

SCS CURVE NUMBER PARAMETERS

Watershed	Vegetation Type	Vegetation Density (%)	Area		Soil B			Soil C			Soil D			CN (weighted)	Initial Abstraction (in)	Imperviousness (%)
			(ac)	(ac)	(%)	(ac)	(%)	CN	(ac)	(%)	CN	(ac)	(%)			
1	Herbaceous	20	4692.7	96	2	79	3,849	82	86	738	16	91	86	0.31	0	
2	Herbaceous	20	85.6	0	0	79	86	100	86	0	0	91	86	0.33	0	
3	Herbaceous	20	1478.6	266	18	79	1,086	73	86	127	9	91	85	0.35	0	
4	Herbaceous	20	1016.8	310	30	79	698	69	86	9	1	91	84	0.38	0	
5	Herbaceous	10	123.0	94	76	82	30	24	88	0	0	92	83	0.40	0	
6	Herbaceous	20	66.7	67	100	79	0	0	86	0	0	91	79	0.53	0	
6/7	Herbaceous	20	546.8	144	26	79	402	74	86	0	0	91	84	0.38	0	
7	Herbaceous	20	237.2	237	100	79	0	0	86	0	0	91	79	0.53	0	
7/11	Herbaceous	20	447.0	22	5	79	415	93	86	10	2	91	86	0.33	0	
8	Herbaceous	10	52.7	23	43	82	30	57	88	0	0	92	85	0.34	0	
9	Herbaceous	20	167.3	78	46	79	90	54	86	0	0	91	83	0.42	0	
10	Herbaceous	20	412.6	153	37	79	260	63	86	0	0	91	83	0.40	0	
11	Desert Brush	10	577.9	551	95	84	27	5	89	0	0	92	84	0.37	0	
11/12	Desert Brush	20	249.0	183	73	83	66	27	88	0	0	91	84	0.37	0	
11/12A	Herbaceous	20	2548.6	704	28	79	1,642	64	86	201	8	91	84	0.37	0	
12	Desert Brush	20	406.1	406	100	83	0	0	88	0	0	91	83	0.41	0	
12A	Herbaceous	20	590.4	158	27	79	432	73	86	0	0	91	84	0.38	0	
13	Desert Brush	20	167.5	168	100	83	0	0	88	0	0	91	83	0.41	0	
14	Desert Brush	20	149.2	149	100	83	0	0	88	0	0	91	83	0.41	0	
15	Desert Brush	20	92.3	92	100	83	0	0	88	0	0	91	83	0.41	0	
16	Desert Brush	20	418.9	385	92	83	34	8	88	0	0	91	83	0.40	0	
16/17	Herbaceous	20	652.0	162	25	79	490	75	86	0	0	91	84	0.38	0	
17	Desert Brush	20	336.4	336	100	83	0	0	88	0	0	91	83	0.41	0	
18	Desert Brush	20	171.0	171	100	83	0	0	88	0	0	91	83	0.41	0	
19	Desert Brush	20	298.1	298	100	83	0	0	88	0	0	91	83	0.41	0	
19/20	Herbaceous	20	3351.0	358	11	79	2,993	89	86	0	0	91	85	0.35	0	
20	Desert Brush	10	17.4	17	100	84	0	0	89	0	0	92	84	0.38	0	
20/26	Desert Brush	20	1015.6	1016	100	83	0	0	88	0	0	91	83	0.41	0	
21	Desert Brush	20	192.0	184	96	83	9	5	88	0	0	91	83	0.40	0	
22	Desert Brush	10	87.9	88	100	84	0	0	89	0	0	92	84	0.38	0	
23	Desert Brush	20	302.6	303	100	83	0	0	88	0	0	91	83	0.41	0	
23/24	Desert Brush	20	435.0	435	100	83	0	0	88	0	0	91	83	0.41	5	
24	Desert Brush	20	441.0	441	100	83	0	0	88	0	0	91	83	0.41	5	
25	Desert Brush	10	32.5	33	100	84	0	0	89	0	0	92	84	0.38	0	
26	Desert Brush	20	480.7	220	46	83	261	54	88	0	0	91	86	0.33	5	

