Irrigator's Workshop

November 18, 2024

4:00 pm

4:00 to 4:30 pm - On-Farm Efficiency

On-farm irrigation efficiency will address water losses that occur between the groundwater well, or surface diversion, and the spray head. On-farm irrigation efficiency losses can reach up to 10% based on age and condition of conveyance facilities. Different types of on-farm losses, typical in Sierra Valley, will be identified to target specific facility improvements that would result in reduced diversions.

4:30 to 5:00 pm - Irrigation Efficiency

Irrigation efficiency represents the amount of water that needs to be applied in addition to the crop requirement. Wind drift, canopy loss, runoff, and non-uniform application are examples of different types of losses that result in reduced efficiency and increased pumping. The components that make up the water budget for a particular type of crop will be presented so factors that could improve efficiency can be identified.

5:00 to 5:30 pm - Remote Sensing and Climatic Data

Data on water consumption (evapotranspiration) is currently being produced with models using meteorological data and images acquired from satellites orbiting the Earth's surface. This model data is freely available on ETdata.org and can be used to understand water usage over time. This presentation will explain the data that are available to each irrigator, how to interpret the data, and how to access the data.

5:30 to 6:00 pm - Irrigation Application and Water Management

This presentation will address how on-farm and irrigation application practices may be combined with remote sensing data (rainfall, solar radiation, and soil moisture) to optimize the total irrigation requirement. Questions such as "when to apply water" and "at what rate to apply water" using these data to meet the crop water requirement will be presented for a typical farm.