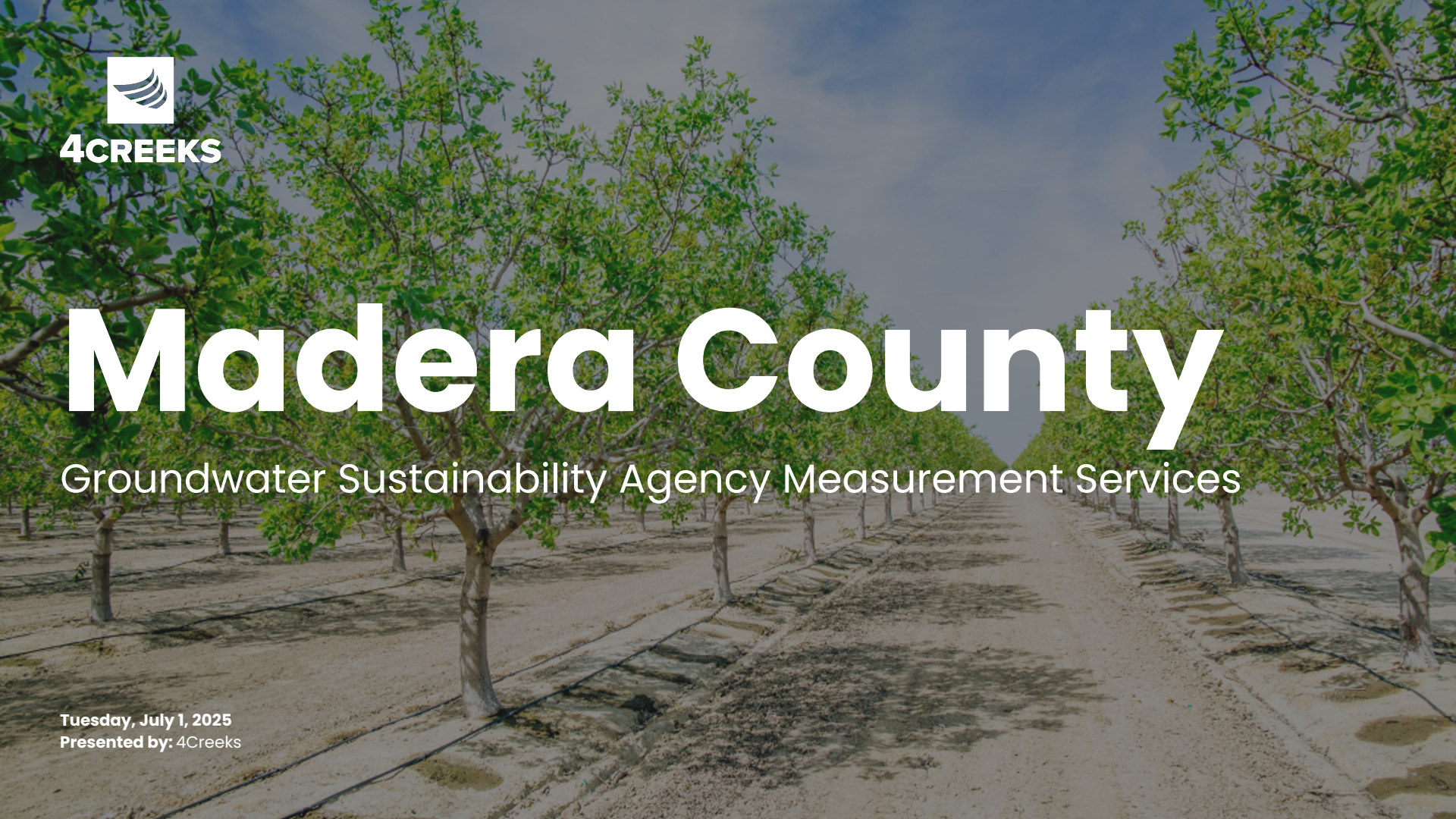


4CREEKS

Madera County

Groundwater Sustainability Agency Measurement Services

Tuesday, July 1, 2025
Presented by: 4Creeks

Current Users

Current Users

BASINSAFE

Groundwater Sustainability Agencies

01 Lower Tule River GSA
02 Pixley GSA
03 Eastern Tule GSA
04 Tri-County Water Authority GSA
05 Vandalia Water District GSA
06 Tea Pot Dome Water District GSA

Irrigation Districts

01 Porterville Irrigation District
02 Saucelito Irrigation District
03 Consolidated Peoples Ditch Company
04 Lower Tule River Irrigation District
05 Pixley Irrigation District
06 Vandalia Water District
07 Tea Pot Dome Water District

Firm Overview

4Creeks, Inc.

is dedicated to providing progressive planning services with logical solutions and designs. Many of our staff have significant work experience with local municipalities as well as federal and state agencies.

100%
Employee-Owned

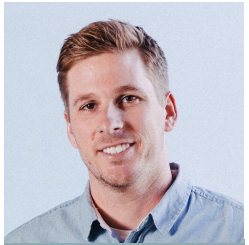
200+
Employees

6
Branch Offices

Project Team

Project Team

DAVID DE GROOT, PE
Principal Engineer



DON TUCKER
Department Manager

VICTOR LOPEZ
Project Manager / Lead Developer

Additional Support Staff

Software Development

Caleb Tyler, Software Developer

Mitch Maltezo, Software Developer

Jake Sliwka, Software Developer

Geographic Information System (GIS)

