Table 38.1-2 Typical Flat Bottom Gradient Terrace Summary (12-feet Bottom Width, 3h:1v Side Slopes)[1]

Slope category		Terrace length	Channel width	Min. terrace	Terrace spacing	Watershed	5-yr sediment	Sediment storage	TC	100-yr 6-hr storm				10-yr 6-hr storm			
Hydrologic & Sediment Values		(ft)	(ft)	(ft)[4]	(ft)[3]	(ac)	(cyd)	(ft)[5]	(hr)	Q (cfs)	Velocity (fps)	Depth (ft)	Fr. #	Q (cfs)	Velocity (fps)	Depth (ft)	Fr. #
Slope category =	10	1000	12	1.89	800	18.37	269	0.535	0.154	9.28	2.01	0.36	0.62	2.93	1.30	0.18	0.55
Curve number (CN) =	83	2000	12	2.03	800	36.73	539	0.535	0.239	16.24	2.46	0.50	0.65	5.08	1.64	0.26	0.59
Rainfall-runoff erosivity factor (R) =	20	3000	12	2.11	800	55.10	808	0.535	0.325	21.47	2.69	0.58	0.66	6.65	1.80	0.30	0.60
Control management/ support practice factor (CP) =	0.364	4000	12	2.17	800	73.46	1,078	0.535	0.410	25.88	2.85	0.64	0.67	7.96	1.87	0.32	0.61
Soil erodibility factor (K)=	0.160	5000	12	2.23	800	91.83	1,347	0.535	0.496	29.56	3.00	0.70	0.68	9.03	2.01	0.36	0.62
[2] Slope length and steepnes factor (LS) =	3.174	6000	12	2.27	800	110.19	1,617	0.535	0.581	32.68	3.10	0.74	0.69	9.96	2.08	0.38	0.62
Sediment yield (t/ac) =	3.70	7000	12	2.31	800	128.56	1,886	0.535	0.667	35.40	3.20	0.78	0.69	10.82	2.15	0.40	0.63
Slope category =	11	1000	12	1.68	580	13.31	184	0.378	0.131	6.72	1.80	0.30	0.60	2.13	1.16	0.15	0.54
CN =	83	2000	12	1.80	580	26.63	367	0.378	0.214	12.25	2.21	0.42	0.63	3.84	1.44	0.21	0.57
R =	20	3000	12	1.88	580	39.94	551	0.378	0.297	16.16	2.46	0.50	0.65	5.00	1.60	0.25	0.58
CP =	0.364	4000	12	1.93	580	53.26	735	0.378	0.380	19.38	2.60	0.55	0.66	5.98	1.72	0.28	0.59
K =	0.160	5000	12	1.98	580	66.57	918	0.378	0.463	22.14	2.74	0.60	0.67	6.78	1.80	0.30	0.60
[2] LS =	2.984	6000	12	2.01	580	79.89	1,102	0.378	0.546	24.47	2.82	0.63	0.67	7.46	1.83	0.31	0.60
Sediment yield (t/ac) =	3.48	7000	12	2.04	580	93.20	1,286	0.378	0.629	26.46	2.90	0.66	0.68	8.06	1.91	0.33	0.61
Slope category =	12	1000	12	1.59	450	10.33	137	0.288	0.115	6.97	1.80	0.30	0.60	2.54	1.21	0.16	0.54
CN =	83	2000	12	1.66	450	20.66	275	0.288	0.194	9.85	2.05	0.37	0.62	3.10	1.35	0.19	0.56
R =	20	3000	12	1.72	450	30.99	412	0.288	0.274	12.96	2.24	0.43	0.63	4.03	1.48	0.22	0.57
CP =	0.364	4000	12	1.77	450	41.32	550	0.288	0.353	15.55	2.40	0.48	0.64	4.80	1.56	0.24	0.58
K =	0.160	5000	12	1.81	450	51.65	687	0.288	0.433	17.74	2.52	0.52	0.65	5.45	1.64	0.26	0.59
[2] LS =	2.878	6000	12	1.84	450	61.98	825	0.288	0.512	19.63	2.60	0.55	0.66	6.00	1.72	0.28	0.59
Sedimeny yield (t/ac) =	3.35	7000	12	1.87	450	72.31	962	0.288	0.591	21.25	2.69	0.58	0.66	6.48	1.76	0.29	0.60
Slope category =	13	1000	12	1.48	350	8.03	101	0.215	0.103	5.41	1.64	0.26	0.59	1.98	1.11	0.14	0.53
CN =	83	2000	12	1.54	350	16.07	202	0.215	0.179	7.91	1.87	0.32	0.61	2.50	1.26	0.17	0.55