Watershed	Vegetation Type	Vegetation Density (%)		Area (ac)		Soil B		Soil C		Soil D		CN (weighted)	Initial Abstraction (in)	Imperviousness (%)
		(%)	(%)	(ac)	(%)	(ac)	(%)	(ac)	(%)	(ac)	(%)			
27	Desert Brush	20	92	1052.3	83	967	8	85	88	0	0	83	0.40	5
28	Desert Brush	10	0	134.5	84	0	100	135	89	0	0	89	0.25	0
28/30	Desert Brush	10	0	183.5	84	0	100	184	89	0	0	89	0.25	0
29	Desert Brush	10	0	25.1	84	0	100	25	89	0	0	89	0.25	0
30	Desert Brush	10	0	139.3	84	0	100	139	89	0	0	89	0.25	10
30/32	Desert Brush	10	0	135.2	84	0	100	135	89	0	0	89	0.25	5
31	Desert Brush	20	95	759.3	83	720	5	39	88	0	0	83	0.40	5
31/32	Desert Brush	20	100	44.3	83	44	0	0	88	0	0	83	0.41	5
32	Desert Brush	10	91	175.1	84	159	9	16	89	0	0	84	0.37	0
33	Desert Brush	10	0	598.6	84	0	100	599	89	0	0	89	0.25	0
34	Desert Brush	20	100	441.4	83	441	0	0	88	0	0	83	0.41	0
34/35	Desert Brush	10	0	71.9	84	0	100	72	89	0	0	89	0.25	0
35	Desert Brush	10	91	798.7	84	728	9	71	89	0	0	84	0.37	0
35/36	Desert Brush	20	100	642.5	83	643	0	0	88	0	0	83	0.41	0
36	Desert Brush	10	100	207.3	84	207	0	0	89	0	0	84	0.38	0
36/37	Desert Brush	10	97	173.3	84	168	3	6	89	0	0	84	0.38	0
37	Desert Brush	10	100	55.7	84	56	0	0	89	0	0	84	0.38	0
38	Desert Brush	20	84	277.9	83	234	16	44	88	0	0	84	0.39	0
38/39	Desert Brush	20	39	80.5	83	31	61	49	88	0	0	86	0.32	0
39	Desert Brush	20	100	143.1	83	143	0	0	88	0	0	83	0.41	0
40	Desert Brush	20	40	248.2	83	98	60	150	88	0	0	86	0.33	0
41	Desert Brush	20	59	194.5	83	116	41	79	88	0	0	85	0.35	0
42	Desert Brush	10	0	53.2	84	0	100	53	89	0	0	89	0.25	0
43	Herbaceous	10	100	291.2	82	292	0	0	88	0	0	82	0.43	0
44	Herbaceous	10	81	332.1	82	270	19	62	88	0	0	83	0.41	0
45	Herbaceous	20	0	256.0	79	0	100	256	86	0	0	86	0.33	0
46	Desert Brush	20	85	287.3	83	243	15	44	88	0	0	84	0.39	0
47	Desert Brush	20	25	1512.8	83	372	75	1,141	88	0	0	87	0.30	0
48	Desert Brush	10	56	263.9	84	149	44	115	89	0	0	86	0.32	0
48/50	Desert Brush	20	100	249.8	83	250	0	0	88	0	0	83	0.41	5
49	Desert Brush	10	79	127.6	84	101	21	27	89	0	0	85	0.35	0
50	Desert Brush	20	73	1049.0	83	765	27	284	88	0	0	84	0.37	5
51	Herbaceous	20	0	85.0	79	0	100	85	86	0	0	86	0.33	0
52	Herbaceous	20	73	55.0	79	40	27	15	86	0	0	81	0.47	0
52/53	Herbaceous	20	0	88.4	79	0	100	88	86	0	0	86	0.33	0