Grant McNulty, GIS Department Manager

Joe Christianson, GIS Technician

Jesse Stewart, GIS Technician

Basinsafe™ Overview

Basinsafe™

Groundwater Management Made Simple

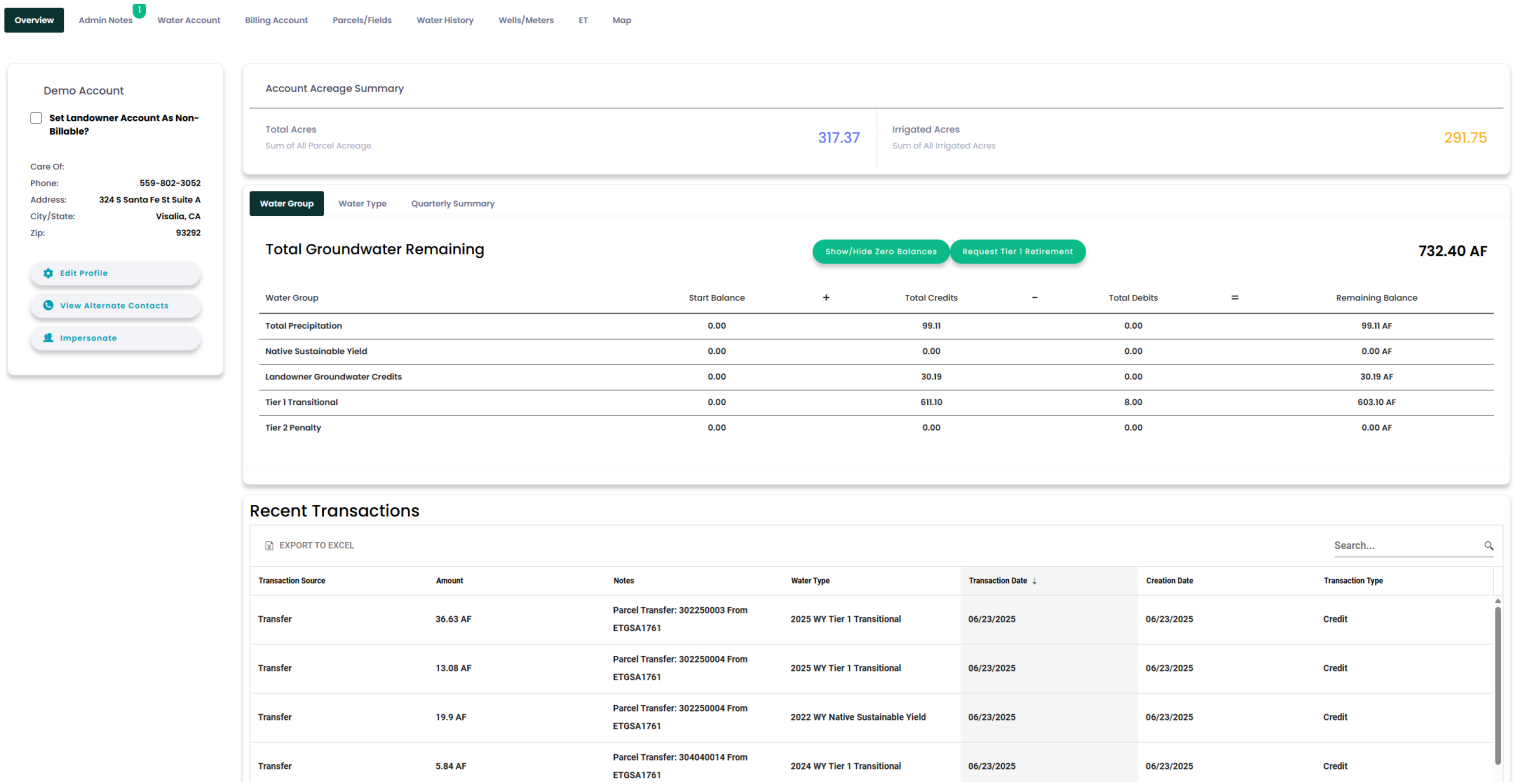
BASINSAFE

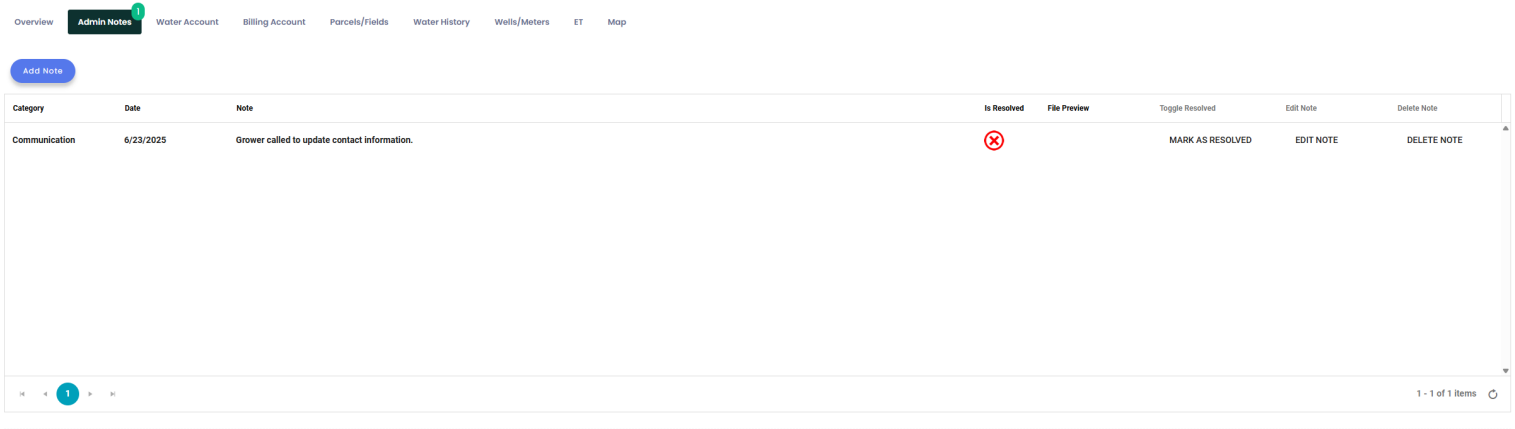
Key Benefits

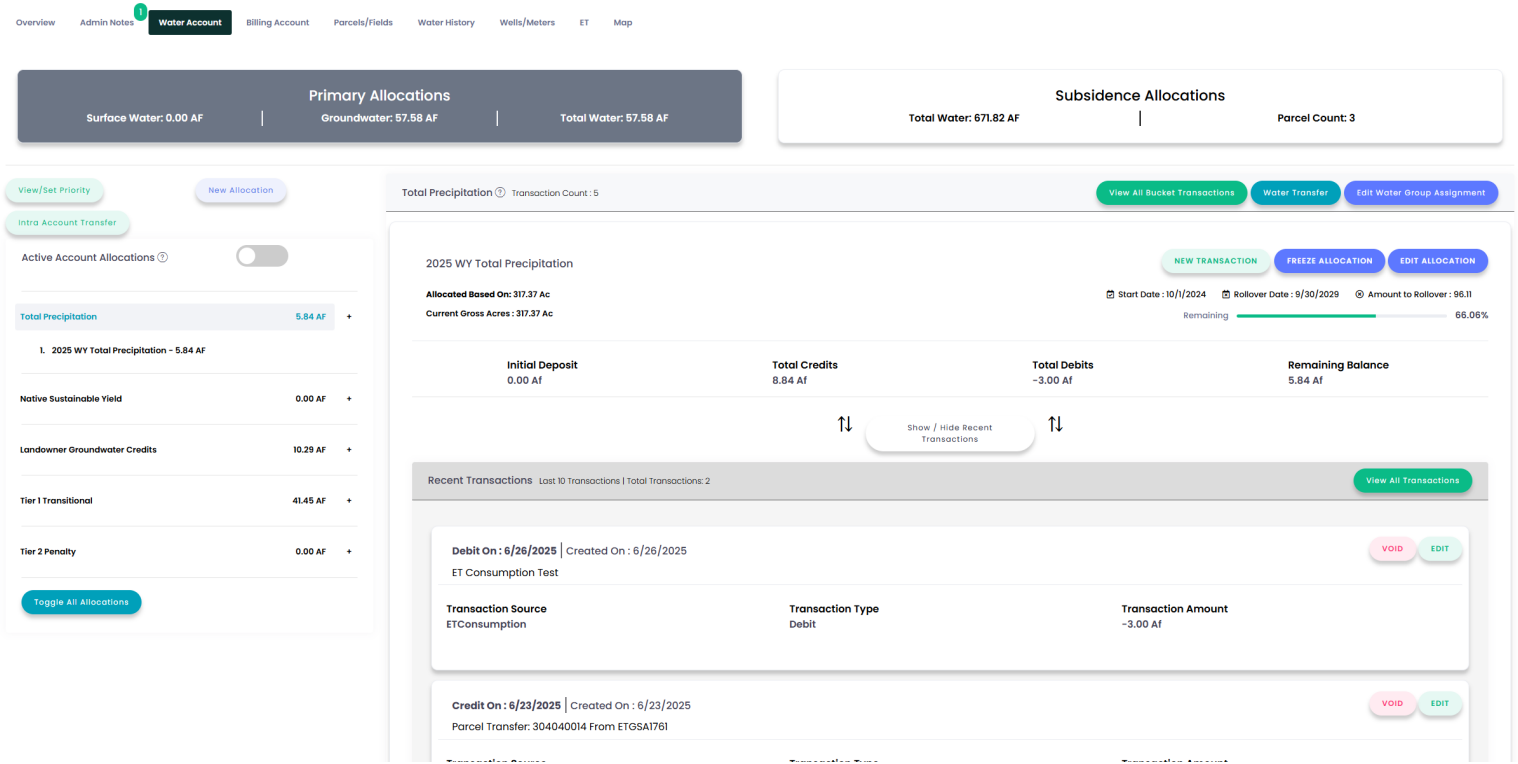
01 Transparent data access for landowners
02 Centralized system for agency staff
03 Easy to use, scalable, and secure
04 Configurable to meet local GSA needs

