

## Crop Water Use Tool Available

A good irrigation scheduling tool is available on the IREC website to growers in the Tulelake area at <http://irec.ucanr.edu>. The link can be found on the IREC home page on the left hand side titled "Weather, Physical & Biological Data". Then, click on the link "2015 Weather" to open a table showing crop water use for most crops grown in the Basin with different planting times available. See table below.

Monitoring crop water use (ET) is critical to maximize yield, quality, and profits. Crop ET takes into account the effect of weather and crop growth stage on crop transpiration and evaporation, so irrigators can accurately estimate "how often to irrigate" and "how much water to apply per irrigation". At IREC, monitoring ET in combination with periodically measuring soil moisture has worked well to accurately schedule irrigation on station crops. Many times, looking at crop ET totals and/or soil moisture readings will provide an early clue when our current irrigation schedule is over-watering or under-watering the crop. In most cases, we can then change our irrigation set time or irrigation frequency and get back on track to meet crop water use.

<b>ESTIMATED CROP WATER USE IN THE KLAMATH BASIN (acre inches)</b>								
Weather based estimates of crop water use. Irrigation amounts should be adjusted for rainfall and irrigation system efficiencies*.								
CROP	START DATE	6/28	6/29	6/30	7/1	DAILY FORECAST	PAST 7 DAYS	SEASON TOTAL TO DATE
ALFALFA	4/1	0.29	0.28	0.28	0.24	0.25	1.90	16.94
CEREAL GRAIN (fall planted)	4/1	0.29	0.28	0.28	0.24	0.27	1.92	13.81
CEREAL GRAIN (early planted)	4/10	0.29	0.28	0.28	0.24	0.27	1.92	12.06
CEREAL GRAIN (late planted)	4/25	0.29	0.28	0.28	0.24	0.27	1.92	8.83
PASTURE GRASS	4/1	0.23	0.23	0.23	0.20	0.21	1.56	15.04
PEPPERMINT (established)	5/1	0.21	0.21	0.21	0.19	0.21	1.41	4.93
POTATO (early planted)	4/25	0.29	0.28	0.28	0.25	0.28	1.95	6.43
POTATO	5/9	0.22	0.22	0.23	0.21	0.23	1.45	3.53
POTATO (late planted)	5/23	0.14	0.14	0.15	0.14	0.16	0.94	1.89
ONIONS (early planted)	4/10	0.22	0.21	0.22	0.19	0.22	1.45	6.33
ONIONS (late planted)	4/25	0.19	0.19	0.19	0.18	0.19	1.28	4.40
*Contact your University Cooperative Extension Office for further information on utilizing these estimates to schedule irrigations.								

All crop water use estimates are based off data from the Tulelake CIMIS station. Since 1989, IREC has had a CIMIS weather station (owned by California Department of Water Resources) located on research grounds to monitor hourly weather conditions. The weather station monitors 14 measurements including evapotranspiration, precipitation, solar radiation, air and soil temperature, relative humidity, dew point, and wind speed/direction. For the IREC crop water use table, daily CIMIS precipitation and evapotranspiration (ET<sub>0</sub>) data is entered into a formula to estimate crop water use for the primary crops grown in the Basin. IREC staff update the tables each morning for grower availability. For further information on the website or crop water use, feel free to call the office.