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				(ac)	(%)	CN	(ac)	(%)	CN	(ac)	(%)	CN			
53	Herbaceous	20	130.2	99	76	79	31	24	86	0	0	91	81	0.48	0
53A	Herbaceous	10	202.9	152	75	82	51	25	88	0	0	92	83	0.40	0
54	Herbaceous	10	87.5	58	67	82	29	33	88	0	0	92	84	0.38	0
55	Herbaceous	20	171.7	0	0	79	171	100	86	0	0	91	86	0.33	0
56	Herbaceous	10	22.1	3	13	82	19	87	88	0	0	92	87	0.29	0
58	Herbaceous	10	157.5	0	0	82	107	68	88	50	32	92	89	0.24	0
59	Herbaceous	20	343.9	197	57	79	147	43	86	0	0	91	82	0.44	0
59A	Herbaceous	20	2265.7	0	0	79	1,792	79	86	474	21	91	87	0.30	0
60	Herbaceous	20	367.7	72	19	79	298	81	86	0	0	91	85	0.35	0
61	Herbaceous	10	200.9	0	0	82	154	77	88	47	23	92	89	0.25	0
62	Desert Brush	20	680.90	486.6	71	83	194	29	88	0	0	91	84	0.37	0
62/63	Desert Brush	20	135.80	135.80	100	83	0	0	88	0	0	91	83	0.41	0
62A	Desert Brush	20	836.10	449.1	54	83	387	46	88	0	0	91	85	0.34	0
63	Desert Brush	20	211.20	211.2	100	83	0	0	88	0	0	91	83	0.41	0
64	Desert Brush	20	2011.90	1184.4	59	83	826	41	88	0	0	91	85	0.35	0
65	Desert Brush	20	232.30	232.30	100	83	0	0	88	0	0	91	83	0.41	0
65/66	Desert Brush	20	776.30	194.2	25	83	582	75	88	0	0	91	87	0.31	10
66	Desert Brush	20	269.00	241.60	90	83	27	10	88	0	0	91	84	0.39	10
68	Desert Brush	10	1206.40	1072.50	89	84	134	11	89	0	0	92	85	0.37	10