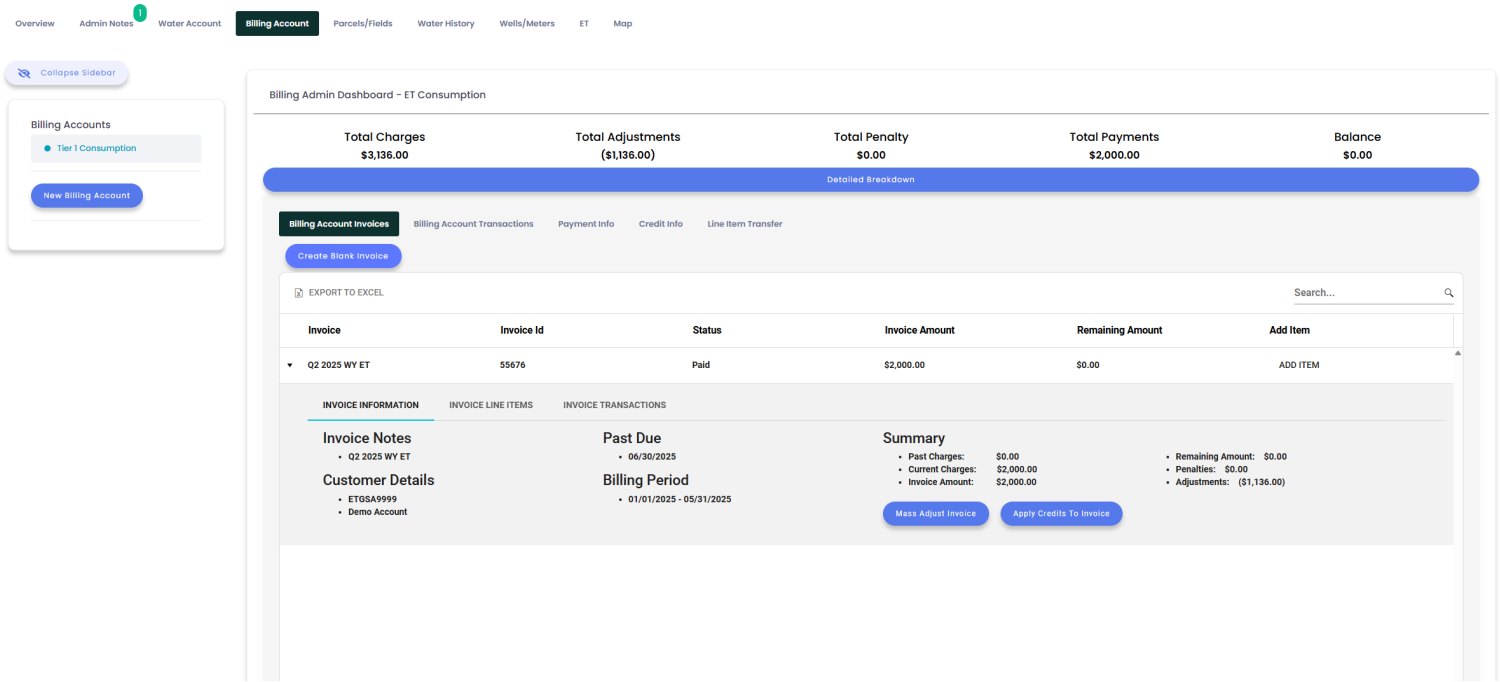
Core Features

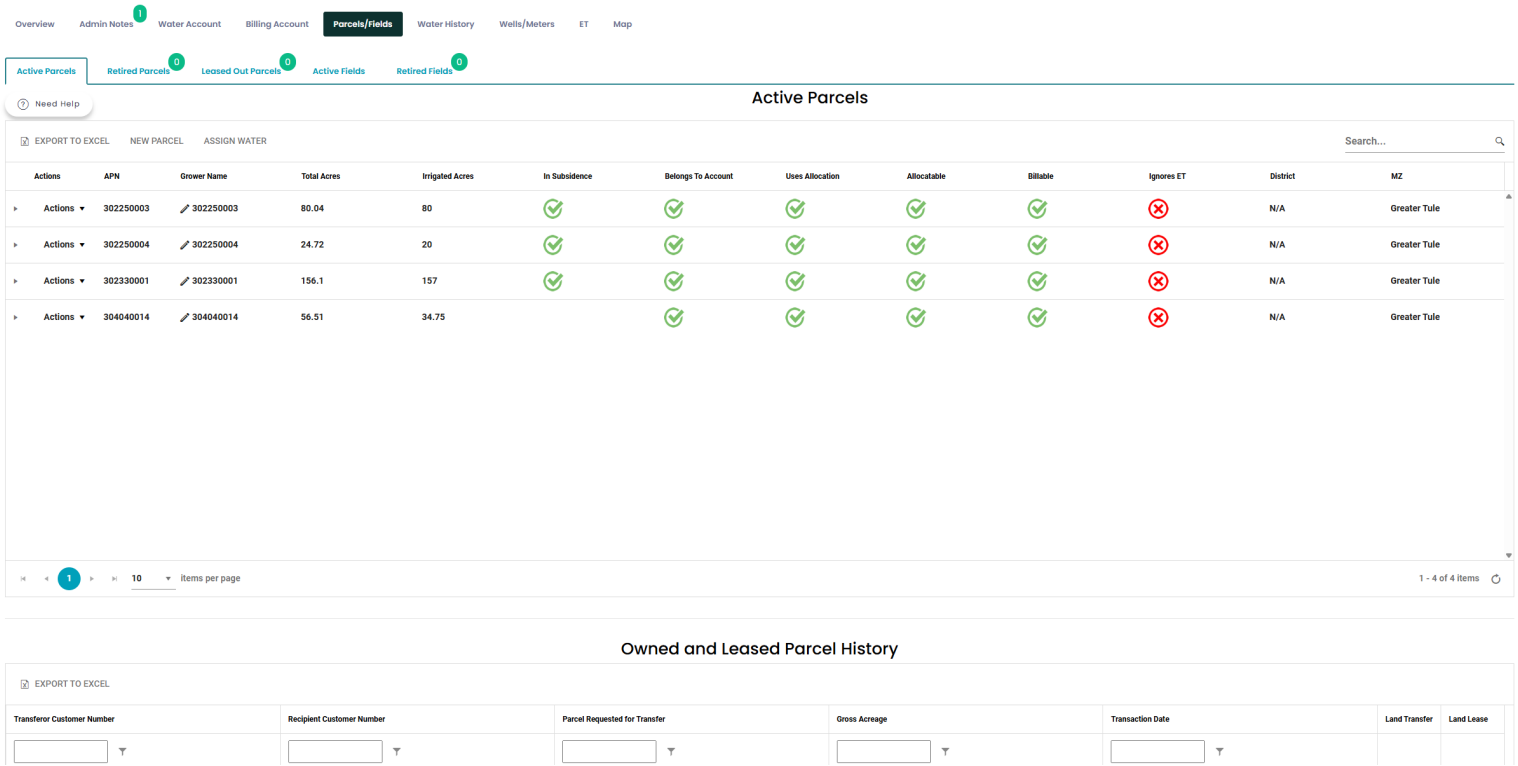
01 Real-time water balance data
02 Parcel-level insights for planning
03 Streamlined invoicing and financial tracking
04 Custom, exportable reports for stakeholders
05 Tools to oversee accounts and acre-feet

