

Hoffman Model Input Parameters	Sensitivity			Report Run Inputs
	most	mid	least	
Crop	x			Bean, alfalfa, and almond
Precipitation	x			57 years of daily precipitation at local station
Leaching Fractrion	x			Bean: 0.15, 0.20, 0.25; Alfalfa: 0.07, 0.10, 0.15, 0.20; Almond: 0.10, 0.15, 0.20
Moisture Extraction Pattern	x			40-30-20-10 and exponential
Crop Coefficient	x			See Goldhamer & Snyder
Temperature		x		57 years of daily minimum and maximum temperature at local station
Bare Soil ET		x		0.7 inches/month
Extraterrestrial Radiation		x		See Hargraeves and Allen, 2003 and Hargraeves, 1985
Crop Growth Period		x		April 1, May 1, and June 16. April 1 data shown in Notes Tab
Runoff Coefficient			x	77
Irrigation Efficiency			x	0.65

Hoffman Modeled Ave. Soil Water EC (dS/m) with Exponential Uptake

		Almond (Soil Water EC Threshold = 3.0)		Bean (Soil Water EC Threshold = 2.0)	
LF	Irrigation Water EC (uS/cm)	5 th Percentile Precipitation	Median Precipitation	5 th Percentile Precipitation	Median Precipitation
15%	700	2.5	2.2	1.7	1.4
20%	700	1.8	1.5	1.2	1.0
25%	700	1.1	1.0	0.8	0.7
15%	1,000	3.5	3.1	2.4	2.0
20%	1,000	2.4	2.1	1.7	1.4
25%	1,000	1.7	1.5	1.2	1.0

Irrigation Water EC (dS/m) with 95% Crop Yield and Exp Uptake

		Almond		Bean	
LF		5 th Percentile Precipitation	Median Precipitation	5 th Percentile Precipitation	Median Precipitation
10%		0.9	1.1		
15%		1.5	1.7	1.0	1.3
20%				1.5	1.8

Relative Crop Yield (Percent) at 15% Leaching Fraction and Exp Uptake

		Almond		Bean	
Irrigation Water EC (uS/cm)		5 th Percentile Precipitation	Median Precipitation	5 th Percentile Precipitation	Median Precipitation
700		100	100	100	100
1,000		95	100	96	100

San Joaquin Valley Precipitation 1952 - 2008

Water Yr	Total Precip	Water Yr Type
1976	4.31	c
2007	4.34	c
1977	5.66	c
1968	6.06	d
1972	6.16	d
1987	6.32	c
1964	6.47	d
1990	6.50	c
1954	6.51	b
1960	6.61	c
1953	6.78	b
1961	7.11	c
2002	7.61	d
1989	8.15	c
1985	8.22	d
1981	8.24	d
1984	8.42	a
1970	8.64	a
1957	8.68	b
1999	8.7	a
2008	8.76	c
1991	8.77	c
1994	8.93	c
1955	9.75	d
2004	9.77	d
1965	10.28	w
1979	10.38	a
2003	10.45	b
1966	10.57	b
1975	10.73	w
1992	10.8	c
1959	10.84	d
1956	10.89	w
1988	11.02	c
2001	11.14	d
2000	11.51	a
1974	11.53	w
1962	12	b
2006	12.1	w
1986	12.9	w
1980	13.03	w
1971	13.36	b
1967	13.48	w
1997	13.61	w
1963	14.02	a
1996	14.15	w
1982	14.81	w
2005	15.29	w
1952	16.89	w
1973	17.01	a
1978	17.25	w
1993	17.84	w
1995	18.72	w
1969	18.84	w
1958	19.69	w
1983	19.78	w
1998	26.02	w
Median	10.57	

5th percentile	5.98	5.3% of all the years (3 out of 57) had less than 5.98" of precipitation.
10th percentile	6.41	8.8% of all the years (5 out of 57) had less than 6.41" of precipitation.
15th percentile	6.55	15.8% of all the years (9 out of 57) had less than 6.55" of precipitation.