SCS LAG TIME PARAMETERS
TR-55

	Sheet Flow							Shallow Flow							Channel Flow							
Watershed	Manning's n	Flow Length	P _{2YR-24HR}	Elevation HIGH	Elevation LOW	Slope	T _t	Flow Length	Surface Type	Elevation HIGH	Elevation LOW	Slope	Velocity	T _t	Manning's n	Flow Length	Elevation HIGH	Elevation LOW	Hydraulic Radius	Slope	Velocity	T _t
	(sheet)	(ft)	(in)	(ft)	(ft)	(ft/ft)	(hr)	(ft)		(ft)	(ft)	(ft/ft)	(fps)	(hr)	(channel)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(fps)	(hr)
37	0.13	300	2.46	3038	3028	0.03	0.33	2273	unpaved	3028	2949	0.035	3.01	0.21	0.05	1437	2949	2901	0.25	0.033	2.16	0.18
38	0.13	300	2.46	3616	3409	0.69	0.10	455	unpaved	3409	3383	0.057	3.86	0.03	0.05	12388	3383	2960	0.33	0.034	2.63	1.31
38/39	0.13	300	2.46	3542	3532	0.03	0.33	1364	unpaved	3532	3473	0.043	3.36	0.11	0.05	4774	3473	3320	0.33	0.032	2.55	0.52
39	0.13	300	2.46	3301	3292	0.03	0.34	0	unpaved	3292	3292	--	--	0.00	0.05	5811	3292	3073	0.46	0.038	3.45	0.47
40	0.13	300	2.46	3555	3537	0.06	0.26	1285	unpaved	3537	3481	0.044	3.37	0.11	0.05	8126	3481	3195	0.77	0.035	4.70	0.48
41	0.13	300	2.46	3480	3465	0.05	0.28	1172	unpaved	3465	3422	0.037	3.09	0.11	0.05	6111	3465	3215	0.76	0.041	5.02	0.34
42	0.13	300	2.46	3570	3550	0.07	0.25	1869	unpaved	3550	3500	0.027	2.64	0.20	0.05	2051	3500	3472	0.94	0.014	3.34	0.17
43	0.13	300	2.46	3605	3174	1.44	0.07	0	unpaved	3600	3600	--	--	0.00	0.05	12143	3600	3280	0.93	0.026	4.61	0.73
44	0.13	300	2.46	3674	3654	0.07	0.25	200	unpaved	3654	3644	0.050	3.61	0.02	0.05	12188	3644	3330	0.75	0.026	3.95	0.86
45	0.13	300	2.46	4604	4250	1.18	0.08	977	unpaved	4250	3990	0.266	8.32	0.03	0.05	3552	3990	3900	0.94	0.025	4.55	0.22
46	0.13	300	2.46	2949	2940	0.03	0.34	1308	unpaved	2940	2900	0.031	2.82	0.13	0.05	10641	2900	2691	0.32	0.020	1.95	1.51
47	0.13	300	2.46	3495	3490	0.02	0.43	0	unpaved	3490	3452	--	--	0.00	0.05	9989	3452	2685	0.90	0.077	7.70	0.36
48	0.13	300	2.46	2707	2699	0.03	0.36	4299	unpaved	2699	2624	0.017	2.13	0.56	0.05	9416	2624	2552	0.39	0.008	1.39	1.88
48/50	0.13	300	2.46	2784	2778	0.02	0.40	0	unpaved	2778	2778	--	--	0.00	0.05	6146	2778	2670	0.90	0.018	3.68	0.46
49	0.13	300	2.46	2640	2634	0.02	0.40	3065	unpaved	2634	2590	0.014	1.93	0.44	0.05	1773	2590	2565	0.25	0.014	1.40	0.35
50	0.13	300	2.46	2750	2743	0.02	0.38	3286	unpaved	2743	2683	0.018	2.18	0.42	0.05	12667	2683	2541	1.03	0.011	3.22	1.09
51	0.13	300	2.46	3700	3690	0.03	0.33	438	unpaved	3690	3678	0.027	2.67	0.05	0.05	3378	3678	3577	0.64	0.030	3.83	0.25
