

**Estimate of Volume of Runoff from ESR Pastures
by SCS T-149 Method**

Soils	Percentage	Hydro Group	CN
Santa Ynez	86	C	74
Lockwood	8	B	61
Pfeiffer	6	B	61
Average CN =			72.18

$S = 1000 / CN - 10$

$S = 3.854$

$Q = (P - 0.2S)^2 / (P + 0.05S)$

NOAA Atlas 11 - Precipitation

	P, inches	Q, inches	% Runoff
2yr-6hr	2.2	0.39	17.6%
5yr-6hr	2.7	0.64	23.8%
10yr-6hr	3.0	0.82	27.2%
25yr-6hr	3.8	1.33	35.1%
50yr-6hr	4.3	1.65	38.8%
100yr-6hr	4.8	2.02	42.6%
2yr-24hr	4.0	1.47	36.8%
5yr-24hr	5.5	2.61	47.4%
10yr-24hr	6.0	3.01	50.2%
25yr-24hr	7.0	3.85	55.0%
50yr-24hr	9.0	5.60	62.3%
100yr-24hr	10.0	6.51	65.1%

Annual % of runoff not use by plants =

PRIZM annual precipitation = 30.58 in. = 2.55 ft.
Annual irrigation @ 2.5 AFA * 248 ac. = 620 AFA

	Pruitt-Snyder		CIMIS	
Nov to Mar runoff, ft.	1.30	51.0%	1.58	62.0%
% of precip. available for infiltration each year		14.2%		25.2%
Acre-feet of infiltration each year		0.36		0.64
% of potential infiltration based on 2.5 AFA		14.2%		25.7%