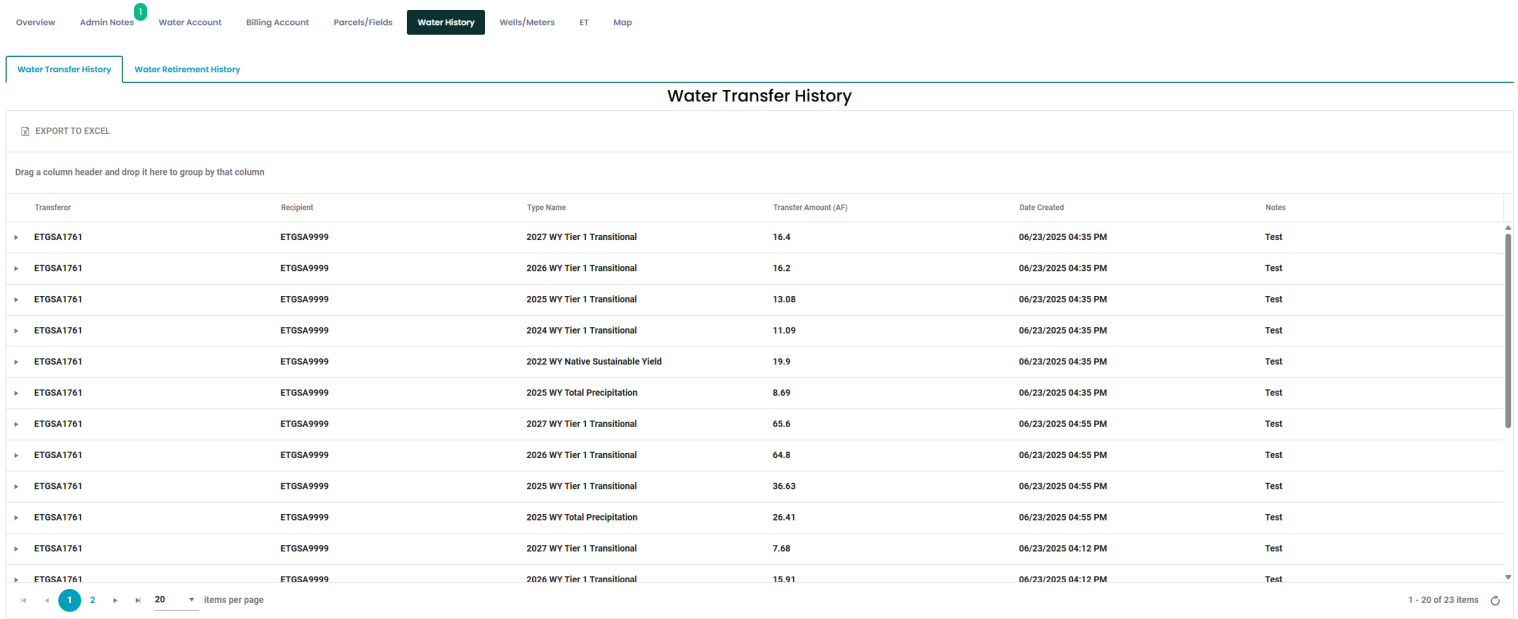

Overview
Admin Notes 1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Demo Account
Set Landowner Account As Non-Billable?
Care Of:
Phone: 559-802-3052
Address: 324 S Santa Fe St Suite A
City/State: Visalia, CA
Zip: 93292
Edit Profile
View Alternate Contacts
Impersonate
Account Acreage Summary
Total Acres
Sum of All Parcel Acreage
317.37
Irrigated Acres
Sum of All Irrigated Acres
291.75
Water Group
Water Type
Quarterly Summary
Total Groundwater Remaining
Show/Hide Zero Balances
Request Tier 1 Retirement
732.40 AF
Water Group | Start Balance | + | Total Credits | − | Total Debits | = | Remaining Balance
Total Precipitation | 0.00 | 99.11 | 0.00 | 99.11 AF
Native Sustainable Yield | 0.00 | 0.00 | 0.00 | 0.00 AF
Landowner Groundwater Credits | 0.00 | 30.19 | 0.00 | 30.19 AF
Tier 1 Transitional | 0.00 | 611.10 | 8.00 | 603.10 AF
Tier 2 Penalty | 0.00 | 0.00 | 0.00 | 0.00 AF
Recent Transactions
EXPORT TO EXCEL
Search...
Transaction Source | Amount | Notes | Water Type | Transaction Date | Creation Date | Transaction Type
Transfer | 36.63 AF | Parcel Transfer: 302250003 From ETGSA1761 | 2025 WY Tier 1 Transitional | 06/23/2025 | 06/23/2025 | Credit
Transfer | 13.08 AF | Parcel Transfer: 302250004 From ETGSA1761 | 2025 WY Tier 1 Transitional | 06/23/2025 | 06/23/2025 | Credit
Transfer | 19.9 AF | Parcel Transfer: 302250004 From ETGSA1761 | 2022 WY Native Sustainable Yield | 06/23/2025 | 06/23/2025 | Credit
Transfer | 5.84 AF | Parcel Transfer: 304040014 From ETGSA1761 | 2024 WY Tier 1 Transitional | 06/23/2025 | 06/23/2025 | Credit