52	0.13	300	2.46	3438	3174	0.88	0.09	997	unpaved	3430	3410	0.020	2.29	0.12	0.05	3099	3410	3330	0.94	0.026	4.59	0.19
52/53	0.13	191	2.46	3550	3530	0.10	0.14	964	unpaved	3530	3518	0.012	1.80	0.15	0.05	4347	3518	3440	1.28	0.018	4.71	0.26
53	0.13	300	2.46	3440	3425	0.05	0.28	1280	unpaved	3425	3405	0.016	2.02	0.18	0.05	3580	3405	3314	0.94	0.025	4.56	0.22
53A	0.13	300	2.46	3668	3658	0.03	0.33	855	unpaved	3658	3570	0.103	5.18	0.05	0.05	7060	3570	3425	0.93	0.021	4.07	0.48
54	0.13	300	2.46	3442	3420	0.07	0.24	2219	unpaved	3420	3352	0.031	2.82	0.22	0.05	5462	3352	3268	0.61	0.015	2.66	0.57
55	0.13	300	2.46	3680	3640	0.13	0.19	1973	unpaved	3610	3600	0.005	1.15	0.48	0.05	7833	3600	3342	1.28	0.033	6.38	0.34
56	0.13	300	2.46	3320	3240	0.27	0.14	432	unpaved	3320	3240	0.185	6.94	0.02	0.05	1268	3240	2710	0.40	0.418	10.46	0.03
58	0.13	300	2.46	3630	3610	0.07	0.25	1717	unpaved	3610	3600	0.006	1.23	0.39	0.05	4128	3600	3500	0.75	0.024	3.83	0.30
59	0.13	300	2.46	3918	3908	0.03	0.33	0	unpaved	3908	3908	--	--	0.00	0.05	9851	3908	3625	0.61	0.029	3.63	0.75
59A	0.13	300	2.46	5520	5370	0.50	0.11	735	unpaved	5520	5250	0.367	9.78	0.02	0.05	18806	5250	3918	0.93	0.071	7.56	0.69
60	0.13	300	2.46	3825	3815	0.03	0.33	125	unpaved	3815	3810	0.040	3.23	0.01	0.05	10692	3810	3510	0.76	0.028	4.16	0.71
61	0.13	300	2.46	3760	3750	0.03	0.33	817	unpaved	3750	3720	0.037	3.09	0.07	0.05	7148	3720	3528	0.95	0.027	4.72	0.42
62	0.13	300	2.46	3185	3176	0.03	0.34	879	unpaved	3176	3145	0.035	3.03	0.08	0.05	10736	3145	2698	0.51	0.042	3.88	0.77
62/63	0.13	300	2.46	3100	3096	0.01	0.47	3093	unpaved	3096	2999	0.031	2.86	0.30	0.05	5787	2999	2836	1.03	0.028	5.10	0.32
62A	0.13	300	2.46	3650	3645	0.02	0.43	67	unpaved	3645	3577	1.015	16.25	0.00	0.05	21560	3577	3039	0.77	0.025	3.95	1.51
63	0.13	300	2.46	2978	2969	0.03	0.34	356	unpaved	2969	2958	0.031	2.84	0.03	0.05	9990	2958	2710	0.83	0.025	4.15	0.67
64	0.13	300	2.46	3597	3594	0.01	0.53	3904	unpaved	3594	3449	0.037	3.11	0.35	0.05	25137	3449	2732	0.68	0.029	3.89	1.79
65	0.13	300	2.46	2979	2969	0.03	0.33	1634	unpaved	2969	2915	0.033	2.93	0.15	0.05	6528	2915	2753	0.83	0.025	4.15	0.44
65/66	0.13	300	2.46	3600	3591	0.03	0.34	1172	unpaved	3591	3537	0.046	3.46	0.09	0.05	17064	3537	2965	0.76	0.034	4.54	1.04
66	0.13	300	2.46	3058	3048	0.03	0.33	349	unpaved	3048	3033	0.043	3.34	0.03	0.05	9562	3033	2779	0.61	0.027	3.49	0.76
68	0.13	300	2.46	3206	3195	0.04	0.31	1555	unpaved	3195	3143	0.033	2.95	0.15	0.05	25871	3143	2556	1.19	0.023	5.04	1.43

