Advancing an Integrated Open-Source Water Accounting Platform in California

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JUNE 23, 2021 - PUBLIC WORKSHOP

Meeting Goals

- Kick-off the Water Accounting Platform partnership
- Share an overview of the project vision
- Show the work done to date
- Hear from project partners
- Review timeline and venues for participation

Polling Question #1

What category of organization best represents you or the agency you work for?

Vision

An accessible open-source water accounting platform that integrates data from a variety of sources and effectively communicates this information to support local, regional, and state water management decisions.

RRB Water Accounting I

https://waterbudget.rrbwsd.com/

Sign In

Water Accounting Platform

Learn More

Rosedale-Rio Bravo Water Accounting Platform

Welcome to the Rosedale-Rio Bravo Water Storage District Water Accounting Platform. The platform is designed to meet these objectives:

- Create a better understanding of water demand and supplies, for Landowners to effectively and efficiently make informed decisions regarding water supply and land use.
- Utilize a satellite based evapotranspiration model, called OpenET, to give landowners a past and present understanding of water demands on their specific parcels.
- Over the long term, develop the accounting platform into a trading platform, encouraging in-district water transfers.

Access Your Water Account

Sign In to view your Water Account. Create a User Profile if you don't have one yet.

Sign In

Create User Profile

Need help logging in?

Forgot Password | Forgot Username | Request Support

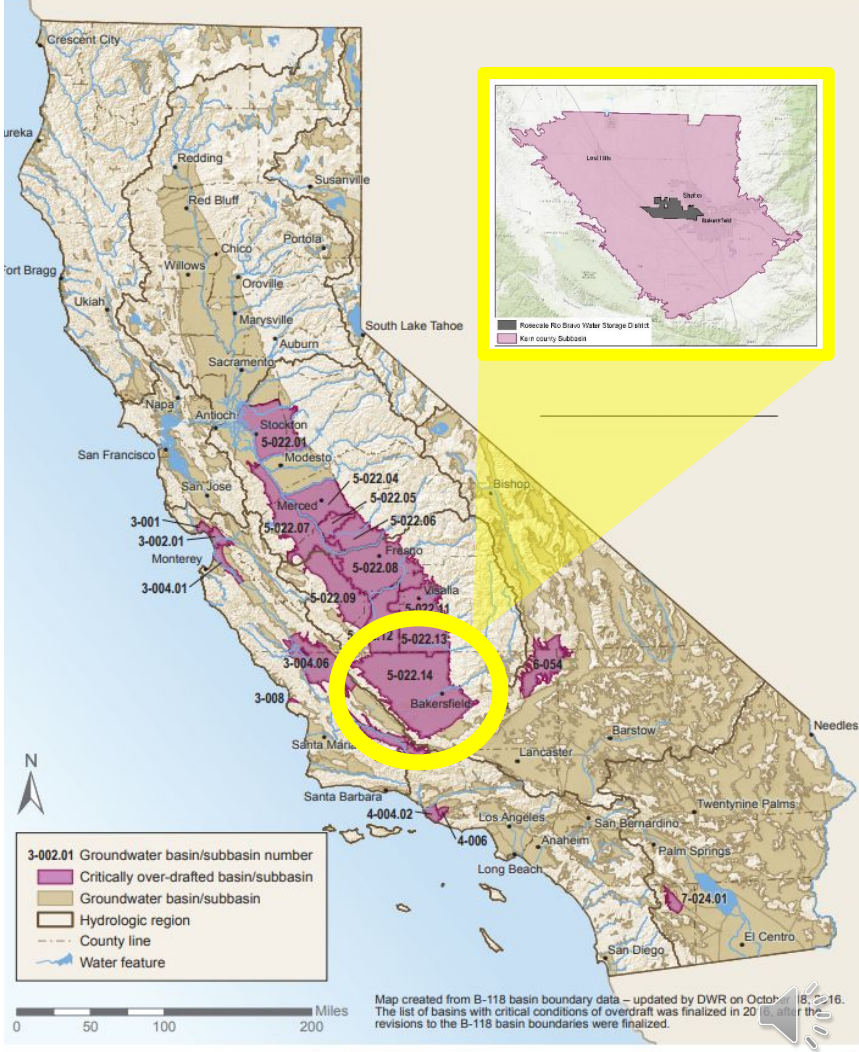
Platform Development

Landowner-led Pilot Phase:

- Rosedale-Rio Bravo Water Storage District initiated Water Accounting and Trading Platform pilot project in 2018
- Implementation guided by landowner workshops and mock trading session