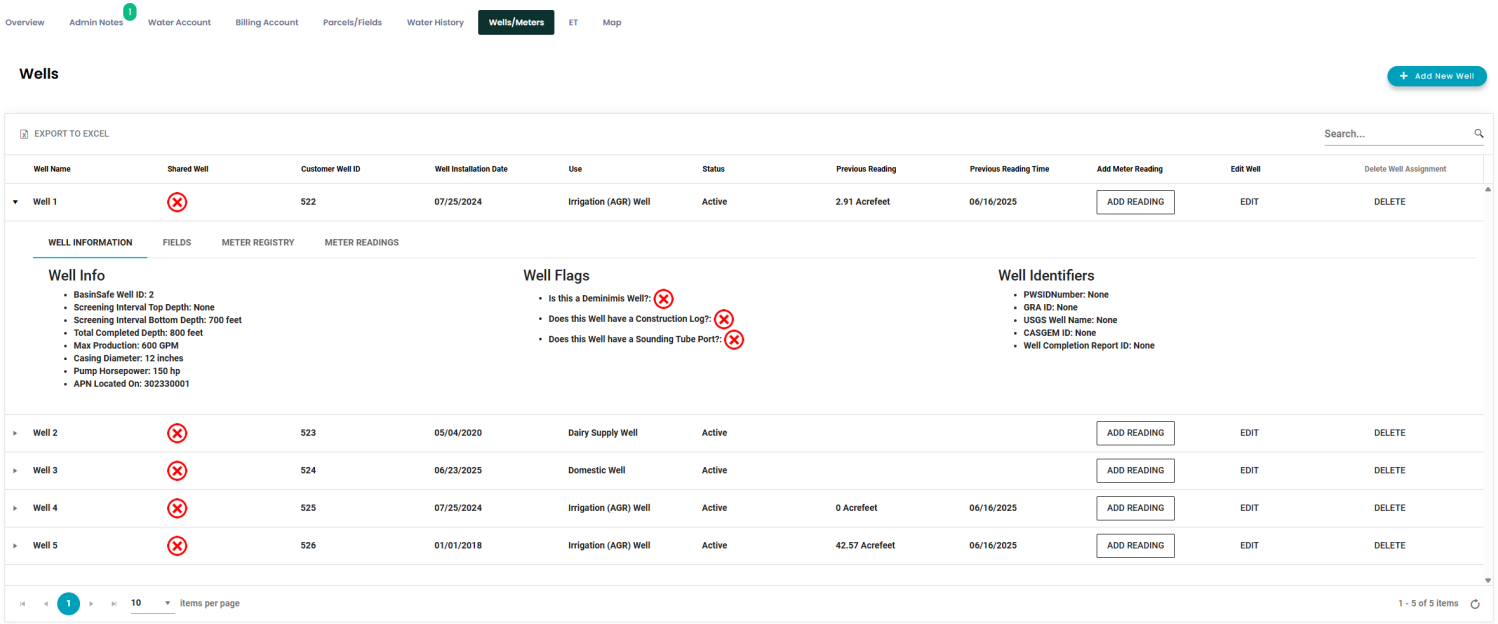

Overview
Admin Notes
1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Add Note
Category
Date
Note
Is Resolved
File Preview
Toggle Resolved
Edit Note
Delete Note
Communication
6/23/2025
Grower called to update contact information.
MARK AS RESOLVED
EDIT NOTE
DELETE NOTE
1
1 - 1 of 1 items

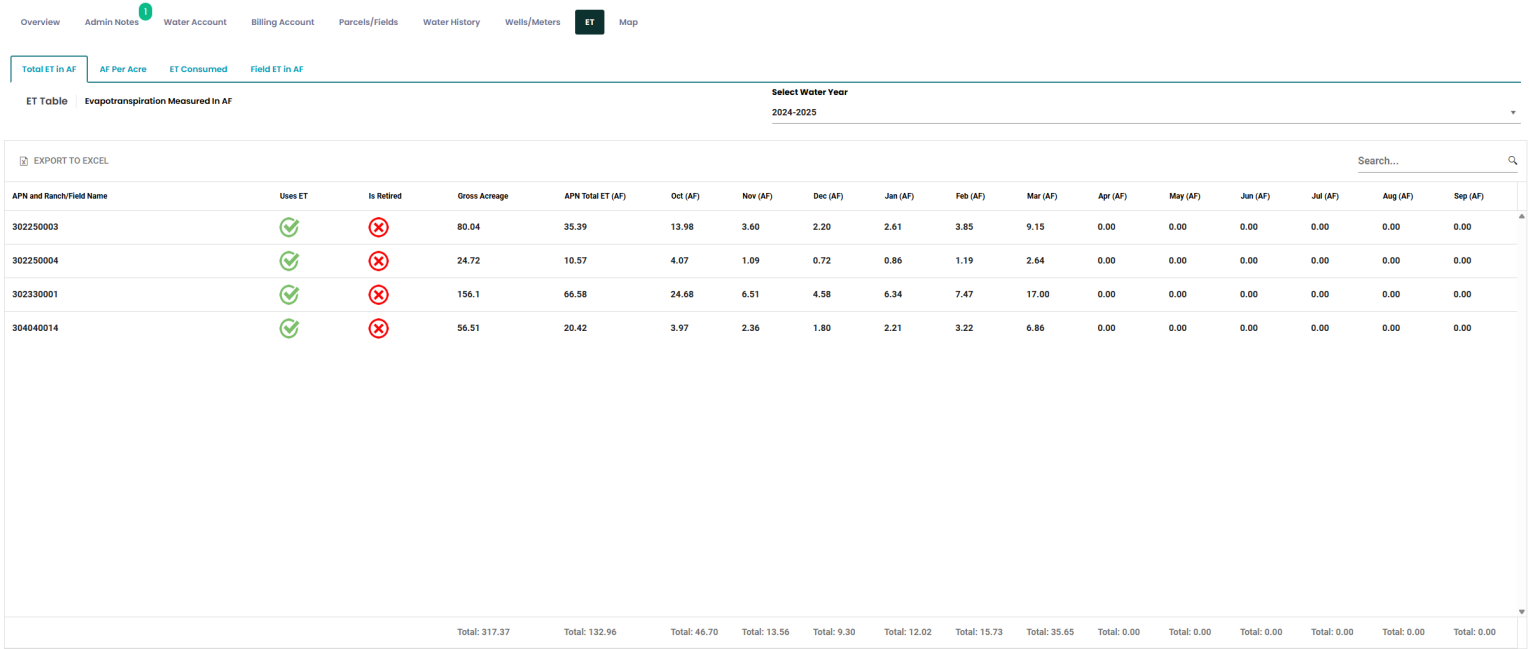

Overview
Admin Notes
1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Primary Allocations
Surface Water: 0.00 AF
Groundwater: 57.58 AF
Total Water: 57.58 AF
Subsidence Allocations
Total Water: 671.82 AF
Parcel Count: 3
View/Set Priority
New Allocation
Intra Account Transfer
Active Account Allocations
Total Precipitation 5.84 AF +
1. 2025 WY Total Precipitation - 5.84 AF
Native Sustainable Yield 0.00 AF +
Landowner Groundwater Credits 10.29 AF +
Tier 1 Transitional 41.45 AF +
Tier 2 Penalty 0.00 AF +
Toggle All Allocations
Total Precipitation Transaction Count : 5
View All Bucket Transactions
Water Transfer
Edit Water Group Assignment
2025 WY Total Precipitation
NEW TRANSACTION
FREEZE ALLOCATION
EDIT ALLOCATION
Allocated Based On: 317.37 Ac
Current Gross Acres : 317.37 Ac
Start Date : 10/1/2024
Rollover Date : 9/30/2029
Amount to Rollover : 96.11
Remaining
66.06%
Initial Deposit
0.00 Af
Total Credits
8.84 Af
Total Debits
-3.00 Af
Remaining Balance
5.84 Af
Show / Hide Recent Transactions
Recent Transactions Last 10 Transactions | Total Transactions: 2
View All Transactions
Debit On : 6/26/2025 | Created On : 6/26/2025
VOID
EDIT
ET Consumption Test
Transaction Source
ETConsumption
Transaction Type
Debit
Transaction Amount
-3.00 Af
Credit On : 6/23/2025 | Created On : 6/23/2025
VOID
EDIT
Parcel Transfer: 304040014 From ETGSA1761