Sheet Flow								Shallow Flow							Channel Flow							
Watershed	Manning's n	Flow Length	P _{2YR-24HR}	Elevation HIGH	Elevation LOW	Slope	T _i	Flow Length	Surface Type	Elevation HIGH	Elevation LOW	Slope	Velocity	T _i	Manning's n	Flow Length	Elevation HIGH	Elevation LOW	Hydraulic Radius	Slope	Velocity	T _i
	(sheet)	(ft)	(in)	(ft)	(ft)	(ft/ft)	(hr)	(ft)		(ft)	(ft)	(ft/ft)	(fps)	(hr)	(channel)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(fps)	(hr)
1	0.13	300	2.46	5600	5460	0.47	0.11	2283	unpaved	5460	5145	0.138	5.99	0.11	0.05	28544	5145	3730	0.91	0.050	6.23	1.27
2	0.13	300	2.46	3915	3865	0.17	0.17	1462	unpaved	3865	3860	0.003	0.94	0.43	0.05	3794	3860	3745	0.93	0.030	4.94	0.21
3	0.13	300	2.46	4360	4320	0.13	0.19	3428	unpaved	4320	4125	0.057	3.85	0.25	0.05	14312	4125	3610	0.93	0.036	5.39	0.74
4	0.13	300	2.46	4750	4600	0.50	0.11	4249	unpaved	4600	3770	0.195	7.13	0.17	0.05	8756	3800	3460	0.94	0.039	5.64	0.43
5	0.13	300	2.46	3780	3765	0.05	0.28	0	unpaved	3765	3750	--	--	0.00	0.05	7685	3750	3490	0.86	0.034	4.96	0.43
6	0.13	300	2.46	4030	4020	0.03	0.33	0	unpaved	4020	4020	--	--	0.00	0.05	4052	4020	3560	0.86	0.114	9.08	0.12
6/7	0.13	300	2.46	4220	4200	0.07	0.25	1449	unpaved	4200	3995	0.141	6.07	0.07	0.05	13278	3995	3740	1.42	0.019	5.22	0.71
7	0.13	300	2.46	3855	3850	0.02	0.43	6952	unpaved	3850	3670	0.026	2.60	0.74	0.05	3071	3670	3580	1.44	0.029	6.51	0.13
7/11	0.13	92	2.46	5200	4750	4.88	0.02	0	unpaved	4750	4495	--	--	0.00	0.05	11819	4495	4150	1.41	0.029	6.40	0.51
8	0.13	300	2.46	3675	3670	0.02	0.43	1465	unpaved	3670	3600	0.048	3.53	0.12	0.05	9378	3600	3560	0.76	0.004	1.62	1.61
9	0.13	300	2.46	3802	3795	0.02	0.38	5895	unpaved	3795	3576	0.037	3.11	0.53	0.05	1500	3576	3500	0.76	0.051	5.59	0.07
10	0.13	300	2.46	3900	3882	0.06	0.26	5429	unpaved	3882	3695	0.034	2.99	0.50	0.05	7316	3695	3456	0.77	0.033	4.52	0.45
11	0.13	300	2.46	3588	3585	0.01	0.53	6700	unpaved	3585	3343	0.036	3.07	0.61	0.05	6767	3343	3088	0.47	0.038	3.50	0.54
11/12	0.13	300	2.46	3704	3695	0.03	0.34	4353	unpaved	3695	3338	0.082	4.62	0.26	0.05	5702	3539	3380	0.77	0.028	4.18	0.38
11/12A	0.13	177	2.46	5610	5520	0.51	0.07	0	unpaved	5520	5520	--	--	0.00	0.05	33234	5520	3577	0.77	0.058	6.05	1.53
12	0.13	300	2.46	3443	3434	0.03	0.34	2680	unpaved	3434	3337	0.036	3.07	0.24	0.05	8788	3337	3024	0.76	0.036	4.68	0.52
12A	0.13	300	2.46	3920	3840	0.27	0.14	1819	unpaved	3920	3669	0.138	5.99	0.08	0.05	10369	3669	3349	0.76	0.031	4.36	0.66
13	0.13	300	2.46	3476	3467	0.03	0.34	2504	unpaved	3467	3376	0.036	3.08	0.23	0.05	9378	3376	3060	1.32	0.034	6.58	0.40
14	0.13	300	2.46	3309	3300	0.03	0.34	2182	unpaved	3300	3224	0.035	3.01	0.20	0.05	6503	3224	2984	0.86	0.037	5.18	0.35
15	0.13	300	2.46	3218	3208	0.03	0.33	2628	unpaved	3208	3090	0.045	3.42	0.21	0.05	2803	3090	2995	0.86	0.034	4.96	0.16