Rosedale-Rio Bravo Water Storage District

- Kern County, west of Bakersfield
- Approximately 44,000 total acres
- Irrigated agriculture, industrial, and residential land uses
- Half of irrigated acreage planted in permanent crops
- Critically overdrafted designation



Prepared by California Department of Water Resources for *Bulletin 118, Interim Update 2016.*

Water Accounting & Trading Platform

As developed for Rosedale-Rio Bravo Water Storage District

Water Accounting & Trading Platform

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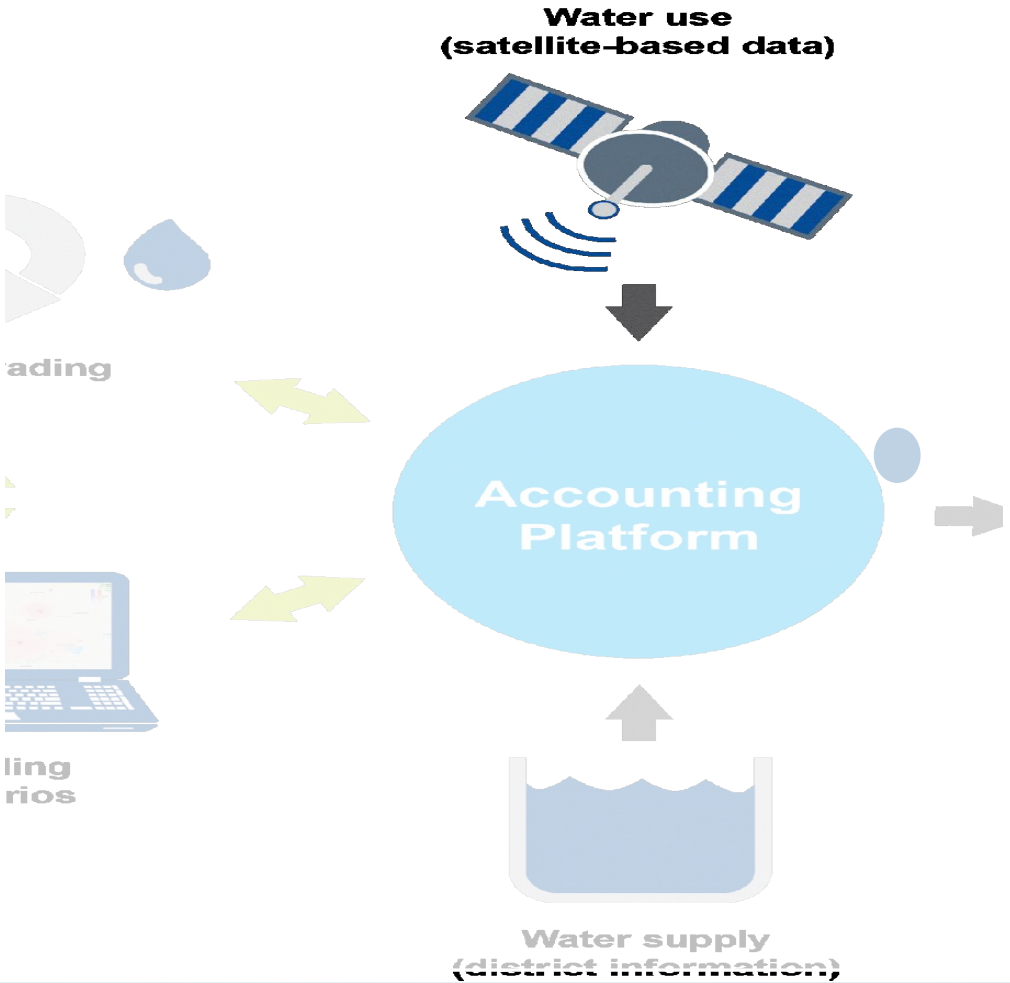