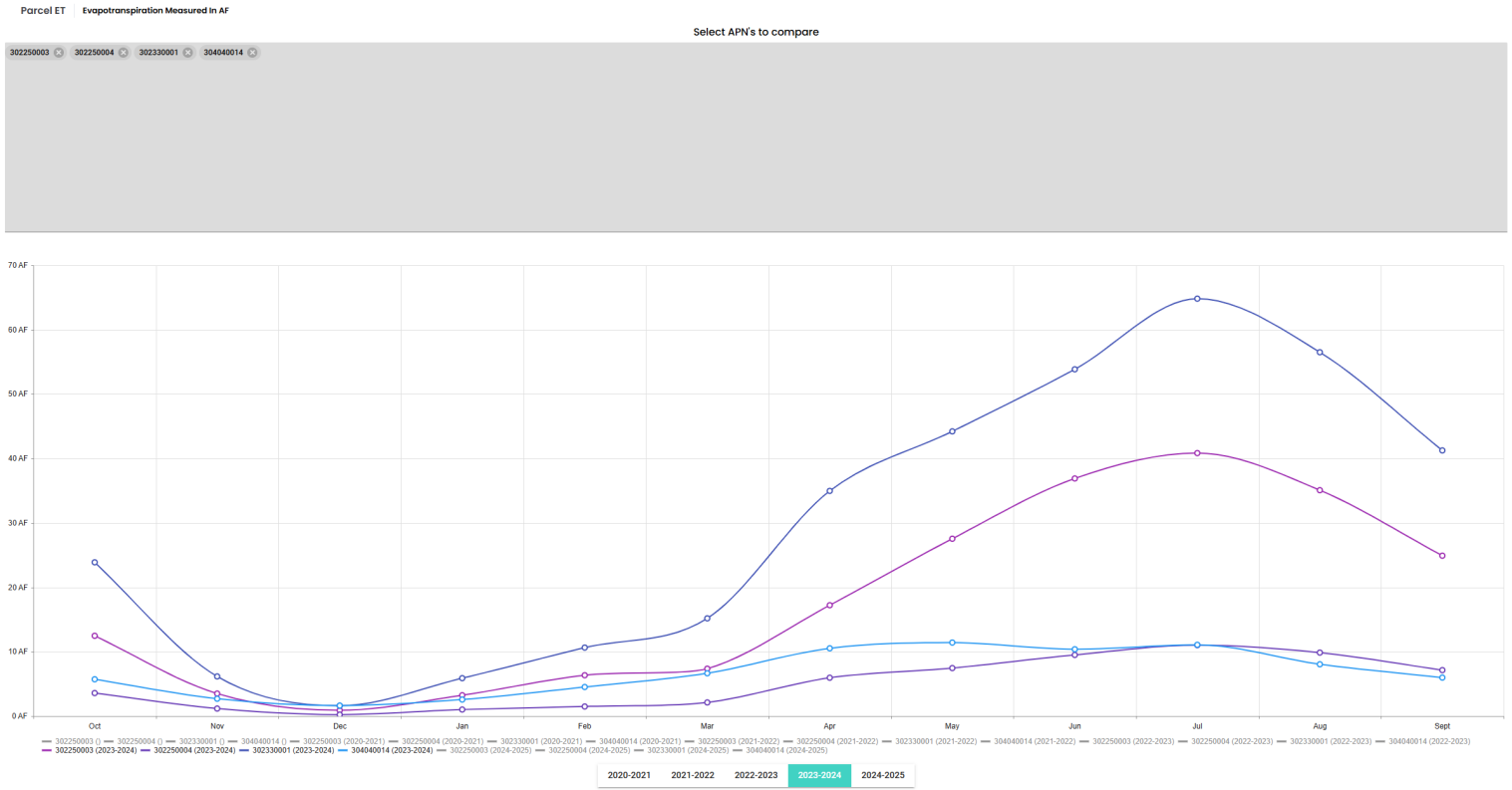

Overview
Admin Notes
1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Collapse Sidebar
Billing Accounts
Tier 1 Consumption
New Billing Account
Billing Admin Dashboard - ET Consumption
Total Charges
$3,136.00
Total Adjustments
($1,136.00)
Total Penalty
$0.00
Total Payments
$2,000.00
Balance
$0.00
Detailed Breakdown
Billing Account Invoices
Billing Account Transactions
Payment Info
Credit Info
Line Item Transfer
Create Blank Invoice
EXPORT TO EXCEL
Search...
Invoice
Invoice Id
Status
Invoice Amount
Remaining Amount
Add Item
Q2 2025 WY ET
55676
Paid
$2,000.00
$0.00
ADD ITEM
INVOICE INFORMATION
INVOICE LINE ITEMS
INVOICE TRANSACTIONS
Invoice Notes
Q2 2025 WY ET
Customer Details
ETGSA9999
Demo Account
Past Due
06/30/2025
Billing Period
01/01/2025 - 05/31/2025
Summary
Past Charges: $0.00
Current Charges: $2,000.00
Invoice Amount: $2,000.00
Remaining Amount: $0.00
Penalties: $0.00
Adjustments: ($1,136.00)
Mass Adjust Invoice
Apply Credits To Invoice

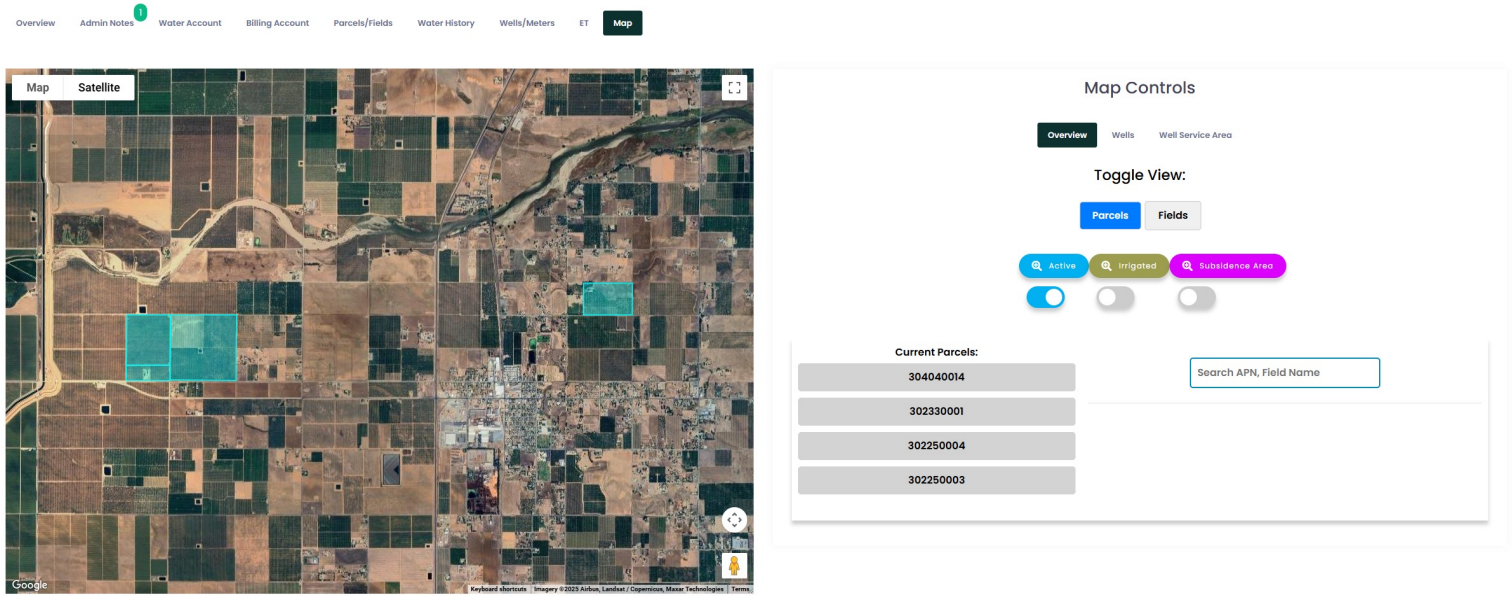

Overview
Admin Notes 1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Active Parcels
Retired Parcels 0
Leased Out Parcels 0
Active Fields
Retired Fields 0
Need Help
Active Parcels
EXPORT TO EXCEL
NEW PARCEL
ASSIGN WATER
Search...
Actions
APN
Grower Name
Total Acres
Irrigated Acres
In Subsidence
Belongs To Account
Uses Allocation
Allocatable
Billable
Ignores ET
District
MZ
Actions 302250003 302250003 80.04 80 N/A Greater Tule
Actions 302250004 302250004 24.72 20 N/A Greater Tule
Actions 302330001 302330001 156.1 157 N/A Greater Tule
Actions 304040014 304040014 56.51 34.75 N/A Greater Tule
1
10
items per page
1 - 4 of 4 items
Owned and Leased Parcel History
EXPORT TO EXCEL
Transferor Customer Number
Recipient Customer Number
Parcel Requested for Transfer
Gross Acreage
Transaction Date
Land Transfer
Land Lease