16	0.13	300	2.46	3582	3573	0.03	0.34	1593	unpaved	3573	3500	0.046	3.45	0.13	0.05	15081	3500	3010	0.97	0.032	5.26	0.80
16/17	0.13	300	2.46	4010	3980	0.10	0.21	3229	unpaved	3980	3945	0.011	1.68	0.53	0.05	22192	3945	3204	0.26	0.033	2.22	2.78
17	0.13	300	2.46	3425	3415	0.03	0.33	6502	unpaved	3415	3200	0.033	2.93	0.62	0.05	4895	3200	3025	0.97	0.036	5.52	0.25
18	0.13	300	2.46	3249	3242	0.02	0.38	2460	unpaved	3242	3145	0.039	3.20	0.21	0.05	7049	3145	2955	1.21	0.027	5.56	0.35
19	0.13	300	2.46	3310	3305	0.02	0.43	2060	unpaved	3305	3230	0.036	3.08	0.19	0.05	5051	3230	2885	0.45	0.068	4.57	0.31
19/20	0.13	300	2.46	4706	4560	0.49	0.11	664	unpaved	4560	4430	0.196	7.14	0.03	0.05	32869	4430	2710	0.75	0.052	5.63	1.62
20	0.13	198	2.46	2623	2617	0.03	0.24	0	unpaved	2617	2617	--	--	0.00	0.05	981	2617	2605	0.26	0.012	1.34	0.20
20/26	0.13	300	2.46	3349	3335	0.05	0.29	0	unpaved	3335	3335	--	--	0.00	0.05	22982	3335	2626	0.27	0.031	2.19	2.92
21	0.13	300	2.46	2891	2876	0.05	0.28	653	unpaved	2876	2859	0.026	2.60	0.07	0.05	11253	2859	2593	0.47	0.024	2.77	1.13
22	0.13	300	2.46	2704	2695	0.03	0.34	0	unpaved	2695	2695	--	--	0.00	0.05	1470	2695	2592	0.32	0.070	3.69	0.11
23	0.13	300	2.46	3007	3002	0.02	0.43	901	unpaved	3002	2976	0.029	2.74	0.09	0.05	14253	2976	2608	0.43	0.026	2.73	1.45
23/24	0.13	300	2.46	3019	3009	0.03	0.33	447	unpaved	3009	2985	0.054	3.74	0.03	0.05	11175	2985	2670	0.47	0.028	3.02	1.03
24	0.13	300	2.46	3015	3006	0.03	0.34	1808	unpaved	3006	2885	0.067	4.17	0.12	0.05	12954	2885	2611	0.29	0.021	1.90	1.90
25	0.13	300	2.46	2654	2644	0.03	0.33	0	unpaved	2644	2644	--	--	0.00	0.05	2560	2644	2596	0.26	0.019	1.66	0.43
26	0.13	300	2.46	2710	2705	0.02	0.43	0	unpaved	2705	2705	--	--	0.00	0.05	15723	2705	2459	0.29	0.016	1.63	2.67
27	0.13	300	2.46	3066	3056	0.03	0.33	735	unpaved	3056	3020	0.049	3.57	0.06	0.05	19956	3020	2552	0.23	0.023	1.71	3.24
28	0.13	300	2.46	2640	2635	0.02	0.43	0	unpaved	2635	2635	--	--	0.00	0.05	5339	2635	2550	0.26	0.016	1.53	0.97
28/30	0.13	300	2.46	2790	2780	0.03	0.33	2924	unpaved	2780	2707	0.025	2.55	0.32	0.05	6081	2707	2599	0.47	0.018	2.40	0.70
29	0.13	300	2.46	2574	2568	0.02	0.40	0	unpaved	2568	2568	--	--	0.00	0.05	1974	2568	2550	0.26	0.009	1.16	0.47
30	0.13	300	2.46	2662	2655	0.02	0.38	3467	unpaved	2655	2595	0.017	2.12	0.45	0.05	1658	2595	2568	0.26	0.016	1.55	0.30
30/32	0.13	300	2.46	3051	3040	0.04	0.31	1088	unpaved	3040	2997	0.040	3.21	0.09	0.05	7638	2997	2740	0.68	0.034	4.23	0.50
31	0.13	300	2.46	3990	3980	0.03	0.33	445	unpaved	3980	3057	2.074	23.24	0.01	0.05	17612	3057	2619	0.47	0.025	2.84	1.72
31/32	0.13	300	2.46	2959	2948	0.04	0.31	1737	unpaved	2948	2889	0.034	2.97	0.16	0.05	3881	2889	2768	0.26	0.031	2.14	0.50
32	0.13	300	2.46	2873	2																	