Water Accounting & Trading Platform

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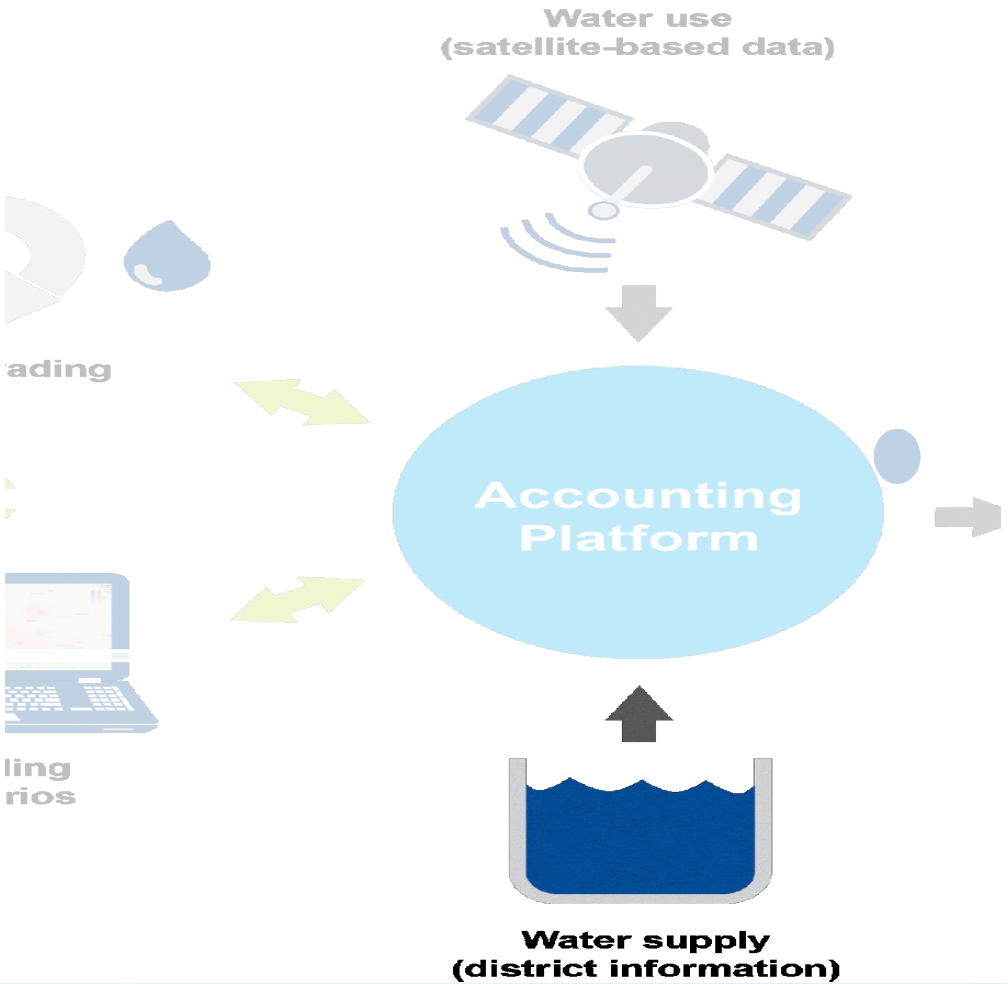

Water Accounting & Trading Platform

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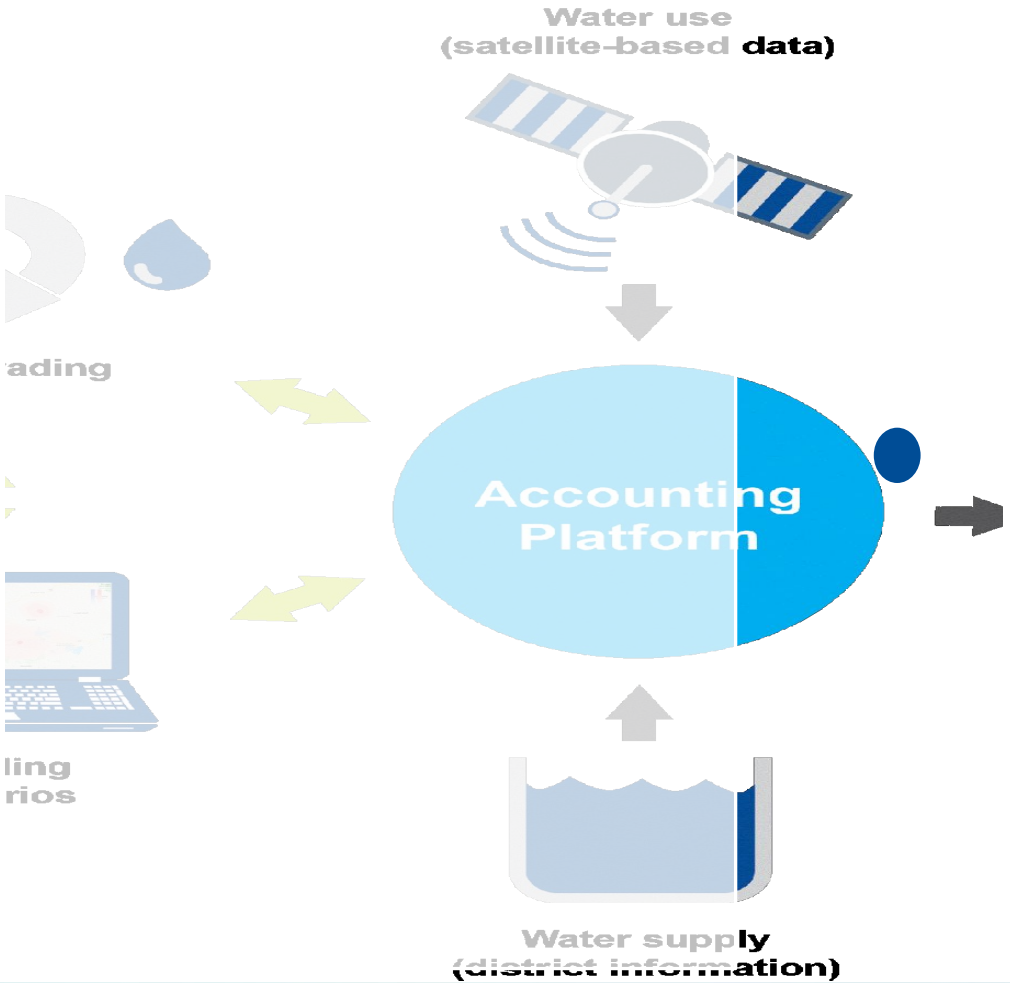