R =	20	3000	12	1.60	350	24.10	302	0.215	0.255	10.37	2.08	0.38	0.62	3.24	1.35	0.19	0.56
CP =	0.364	4000	12	1.64	350	32.14	403	0.215	0.331	12.43	2.21	0.42	0.63	3.85	1.44	0.21	0.57
K =	0.160	5000	12	1.68	350	40.17	504	0.215	0.407	14.20	2.34	0.46	0.64	4.37	1.52	0.23	0.58
[2] LS =	2.713	6000	12	1.71	350	48.21	605	0.215	0.483	15.72	2.43	0.49	0.65	4.81	1.56	0.24	0.58
Sediment yield (t/ac) =	3.16	7000	12	1.73	350	56.24	705	0.215	0.559	17.02	2.49	0.51	0.65	5.19	1.60	0.25	0.58
Slope category =	14	1000	12	1.43	300	6.89	88	0.188	0.094	4.65	1.56	0.24	0.58	1.70	1.06	0.13	0.53
CN =	83	2000	12	1.49	300	13.77	175	0.188	0.166	6.95	1.80	0.30	0.60	2.20	1.16	0.15	0.54
R =	20	3000	12	1.55	300	20.66	263	0.188	0.238	9.15	2.01	0.36	0.62	2.86	1.30	0.18	0.55
CP =	0.364	4000	12	1.58	300	27.55	35	0.188	0.310	10.95	2.11	0.39	0.62	3.39	1.39	0.20	0.56
K =	0.160	5000	12	1.62	300	34.44	438	0.188	0.382	12..50	2.24	0.43	0.63	3.86	1.44	0.21	0.57
[2] LS =	2.751	6000	12	1.64	300	41.32	525	0.188	0.455	13.85	2.31	0.45	0.64	4.25	1.52	0.23	0.58
Sediment yield (t/ac) =	3.20	7000	12	1.66	300	48.21	613	0.188	0.527	15.04	2.37	0.47	0.64	4.59	1.56	0.24	0.58
Slope category =	15	1000	12	1.36	250	5.74	71	0.153	0.088	3.87	1.44	0.21	0.57	1.41	1.00	0.12	0.52
CN =	83	2000	12	1.42	250	11.48	141	0.153	0.158	5.80	1.68	0.27	0.59	1.83	1.11	0.14	0.53
R =	20	3000	12	1.47	250	17.22	212	0.153	0.229	7.74	1.87	0.32	0.61	2.42	1.21	0.16	0.54
CP =	0.364	4000	12	1.51	250	22.96	282	0.153	0.299	9.26	2.01	0.36	0.62	2.87	1.30	0.18	0.55
K =	0.160	5000	12	1.54	250	28.70	353	0.153	0.369	10.58	2.11	0.39	0.62	3.27	1.35	0.19	0.56
[2] LS =	2.660	6000	12	1.56	250	34.44	423	0.153	0.440	11.74	2.18	0.41	0.63	3.60	1.39	0.20	0.56
Sediment yield (t/ac) =	3.10	7000	12	1.58	250	40.17	494	0.153	0.510	12.75	2.24	0.43	0.63	3.89	1.44	0.21	0.57

Notes: (1) Values as appear in Table "I" in Reclamation Surface Stabilization Handbook (BNCC 1999) t/ac- tons per acre

Table 38.1-2 (Continued)

Slope category	Terrace length	Channel width	Min. terrace	Terrace spacing	Watershed	5-yr sediment	Sediment storage	TC	100-yr 6-hr storm				10-yr 6-hr storm			
Hydrologic & Sediment Values	(ft)	(ft)	(ft)(4)	(ft)(3)	(ac)	(cyd)	(ft)(5)	(hr)	Q (cfs)	Velocity (fps)	Depth (ft)	Fr. #	Q (cfs)	Velocity (fps)	Depth (ft)	Fr. #

(2) Surface runoff will become channelized in one-half the distance between terraces
(3) values per Phillip Reinholtz memo dated 20 Aug 1990 (on file at NTEC's Navajo Mine office)
(4) Terrace height includes sediment storage + 10-yr 6-hr flow depth + 1.0-ft freeboard
(5) Sediment density is 1.26 tons per cubic yard

TC- time of concentration
cfs- cubic fet per second
cyd- cubic yard
fps- feet per second
Fr. #- Froude number