



INVITATION TO PARTICIPATE
First come, first served!

Summer Irrigation Evaluation Program

Drip/Micro Irrigation Systems

Ongoing Evaluations throughout the Central Valley in Summer 2024

Funded by the California Dept. of Water Resources (DWR)
Supported by local irrigation/water districts

What does the student team do?

- Spends about one day in the field taking measurements of pressures and flows, and making observations of the filtration, chemical injection, etc.
- Inputs data into the Cal Poly ITRC Irrigation Evaluation Programs and examines field data
- Prints out the data, results, and recommendations
- Sets up an appointment with the farmer to review the information

What information is provided afterward?

The ITRC Irrigation Evaluation Program results tell you:

- The Distribution Uniformity (DU) of the irrigation system; the DU is a measure of how evenly the irrigation water is applied to plants throughout a field
- The causes of non-uniformity; for example, the program will tell a farmer what percentage of the non-uniformity is due to plugging, what percentage is due to pressure differences, etc.
- Recommendations on how to improve that specific system's performance

Who gets the information?

- The farmer
- The water/irrigation district (if applicable)
- The DWR (but without any farmer's name or address)
- Cal Poly ITRC (we have a database of results without contact information)

What is the farmer's obligation?

- There is no fee; it is completely funded by the CA DWR.
- The farmer must agree to have someone show the students the field, explain the layout, and start and stop the pump on the agreed-upon date and at the agreed-upon time. It is VERY helpful to provide a map of the irrigation system.
- The farmer must be willing to take the time to sit down and go over the results (about 30 minutes).

Why should I participate?

Irrigation systems cost money to operate, and their performance greatly impacts yield and yield quality. Older systems need to be checked out just as automobiles do. Sometimes they need a tune-up; sometimes they don't. This evaluation lets a farmer know if a tune-up is needed, and what types of things can be done.

On average, we find that the DU of drip/micro systems is about 0.76 (out of a perfect 1.00), whereas reasonably attainable values are about 0.92 for drip/micro systems. If you shift from a DU of 0.76 to a DU of about 0.92, the ratio of (maximum/minimum) water applied to different plants throughout a field will shift from about 2 to 1 to about 1.2 to 1.

Farmers should expect a high DU from a new irrigation system. This program allows farmers to verify the quality of a new system that might have been recently purchased.

Contact

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