Water Accounting & Trading Platform

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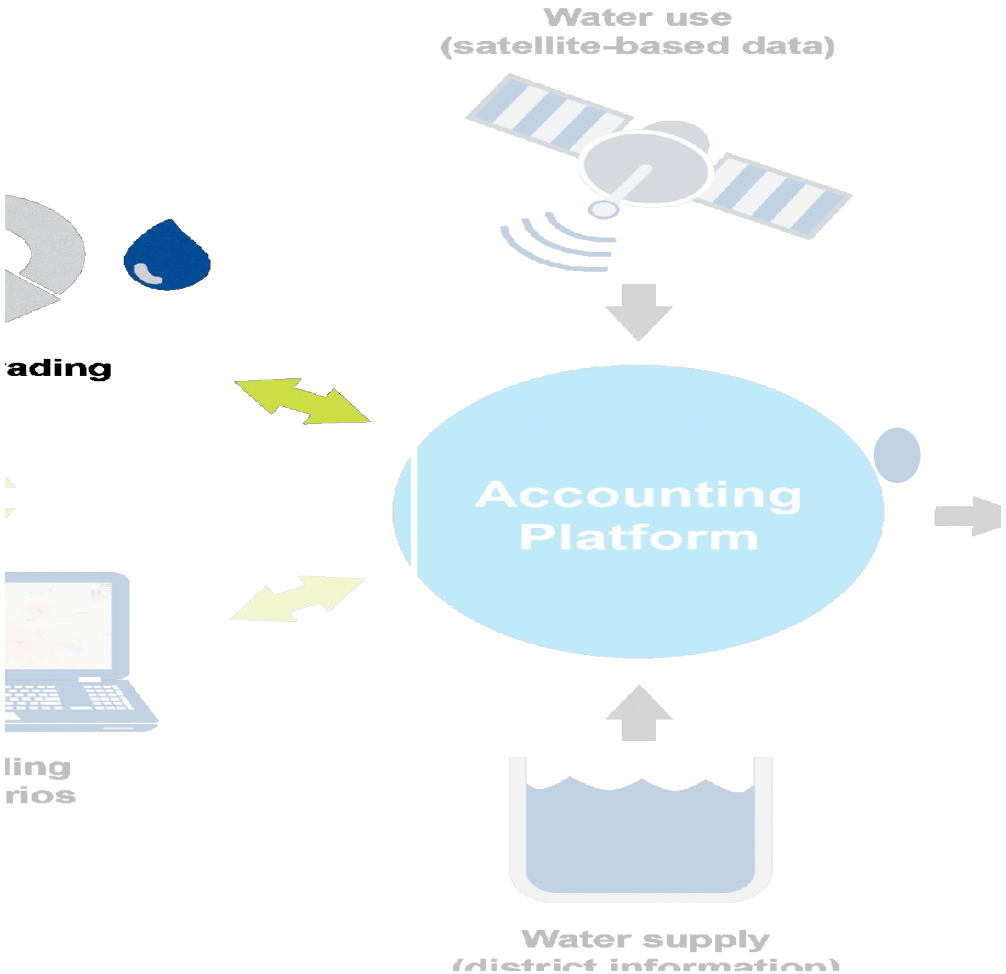

