Environmental Defense Fund

California Water Data Consortium

Groundwater Accounting Platform

Leverage Data to Better Understand and Manage Water Supply, Usage, and Trading

Climate change and population growth are driving many communities to make tough decisions about water use. It is more important than ever that water managers and agricultural water users have access to the best possible data to balance supply and demand. In an effort to chart a sustainable future for water resources, the Groundwater Accounting platform was built in partnership by Environmental Defense Fund, California Water Data Consortium, Olsson, and ESA. The platform was initially created for the Rosedale-Rio Bravo Water Storage District in California, and subsequently expanded to include pilot partners Merced Irrigation-Urban Groundwater Sustainability Agency, Pajaro Valley Water Management Agency, Merced Subbasin, and Yolo County Flood Control and Water Conservation District.

The Groundwater Accounting Platform enables water managers, landowners, and water users to track water budgets and usage in near real-time. The platform includes modules for groundwater modeling and water trading, providing a complete set of tools for local water districts to better manage allocations over time. Built using open-source code, the Groundwater Accounting Platform provides a springboard for water districts everywhere to launch and customize their own software solutions.

Benefits

1. **Measure**
   Enable water managers and agricultural users to understand their water use and available supply in near real-time
2. **Manage**
   Empower well-informed decision making with advanced modeling
3. **Trade**
   Establish a local marketplace for water trading
4. **Support Sustainability**
   Meet regulatory objectives for your region

Connect with us:

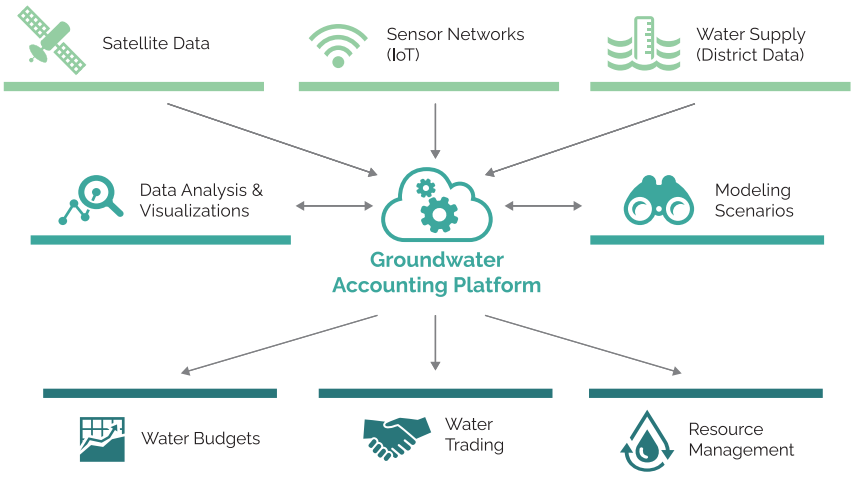
California Water Data Consortium
cawaterdata.org/contact-us/

Environmental Defense Fund
edf.org/offices/san-francisco

Data Driven Decisions

Manage Water Supply and Demand

The Groundwater Accounting Platform accepts water supply data from a variety of sources including satellite, flow meters, and sensor networks. The platform combines water supply and use data to help track water budgets at the field scale for water users. The platform also features a water manager dashboard to track and account for water across a district or region, which informs management decisions such as billing and allocation planning.



Key Platform Functionality

MEASURE	MONITOR	MANAGE	TRADE

- Track water supply data
- Track demand and account for usage in near real-time
- Capture usage data to inform district billing
- Create, view, and manage water budgets
- Landowners can check their water budget and outstanding balance online, similar to how they check their bank account online
- Model the hydrological impacts of various allocation, usage, trade, and recharge scenarios with the optional Groundwater Evaluation Toolbox (GET) from Olsson
- Post offers to buy and sell water with the optional Trading Module
- Facilitate the transfer of allocations at the request of landowners
- Because the technology used to develop the platform is open source, other water agencies can use it to build their own cost-efficient, locally applicable groundwater accounting and trading platforms

Project Partners

Environmental Defense Fund

California Water Data Consortium

Environmental Science Associates

Open ET

Olsson

Rosedale-Rio Bravo Water Storage District

Merced Irrigation-Urban Groundwater Sustainability Agency

Pajaro Valley Water Management Agency

Yolo County Flood Control and Water Conservation District

Merced Subbasin Groundwater Sustainability Agency