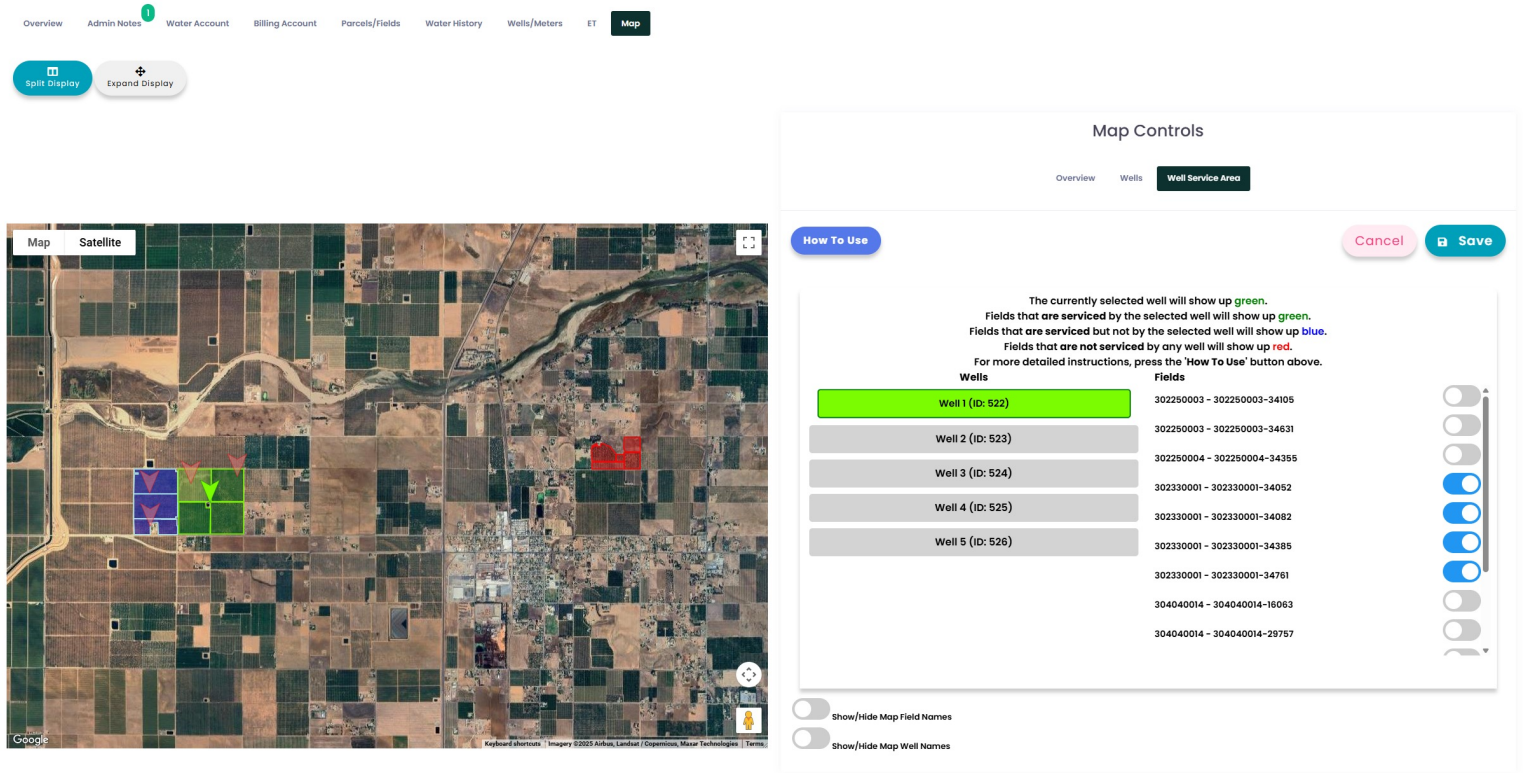

Overview
Admin Notes
1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Water Transfer History
Water Retirement History
Water Transfer History
EXPORT TO EXCEL
Drag a column header and drop it here to group by that column
Transferor
Recipient
Type Name
Transfer Amount (AF)
Date Created
Notes
ETGSA1761 ETGSA9999 2027 WY Tier 1 Transitional 16.4 06/23/2025 04:35 PM Test
ETGSA1761 ETGSA9999 2026 WY Tier 1 Transitional 16.2 06/23/2025 04:35 PM Test
ETGSA1761 ETGSA9999 2025 WY Tier 1 Transitional 13.08 06/23/2025 04:35 PM Test
ETGSA1761 ETGSA9999 2024 WY Tier 1 Transitional 11.09 06/23/2025 04:35 PM Test
ETGSA1761 ETGSA9999 2022 WY Native Sustainable Yield 19.9 06/23/2025 04:35 PM Test
ETGSA1761 ETGSA9999 2025 WY Total Precipitation 8.69 06/23/2025 04:35 PM Test
ETGSA1761 ETGSA9999 2027 WY Tier 1 Transitional 65.6 06/23/2025 04:55 PM Test
ETGSA1761 ETGSA9999 2026 WY Tier 1 Transitional 64.8 06/23/2025 04:55 PM Test
ETGSA1761 ETGSA9999 2025 WY Tier 1 Transitional 36.63 06/23/2025 04:55 PM Test
ETGSA1761 ETGSA9999 2025 WY Total Precipitation 26.41 06/23/2025 04:55 PM Test
ETGSA1761 ETGSA9999 2027 WY Tier 1 Transitional 7.68 06/23/2025 04:12 PM Test
ETGSA1761 ETGSA9999 2026 WY Tier 1 Transitional 15.91 06/23/2025 04:12 PM Test
1
2
20
items per page
1 - 20 of 23 items


Overview
Admin Notes
1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Wells
+ Add New Well
EXPORT TO EXCEL
Search...
Well Name
Shared Well
Customer Well ID
Well Installation Date
Use
Status
Previous Reading
Previous Reading Time
Add Meter Reading
Edit Well
Delete Well Assignment
Well 1
522
07/25/2024
Irrigation (AGR) Well
Active
2.91 Acrefeet
06/16/2025
ADD READING
EDIT
DELETE
WELL INFORMATION
FIELDS
METER REGISTRY
METER READINGS
Well Info
BasinSafe Well ID: 2
Screening Interval Top Depth: None
Screening Interval Bottom Depth: 700 feet
Total Completed Depth: 800 feet
Max Production: 600 GPM
Casing Diameter: 12 inches
Pump Horsepower: 150 hp
APN Located On: 302330001
Well Flags
Is this a Deminimis Well?:
Does this Well have a Construction Log?:
Does this Well have a Sounding Tube Port?:
Well Identifiers
PWSIDNumber: None
GRA ID: None
USGS Well Name: None
CASGEM ID: None
Well Completion Report ID: None
Well 2
523
05/04/2020
Dairy Supply Well
Active
ADD READING
EDIT
DELETE
Well 3
524
06/23/2025
Domestic Well
Active
ADD READING
EDIT
DELETE
Well 4
525
07/25/2024
Irrigation (AGR) Well
Active
0 Acrefeet
06/16/2025
ADD READING
EDIT
DELETE
Well 5
526
01/01/2018
Irrigation (AGR) Well
Active
42.57 Acrefeet
06/16/2025
ADD READING
EDIT
DELETE
1
10
items per page
1 - 5 of 5 items