BRAWLEY WASH NEAR THREE POINTS, ARIZ.

Location. --In SE $\frac{1}{4}$ sec. 32, T. 15 S., R. 10 E., 1,000 feet downstream from State Highway 86, 1 $\frac{1}{2}$ miles west of Three Points, and 23 miles west of Tucson.

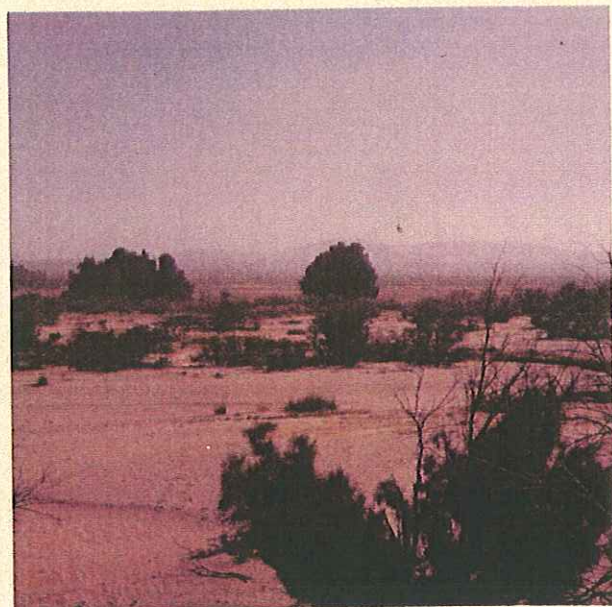
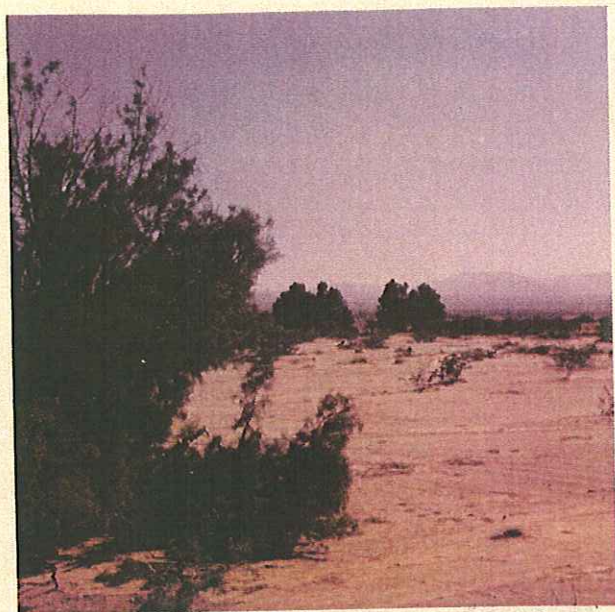
Channel. --The reach has a fairly narrow deep main channel and shallow overflow area. The overflow section is nearly 700 feet wide at the upper end and about 400 feet wide at the lower end. Water in the overflow area was generally less than 2 feet deep. The bed of the overflow area is sand and supports scattered vegetation; the amount of vegetation increases in a downstream direction.

Manning's "n". --Section 1—An "n" of 0.030 was assigned owing to the smooth bottom and very small amounts of brush. The bottom is relatively uniform and has very few cross channels. Depth of flow was uniformly about 2 feet. For deeper depths the "n" might drop as low as 0.025.

Section 2—Depth of flow was about 1 $\frac{1}{2}$ feet; vegetation is somewhat denser than at section 1 and a few cross channels are present. An "n" of 0.035 was assigned to section 2. Varying the depth of flow will have only minor effect on the "n" value. As depth increases, the effect of bottom roughness decreases, but the effect of the brush increases.

Section 3—Depth of flow varied from 1 $\frac{1}{2}$ to 2 feet. The brush is moderately dense and a few cross channels are present. Debris caught on root crowns and mounds of dirt. An "n" of 0.045 was assigned. This value would decrease to about 0.035 at depths of 3 or 4 feet.

Section 4—Brush grows in large clumps with dense root-crown structures. There are large clumps of down brush. Water was generally about a foot deep over the ridges and 2 feet deep in cross channels, which were very numerous. For this stage, an "n" of 0.050 was used. For other stages, the depth of flow and degree to which brush is flattened by a flood will have a large effect on the "n" value. With depths of 4 to 5 feet and a moderate amount of flattening of brush, the "n" could drop to about 0.035.



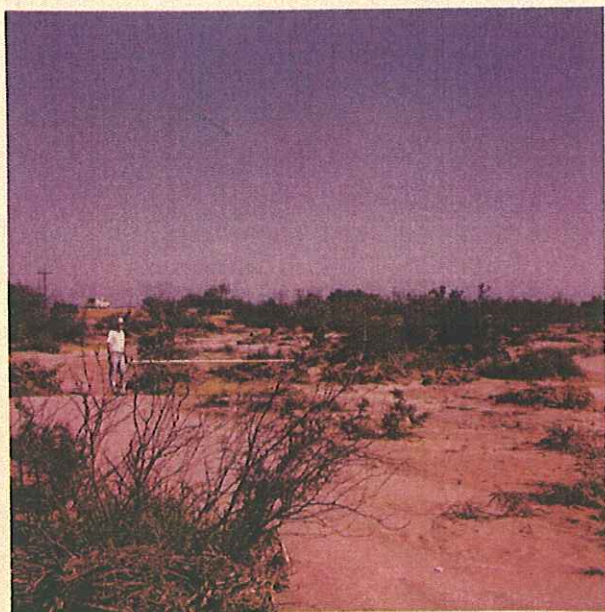
Brawley Wash

Across overflow area at section 1.

Slide No. 58

Across overflow area at section 2.

Slide No. 59



Downstream through overflow
area at section 3.
Slide No. 60

Across overflow area at section 4.
Slide No. 61