Water Accounting & Trading Platform

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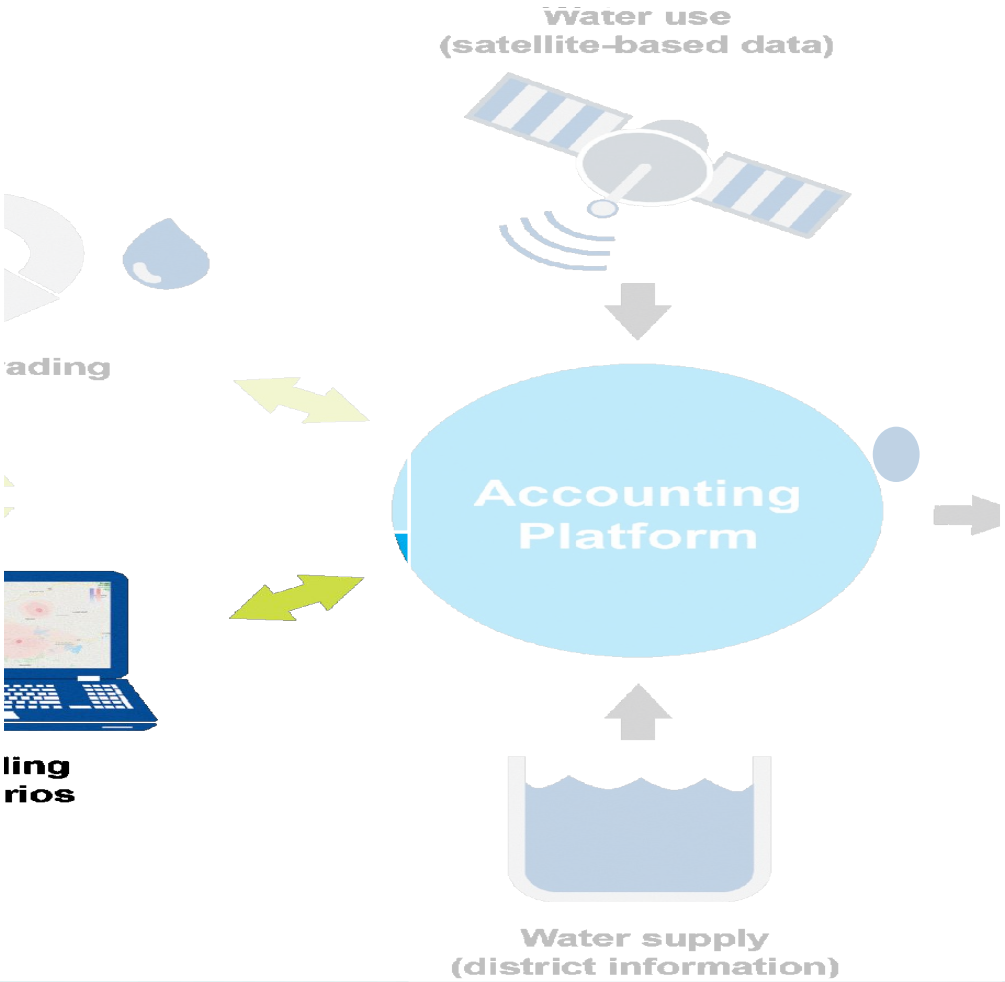
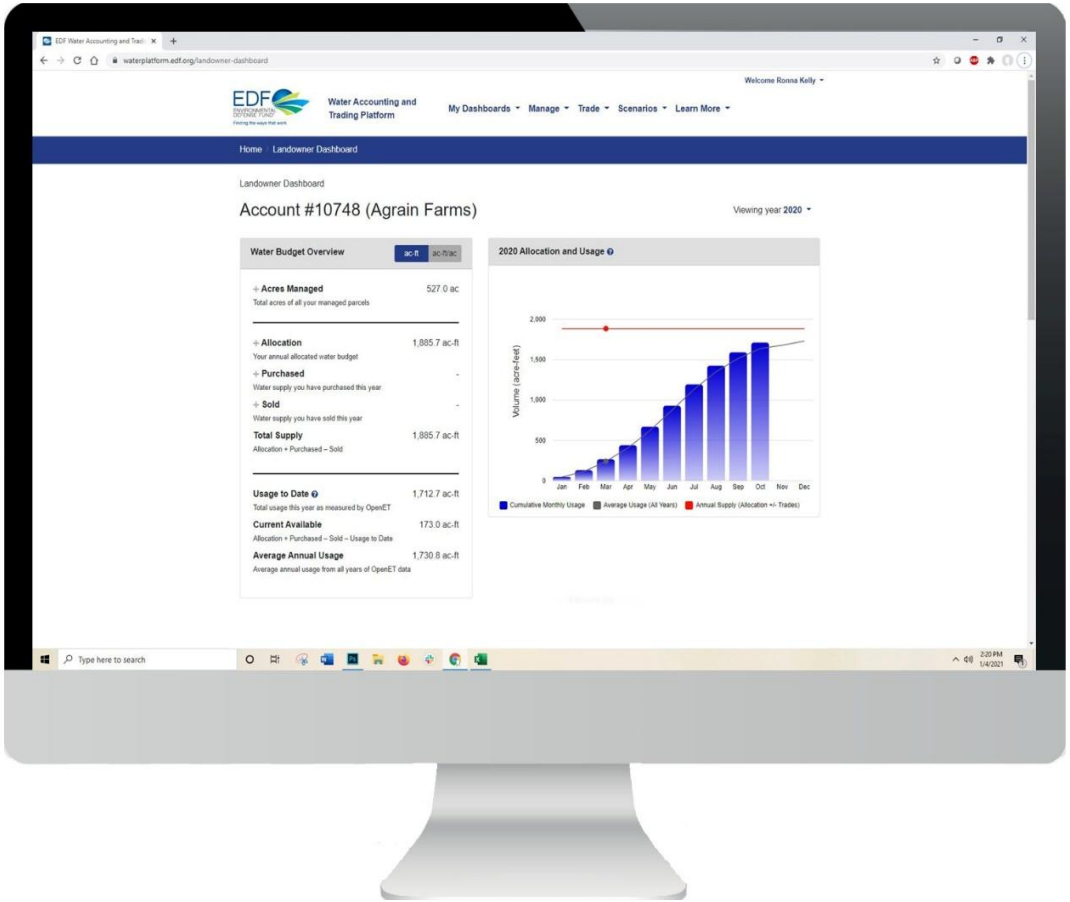
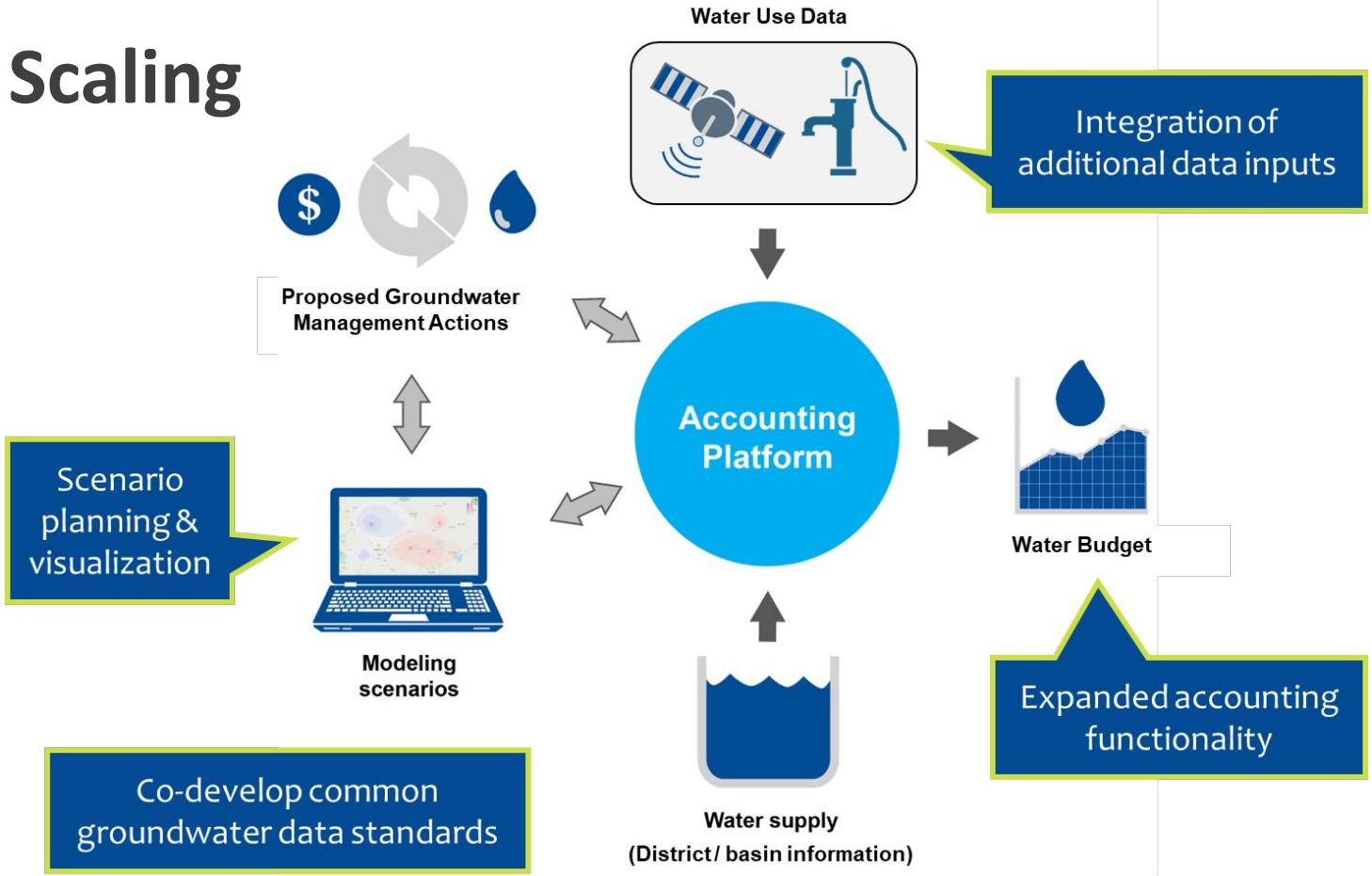