Overview
Admin Notes
1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Total ET in AF
AF Per Acre
ET Consumed
Field ET in AF
ET Table
Evapotranspiration Measured In AF
Select Water Year
2024-2025
EXPORT TO EXCEL
Search...
APN and Ranch/Field Name
Uses ET
Is Retired
Gross Acreage
APN Total ET (AF)
Oct (AF)
Nov (AF)
Dec (AF)
Jan (AF)
Feb (AF)
Mar (AF)
Apr (AF)
May (AF)
Jun (AF)
Jul (AF)
Aug (AF)
Sep (AF)
302250003 80.04 35.39 13.98 3.60 2.20 2.61 3.85 9.15 0.00 0.00 0.00 0.00 0.00 0.00
302250004 24.72 10.57 4.07 1.09 0.72 0.86 1.19 2.64 0.00 0.00 0.00 0.00 0.00 0.00
302330001 156.1 66.58 24.68 6.51 4.58 6.34 7.47 17.00 0.00 0.00 0.00 0.00 0.00 0.00
304040014 56.51 20.42 3.97 2.36 1.80 2.21 3.22 6.86 0.00 0.00 0.00 0.00 0.00 0.00
Total: 317.37 Total: 132.96 Total: 46.70 Total: 13.56 Total: 9.30 Total: 12.02 Total: 15.73 Total: 35.65 Total: 0.00 Total: 0.00 Total: 0.00 Total: 0.00 Total: 0.00 Total: 0.00


Parcel ET
Evapotranspiration Measured In AF
Select APN's to compare
302250003
302250004
302330001
304040014
70 AF
60 AF
50 AF
40 AF
30 AF
20 AF
10 AF
0 AF
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sept
302250003 (2023-2024)
302250004 (2023-2024)
302330001 (2023-2024)
304040014 (2023-2024)
2020-2021
2021-2022
2022-2023
2023-2024
2024-2025


Overview
Admin Notes
1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Map
Satellite
Google
Keyboard shortcuts
Imagery ©2025 Airbus, Landsat / Copernicus, Maxar Technologies
Terms
Map Controls
Overview
Wells
Well Service Area
Toggle View:
Parcels
Fields
Active
Irrigated
Subsidence Area
Current Parcels:
304040014
302330001
302250004
302250003
Search APN, Field Name


Overview
Admin Notes
1
Water Account
Billing Account
Parcels/Fields
Water History
Wells/Meters
ET
Map
Split Display
Expand Display
Map
Satellite
Google
Map Controls
Overview
Wells
Well Service Area
How To Use
Cancel
Save
The currently selected well will show up green.
Fields that are serviced by the selected well will show up green.
Fields that are serviced but not by the selected well will show up blue.
Fields that are not serviced by any well will show up red.
For more detailed instructions, press the 'How To Use' button above.
Wells
Fields
Well 1 (ID: 522)
Well 2 (ID: 523)
Well 3 (ID: 524)
Well 4 (ID: 525)
Well 5 (ID: 526)
302250003 - 302250003-34105
302250003 - 302250003-34631
302250004 - 302250004-34355
302330001 - 302330001-34052
302330001 - 302330001-34082
302330001 - 302330001-34385
302330001 - 302330001-34761
304040014 - 304040014-16063
304040014 - 304040014-29757
Show/Hide Map Field Names
Show/Hide Map Well Names

Proposed Cost

Proposed Cost: Development Phase

Task	Description of Activities	Fee
Phase 1: Discovery Phase		
Phase 1	• In depth review with GSA staff of the "off the shell" application features and current rent district operations • Recommendations on framework configuration and best use of system • Updated scope and fee for Phase 2	**T&M** **$3,500**
Phase 2: Agency Specific Application Development & Deployment Preliminary Fees		

Core Application Development & Configuration	• Contract initiation - GSA signs and agrees to software setup and one-time development set up fee
	  • Development fees included in this task: $55,000 (Fixed Fee)
	• System server requisition
	• Configuration and setup of server
	• GSA database and core Basinsafe™ framework configuration
	  • Configuration fees included in this task: $2,500
	• Deploy software
	• Setup staff accounts and administrative access
		One Time Development Fee
		$57,500

Onboarding	• System capabilities review with staff – in-depth software overview meeting • Data review with recommendations on formatting data appropriately • Provide input to staff that can support data preparation efforts	**T&M** **$7,500**
User Account Setup & Verification	• Receive formatted landowner (user) data from GSA staff • 4Creeks to prepare data for user account importation • Setup staff accounts and administrative access, GSA to provide initial landowner (user) data audit • Import final landowner (user) data into system	**T&M** **$13,000**

Time & materials charges shown are estimated and will vary based upon agency needs.

Task	Description of Activities	Fee
Testing & Staff Training	• Test system with specific data • Deploy “Beta” version of the application for administrative testing period • GSA’s final data audits in system • Three (3) 2-hour staff training sessions	**T&M** **$10,000**
Launch for Member Access	• Work with GSA staff to develop a software launch plan • Provide appropriate, useful on-boarding materials • Dispense user ID / login information • Launch software for member access	**T&M** **$8,500**
Customization	Includes updates requested to the existing core application that would require substantial reconfiguration efforts to launch for member access (i.e. custom billing and invoicing features, custom reports, staff training beyond 3 meetings, etc.). Customization efforts will be agreed upon by both GSA and 4Creeks and a T&M proposal will be provided for approval before work is started.	**Varies**
One-Time Development & Configuration Fee		**$57,500**
Tasks 1-5 Implementation Service Time & Materials Estimate		**$39,000**
Total Estimated Cost		**$96,500**

Proposed Cost: On-Going Support

Task	Description of Activities	Fee
Phase 3: Annual On-Going Support Services		
On-Call Support	• Support services will be provided by high-quality, local staff • Support will be provided during standard business hours • Support services are offered on an hourly basis where support tasks are identified by complexity, length of time to complete, and immediacy • Support rates are valued at $120 / hour • Example: Support during agency assessments or billing cycles	**T&M** **$15,000**

Annual Licensing & Subscription Fee (Includes Web-Based Access & Data Hosting)	• Agency-specific enterprise-level server configuration for data retention and optimization performance
	• Data confidentiality and encryption
	• Fully supported hardware to ensure uptimes of 98% or greater
	• Low latency, high throughput, and highly redundant data access and storage
	• Built and managed to ensure decades of data is secure and accessible
	• Hardware maintained and replaced at regular / specific intervals to ensure uptime and data security
	• Platform license fee to be billed monthly upon operational setup of system
	• Includes:
	  • Software optimization (base code management / optimizing)
	  • System upgrades (upgrades to system performance / ux / ui)
	  • Weekly data backup services
	  • Maintaining software documentation / training resources
	  • Platform debugging and troubleshooting (platform critical support)
		Fixed Fee
		$45,000/Year
		(Annual Fixed Fee)

Customization as Requested	Upon request, scope and fees to be provided to client for approval before customization work begins.	**T&M**
Annual On-Going Support Fees		**$60,000**

BASINSAFE

Test Site

ettest.basinsafe.com

Username: Demo

Password: BasinsafeTrial

Honest. Authentic. Solutions.

4-creeks.com | (559) 802-3052 | info@4-creeks.com