposal

**Subscription Fee:** (Includes essential support, regular software updates, system maintenance, and comprehensive security monitoring)

Our fee structure is based on irrigated acreage and includes a base fee which will is assessed annually. Given the current GSA structure with Madera, Chowchilla, and Delta Mendota Subbasins our system is designed in a way that allows growers to manage ground in all 3 subbasins while Subbasin allocations, fees, & policies can be customized to the needs of the subbasin. Here is the pricing breakdown on a annual basis based on irrigated acreage:

Subbasin	Irrigated Acres	Annual Fee
Madera Subbasin	81,473.00	67,957.45
Chowchilla Subbasin	35,872.00	38,316.80
Delta-Mendota Subbasin	1,755.00	16,140.75

**Additional Services:** (Custom development, enhancements, and strategic consulting)

Hourly Rate: \$225/hour, with detailed estimates provided prior to project initiation.

## **Travel and Other Direct Costs:**

• All actual travel and related expenses transparently billed at cost, with full documentation and receipts provided upon request.

Thank you for considering United Tracking Systems. We eagerly look forward to the opportunity to work closely with Madera County GSA, supporting your ongoing efforts toward groundwater sustainability and effective resource management.