waterplatform.edf.org/landowner-dashboard
Welcome Ronna Kelly
EDF
Water Accounting and Trading Platform
My Dashboards
Manage
Trade
Scenarios
Learn More
Home
Landowner Dashboard
Landowner Dashboard
Account #10748 (Agrain Farms)
Viewing year 2020
Water Budget Overview
ac-ft
ac-ft/ac
Acres Managed
527.0 ac
Total acres of all your managed parcels
Allocation
1,885.7 ac-ft
Your annual allocated water budget
Purchased
Water supply you have purchased this year
Sold
Water supply you have sold this year
Total Supply
1,885.7 ac-ft
Allocation + Purchased – Sold
Usage to Date
1,712.7 ac-ft
Total usage this year as measured by OpenET
Current Available
173.0 ac-ft
Allocation + Purchased – Sold – Usage to Date
Average Annual Usage
1,730.8 ac-ft
Average annual usage from all years of OpenET data
2020 Allocation and Usage
Volume (acre-feet)
2,000
1,500
1,000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Cumulative Monthly Usage
Average Usage (All Years)
Annual Supply (Allocation +/- Trades)
Type here to search

LIVE DEMO

Platform Scaling



Why should open-source matter to you?

Open-source Software Approach

No license costs, no vendor lock-in

No subscription service fees

Available for anyone to use, contribute, modify

Options to Leverage the Platform

Utilize established functionality and adapt the configuration

Customize functionality and configuration

Self-manage and host

Scaling and Onboarding

Smaller user groups, or those with flexible requirements, can participate with minimal up-front costs

Larger agencies or organizations, or those with more specific requirements, can tailor the platform to their needs

Scalable system focused on integrating with existing data sources and systems

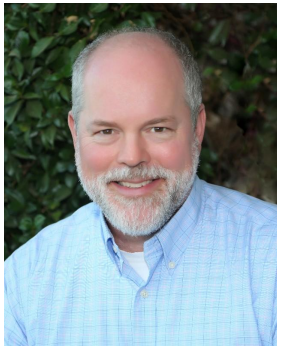
Speaker Introductions

Steven Springhorn
DWR

Erik Ekdahl
SWRCB

Markus Nygren
RRBWSD

Patty Poire
KGA



Max Stevenson
YCFCWCD

Open Question

What datasets should the state prioritize to support this effort moving forward?

Please drop your responses into chat

Polling Question #2

Does your water agency have a water accounting platform?

