

## El Dorado County West Slope Agricultural Development Feasibility Assessment Applied Water Validation Study for Irrigated Agriculture Project Information for Potential Cooperating Growers

### Background and Purpose

In El Dorado County, agriculture is a way of life. Farms, orchards, vineyards, and pastures not only embody the geography, they represent the county's character and support a rural-agricultural lifestyle that both residents and tourists value. Recognizing the importance of the rural-agricultural economy, El Dorado Water Agency (EDWA) recently worked with the County Agricultural Commissioner and local growers to prepare estimates of applied water demands associated with potential future expansion of irrigated agriculture in the West Slope. Acquiring water rights sufficient to meet these future demands, along with future municipal and industrial demands, will allow the County to continue to support both the economic growth and rural-agricultural lifestyle envisioned in its adopted General Plan.

The applied water demands were estimated using locally calibrated crop coefficients based on remotely sensed actual crop evapotranspiration data and root zone water budget modeling using DWR's IDC model, but were not validated through comparison to actual on-the-ground water demands and use. A new phase of work is underway to partner with collaborating agencies and growers to collect in-field applied water data to characterize existing irrigation water use that will then be used to validate and potentially refine the applied water estimates from prior work.

### We Need Your Help as a Cooperating Grower!

In order to collect in-field applied water data and complete this work, we need to identify and partner with active growers in El Dorado County. Growers who voluntarily participate will help support the potential future expansion of irrigated agriculture in El Dorado County, and along with it, continued economic growth and promotion of its unique rural-agricultural lifestyle. Additionally, all data collected will be shared with participating growers for their own knowledge and use in management of their agricultural lands.

Our goal is to identify about thirty (30) "Cooperating Growers" and document their existing irrigation systems and practices during the upcoming (2024) irrigation season through field data collection. Cooperating Growers are established growers in the West Slope and will be selected to represent the following range of crops, locations, and conditions:

#### Crop Types

- Vineyards
- Apple Orchards
- Miscellaneous Deciduous (e.g. walnuts, pears, peaches, plums, cherries, etc.)
- Irrigated Pasture
- Christmas Trees

#### Locations and Conditions

All locations on the West Slope will be considered, but the study goal is to include growers across the variety of West Slope locations and conditions where there is currently irrigated agriculture. The parameters that will be evaluated for inclusion include geographic location and information on farm and field size, elevation, land slope, and soils.

**Cooperating Growers and their associated lands must meet the following criteria to be eligible for participation in the study:**

- Willingness to **provide access to lands** for data collection.
  - Access is anticipated to include a single site visit during the 2023/2024 winter to establish current conditions and plan for monitoring, and periodic, regular site visits during the 2024 irrigation season for data collection. The site visits will primarily be conducted by technical consultants working on behalf of EDWA, as coordinated and agreed upon prior to the site visits.
- Willingness to **share data collected** for purposes of the study and inclusion in a final report.
  - Note: Individual data will be protected (meaning the identity of growers belonging to a particular data set will be masked), and all data published or released to the public will be in aggregate, averaged, or summarized form. We will make individual results available with the respective Cooperating Grower for their own knowledge and use in management of their agricultural lands.
- Ability to **continuously measure irrigation water deliveries** (either surface water deliveries or pumped groundwater) to quantify applied water volumes over time.
  - It is anticipated that some potential growers (potentially within El Dorado Irrigation District) may have a single flowmeter that measures both irrigation and domestic water deliveries. If this arises, these cases will have to be evaluated as to whether measurement records can be adjusted to account for the municipal use component.
- Ability to **associate applied water deliveries with the final place of use** (i.e., a defined field or set of fields).
  - Preference will be given to growers who have a single crop and irrigation method (e.g., drip irrigation) associated with a delivery point(s). Having multiple crops or irrigation methods does not automatically result in exclusion from the study.
  - Growers who may have multiple delivery points and fields may have multiple areas considered for potential inclusion in the study.
  - Resources are being explored to assist cooperating growers in installing water delivery measurement devices if such devices currently do not exist or are not sufficiently reliable.



**For more information, or to discuss your agency's potential collaboration, please contact Rebecca Guo, EDWA General Manager, at (530) 718-8772 or [rebecca.guo@edcgov.us](mailto:rebecca.guo@edcgov.us).**

**Thank you for your interest.**