

SAN JOSE CREEK WATERSHED RECOVERABLE WATER WORKSHEET

(FOLLOWS PROCEDURE DEVELOPED IN USGS PROFESSIONAL PAPER 417-E)

Altitude Range (ft, MSL)	WtrshdArea (Acres)	Area % of Wtrshd	Rainfall (P) (in inches)	Potential ET (E, in.)	Ratios		Recovrable Water (R)	Adjusted R (= K*R)	Watershed Loss (L)
					P/E	R/E			
2500 - 3000	510	14.5%	30.00	54.00	0.56	0.103	5.54	7.81	22.19
2000 - 2500	1020	28.9%	29.00	55.50	0.52	0.085	4.74	6.69	22.31
1600 - 2000	637	18.1%	28.00	56.00	0.50	0.075	4.18	5.90	22.10
1200 - 1600	361	10.2%	27.00	56.00	0.48	0.067	3.73	5.27	21.73
800 - 1200	297	8.4%	25.50	55.20	0.46	0.058	3.22	4.54	20.96
400 - 800	404	11.5%	24.00	53.50	0.45	0.053	2.84	4.01	19.99
150 - 400	297	8.4%	22.00	51.00	0.43	0.047	2.39	3.38	18.62
TOTALS									
			27.30	54.79			4.11	5.80	21.51

ADJ. RECOVERABLE WATER = 5.80 Inches watershed weighted mean runoff depth.
 WATERSHED AREA = 3526 Acres.
WATERSHED RUNOFF EST. @ 1703 Acre Feet / Year.
 Lookup table K factor = 1.411
 The TOTAL GEO INDEX K value = 1.411 Used to calculate adjusted recoverable water.
 (see Figure 10 on page E21 of 417-E).....

LOOKUP TABLE	
Geo Index	K Factor
0	1.60
200	1.60
400	1.53
600	1.39
800	1.25
1000	1.11
1200	0.97
1400	0.83
1600	0.71
1800	0.62
2000	0.56
2200	0.52
2400	0.49
2600	0.46
2800	0.43
3000	0.40
3200	0.37

GEOLOGIC INDEX: (see USGS Prof. Paper 417-E, pp E20 and E21)		
Category	% of wtrshd	Index
A. Quaternary, except old alluvium.....(X 1	7%	70
B. Old alluvium.....(X 10	0%	0
C. Tertiary, except Potato Sandstone.....(X 0	88%	0
D. Potato Sandstone of F.E.Vaughan...(X 100	5%	500
E. Mesozoic.....(X 1C	0%	0
F. Paleozoic.....(X 2C	0%	0
G. Precambrian.....(X 4I	0%	0
TOTAL GEO INDEX =		570

Figure 10