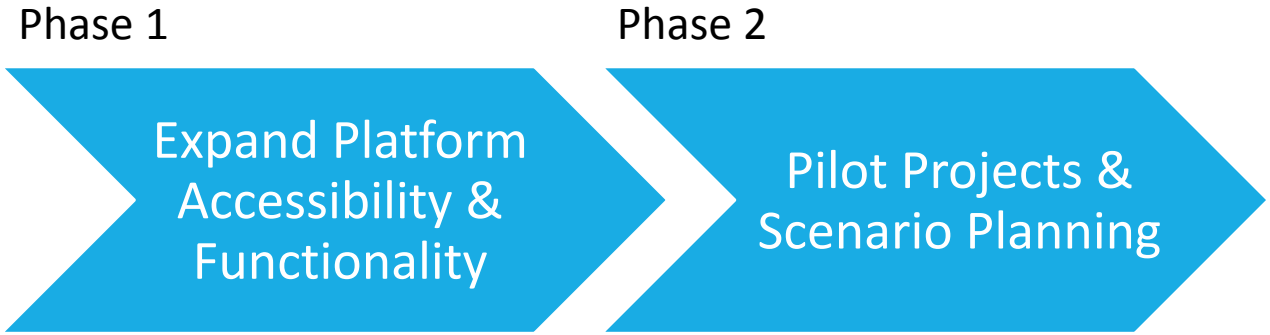
Project Implementation

Phase 1

Expand Platform Accessibility & Functionality

Year 1: 2021
& 2022

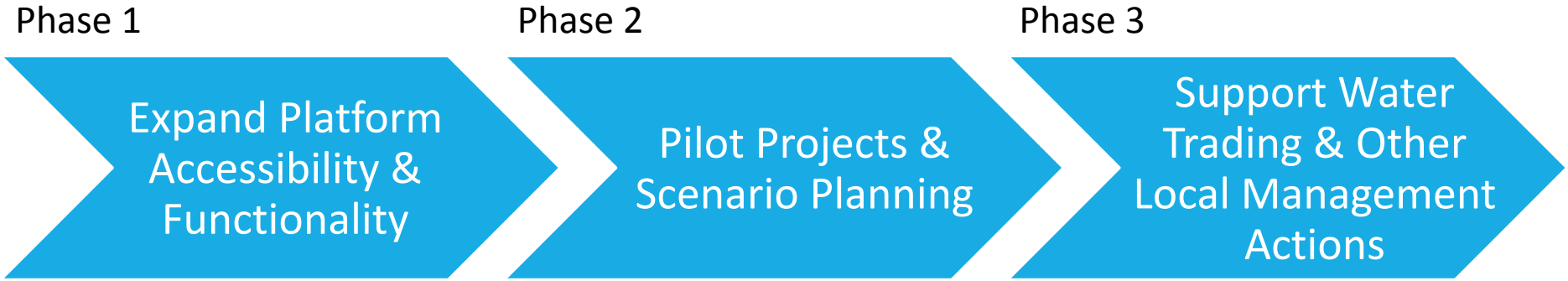
Project Implementation



Year 1: 2021 & early 2022

Year 1 & 2: late 2021 & 2022

Project Implementation



Year 1: 2021 to mid-2022

Year 1 & 2: late 2021 & 2022

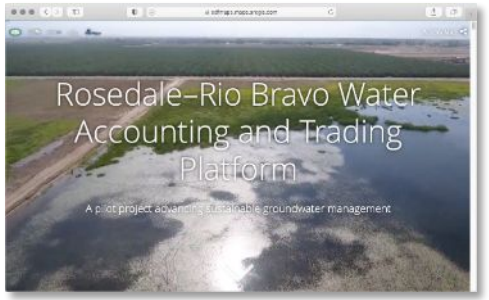
Year 2 & 3: late 2022 & 2023

Stakeholder Engagement

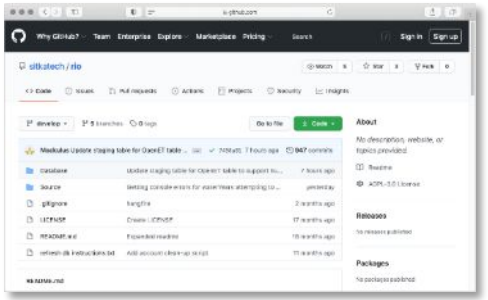
- Public Meetings
- Quarterly Working Groups
  - Advisory
  - Technical
  - Platform Scaling
- Targeted Outreach

To learn more, please visit …

Demo Platform
waterplatform.edf.org



StoryMap
edf.org/waterplatformstory



Source Code
github.com/sitkatech/rio

Thank you!

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