



## Water Use: Emerging Data and Tools for Water Budgeting Update: January 2026

The emerging data and tools coming from the Statewide Evapotranspiration (ET) work is enabling OWRD and its partners to continue to strengthen its data-driven management approach. Investments from House Bill (HB) 2018 (2021), HB 2010 (2023), ARPA, and our agency partners are utilizing the best technologies of the day in service of optimizing the water that we have for consumptive use. Below please find a summary of the status of this work.

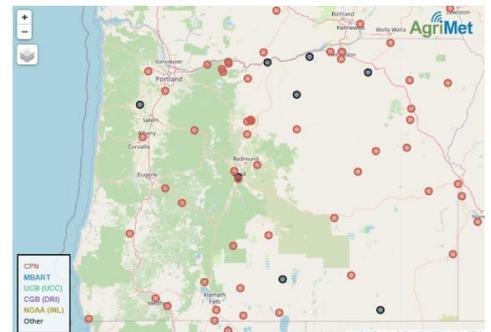
### Description of the project:

#### **Developing statewide data sets quantifying ET rates by individual field level:**

The **Statewide Evapotranspiration (ET) Project** developed field- and watershed scale consumptive use and groundwater pumpage estimates for all irrigated fields and open water evaporation estimates for major reservoirs and lakes in Oregon. This collaborative project between Desert Research Institute (DRI), OpenET, and OWRD scientists involved satellite imagery, geospatial data, and hydrologic modeling (Huntington et al. 2025).

#### **Expanding weather and ET data available for irrigators and water managers:**

The AgriMet program is run by the Bureau of Reclamation to collect and transmit site-specific weather data, and translate it into crop-specific water use information for use by irrigators and water managers. The primary emphasis is on irrigation management – applying the right amount of water at the optimal time. While AgriMet's primary purpose is modeling evapotranspiration, or the amount of water used by a crop, there are many other uses of AgriMet data, including integrated pest management, frost protection, and other crop management activities. OWRD worked with project partners to expand the number of stations in Oregon and develop technical assistance and outreach products to promote their use.

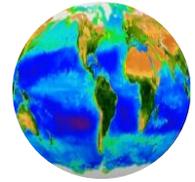


*This map, from the [Bureau of Reclamation](#), shows the current geographic spread of AgriMet stations in Oregon.*

### The Work Completed:

- In partnership with the Bureau of Reclamation and support from OSU Extension, OWRD added 30 AgriMet weather stations, filling important geographic gaps in [its network](#) in 2024.
- The Desert Research Institute (DRI) and OpenET Inc. completed the development of a statewide GIS dataset with over 250,000 mapped agricultural field boundaries, each with data on source type, system type, annual crop type, and monthly satellite-based consumptive use and groundwater pumpage going back to 1984.
- A recently completed report, [Crop Evapotranspiration, Consumptive Use, and Open Water Evaporation for Oregon](#), describes the study and its results, and summarizes the data in support of basin water budgets, consumptive water use, and other water management and planning activities.
- [Technical report](#) documenting a historical review of the OpenET satellite-based ET estimates was published in the fall of 2024.

- OWRD and its partners updated interested parties in January of 2025 about the data that has been developed and how the department is starting to use the data. The presentation and memo on intended uses for remotely sensed ET data are available upon request.



## **The Work Underway:**

For the 2025-2027 biennium the WRD ET and Water Use program goals include developing internal ET data storage and tools, and using the field and watershed-level ET data for a number of technical projects. These include the following:

- Walla Walla River Basin Study - water use estimates,
- Harney Basin - Rulemaking and Conservation Reserve Enhancement Program (CREP),
- Deschutes Basin - canal seepage study,
- Fifteenmile Creek Basin Study,
- Place-Based Planning,
- Developing the statewide Surface Water Information Modeling System (SWIMS), and
- Supporting legal cases.

OWRD is supporting the installation of new AgriMet stations by OSU, in partnership with the Bureau of Reclamation, in 2026. OSU anticipates installing 14 new stations to fill some geographic gaps, largely in Central and Eastern Oregon.

## **Information and Technical Assistance Now Available:**

**Statewide ET project Presentation:** This powerpoint was provided to interested water partners to update them about this project in January 2025, and is available upon request.

**Oregon State University (OSU) Extension's Agricultural Water Technical Assistance Program,** or [AgTaps](#) provides water users and managers current information and tools for more efficiently managing Oregon's water resources in agricultural areas. The program connects OSU's Research and Extension water community to practitioners, agencies, and other interested parties around the state to better understand and manage our water resources.

**AgriMet video:** This 9-minute video was developed by OWRD in partnership with the Bureau of Reclamation (BoR) and OSU Extension to introduce the AgriMet program to irrigators and other interested water users. It describes the data the stations collect, how it's stored and used, and how to access it. The video also connects people to the AgriMet data available at BoR and AgTaps technical assistance at OSU Extension.

**Understanding Groundwater in Oregon:** This story map, developed by the Oregon Water Science Center (USGS) provides information for the interested public about groundwater, ET, water budgets, and the work underway to better understand the foundational components of water budgets for basins across the state.

**For more information,** please contact:

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**Note:** This summary will be updated twice a year until the development of Water Use tools funded by HB2018 and HB 2010 is complete, which is likely through 2028.