Pistachio Water Use
Mature Trees
(>60 degrees Shaded Area)

Bi monthly values of Pistachio tree ET for a normal evaporative demand year in the San Joaquin Valley. Crop coefficients (Kp) were determined from neutron probe data adjusted for deep percolation, and ET estimates made using long term average pan evaporation

CROP WATER USE (ET) OF PISTACHIO TREES FOR A NORMAL YEAR
-Mature, Clean Cultivated Orchards-

	Kp[1]	ET (In)	ET (In/day)	ET (gal/tree/day)[2]
April 1-15	0.06	0.17	.011	2
April 16-30	0.35	1.14	.076	14
May 1-15	0.55	2.09	.139	25
May 16-31	0.75	3.41	.213	38
June 1-15	0.88	4.12	.275	49
June 16-30	0.94	4.62	.308	55
July 1-15	0.96	4.72	.315	57
July 16-31	0.96	4.83	.302	54
August 1-15	0.96	4.15	.277	50
August 16-31	0.90	3.70	.231	42
September 1-15	0.80	2.71	.181	33
September 16-30	0.70	2.02	.135	24
October 1-15	0.54	1.26	.084	15
October 16-31	0.40	.76	.048	9
November 1-15	0.28	.36	.024	4

[1]Crop coefficient for pan evaporation. Current (real time) crop water use can be determined using:
ET crop = Kp xE pan

[2]Based on 17x17 ft. tree spacing. The following equation can be used to calculate individual tree water use for other spacings:
gal/tree/day = ET (In/day) x spacing (ft^2) x .622 (gal/in-ft^2)