## **Typical Seasonal Crop Water Use**

For the San Joaquin County and Delta Water Quality Coalition area. Crop water use was calculated using average historical ETo values from CIMIS Station # 42 (Lodi) and #70 (Manteca). California Dept of Water Resources / Univ. of California Basic Irrigation Scheduling (BIS Program)

|            | Leaf out date -*1 | Leaf drop date | ETc (in)-*2 |
|------------|-------------------|----------------|-------------|
| Almond     | 1-Mar             | 15-Nov         | 47.4        |
| Apple      | 1-Apr             | 15-Nov         | 39.3        |
| Olive      | 1-Jan             | 31-Dec         | 31.9        |
| Stonefruit | 1-Mar             | 15-Oct         | 44.3        |
| Walnut     | 1-Apr             | 15-Nov         | 42.2        |
| Winegrape  | 1-Apr             | 1-Oct          | 24.4        |

## Crop water use for a typical season for trees and vines

- \*1 Leaf out dates and leaf drop dates are "typical", yours may be different due to many factors-- i.e. variety
- \*2 These are full potential seasonal crop water use values. If deficit irrigation is practiced actual water use will be less. Applied irrigation water to meet crop water use may be less than these values with use of stored soil moisture and in-season effective rainfall. Applied water to meet the crop water use may be more than these values do to irrigation inefficiency.

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## **Typical Seasonal Crop Water Use Continued**

|                         | Plant date-*3 | Harvest date | ETc (in)-*4 |
|-------------------------|---------------|--------------|-------------|
| Alfalfa (cycle cutting) | 1-Jan         | 31-Dec       | 50.0        |
| Barley                  | 1-Nov         | 31-May       | 17.2        |
| Corn Grain              | 1-May         | 10-Sep       | 24.6        |
| Corn Silage             | 15-Apr        | 10-Sep       | 20.6        |
| Cucumber                | 1-Apr         | 15-Jun       | 12.0        |
| Dry Beans               | 15-Jun        | 30-Sep       | 17.0        |
| Melon                   | 1-Apr         | 15-Nov       | 38.5        |
| Oats                    | 1-Nov         | 15-May       | 16.9        |
| Onion Dry               | 1-Mar         | 1-Oct        | 43.7        |
| Pasture (Improved)      | 1-Jan         | 31-Dec       | 49.9        |
| Peppers                 | 1-Mar         | 31-Aug       | 33.9        |
| Rice                    | 1-May         | 27-Sep       | 32.2        |
| Safflower               | 1-Apr         | 31-Jul       | 19.8        |
| Sudangrass              | 18-Jul        | 30-Sep       | 12.5        |
| Sugar Beets             | 15-Mar        | 30-Sep       | 37.7        |
| Sunflower               | 1-May         | 10-Sep       | 23.0        |
| Sweet Potatoes          | 15-Apr        | 15-Aug       | 26.3        |
| Tomato                  | 1-Apr         | 31-Aug       | 26.5        |
| Watermelon              | 1-Apr         | 15-Nov       | 39.5        |
| Wheat                   | 1-Nov         | 31-May       | 17.5        |

## Crop water use for a typical season for field and row crops

- \*3 Plant dates and harvest or end of season dates are " typical" yours may be different due to many factors-i.e. variety
- \*4 Applied irrigation water to meet crop water use may be less than these values with use of stored soil moisture and in-season effective rainfall.
  Applied water to meet the crop water use may be more than these values do to irrigation inefficiency

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