30-year average seasonal and daily estimated peak water use (ET) based on Kimberly USDA-ARS weather station data. Prepared by:

Dr. Howard Neibling, P.E. 4/2/12

Crop	seasonal ET, inches	seasonal ET gallons per acre	mid-season peak ET inches/day	mid-season peak ET gallons/acre per day
Alfalfa	41	1,113,248	0.34	9,232
Lawn	39	1,058,944	0.26	7,060
Sugar Beets	35	950,334	0.33	8,960
Pasture	32	868,877	0.22	5,974
Corn	27	733,115	0.32	8,689
Potatoes	24	651,658	0.3	8,146
Winter grain	23	624,505	0.32	8,689
Spring grain	21	570,200	0.33	8,960
Dry Beans	17	461,591	0.29	7,874

1 acre-inch= 27,152 gallons

Note: these numbers are for actual crop demand. To get total irrigation requirement (which includes system losses), divide these numbers by an application efficiency of 0.85 for center pivot or 0.65 for set systems. The result is the water that must be applied by the system to meet crop need.

