



FEMA Effective Model as of June 18, 2007

TC&R values for FEMA Effective Model

Barker Reservoir Watershed

HCFCFDT C&R Excel Template

Subwatershed	Drainage Area (acres)	Drainage Area (sq.mi.)	Watershed Length (mi.)	Length to Centroid(mi.)	Channel Slope(ft./mi)	Overland Slope(ft./mi.)	D	Percent Urban Development 2002	Percent Channel Improvement	Percent Channel Conveyance	Percent Ponding	DLU affected by Detention	Percent Impervious 2002	(TC+R)"	TC"	R"	DLU Minimum	DLU (Detention)	Ponding Adjustments for Storage Values (R")					
								DLU	DCI	DCC	DPP	DET	20% (5-Yr)						10% (100-Yr)	4% (25-Yr)	2% (50-Yr)	1% (100-Yr)	0.2% (500-Yr)	
T100A	10636.8	16.62	9.14	3.50	4.22	4.22	2.46	4.25		100	83	0.00	3.37	20.79	4.29	16.50	17.59	4.25	55.68	50.91	43.93	39.92	35.79	28.24
T100B	4396.8	6.87	7.06	3.03	4.22	4.22	2.46	0.09	0	100	37	0.00	0.08	17.34	3.71	13.63	17.59	0.09	38.56	35.70	31.52	29.07	26.52	21.73
T100C	7392.0	11.55	6.97	2.46	5.81	5.81	2.46	8.21	9	100	35	0.00	5.24	15.34	2.38	12.96	17.59	8.21	36.40	33.71	29.80	27.50	25.10	20.60
T100D1	1510.4	2.36	2.93	1.01	0.09	0.09	2.46	0.59	0	100	92	0.00	0.53	36.23	8.89	27.34	17.59	0.59	94.19	86.00	74.01	67.13	60.07	47.18
T100D2	1913.6	2.99	5.37	2.93	0.06	0.06	2.46	0.12	0	100	95	0.00	0.10	64.15	34.17	29.98	17.59	0.12	104.15	95.04	81.69	74.05	66.20	51.91
T100D3	806.4	1.26	2.94	1.44	0.15	0.15	2.46	9.87	56	100	57	0.00	5.52	30.35	7.33	23.02	17.59	9.87	71.60	65.85	57.43	52.55	47.49	38.13
T100D4*	1593.6	2.49	3.58	1.73	6.49	0.08	2.46	0.79	48	40	16	0.00	0.71	9.21	1.29	7.92	63.71	0.79	18.88	17.69	15.97	14.94	13.86	11.79
T100D5	1036.8	1.62	2.45	0.72	7.17	0.13	2.46	39.50	100	80	0	0.00	22.73	4.82	0.30	4.52	24.06	39.50	4.52	4.52	4.52	4.52	4.52	4.52
T100D6	652.8	1.02	2.67	0.84	10.70	0.21	2.46	37.27	38	90	0	0.00	33.19	4.13	0.44	3.68	20.39	37.27	3.68	3.68	3.68	3.68	3.68	3.68
T100E	6035.2	9.43	7.85	4.19	5.81	5.81	2.46	7.25	2	100	39	0.00	6.25	16.69	4.32	12.37	17.59	7.25	35.46	32.80	28.91	26.63	24.26	19.83
T100F	8435.2	13.18	6.46	2.64	7.92	7.92	2.46	12.03	46	100	0	0.13	8.76	13.04	1.79	11.25	17.59	12.03	11.25	11.25	11.25	11.25	11.25	11.25
T100G	6432.0	10.05	7.28	3.16	6.86	6.86	2.46	0.95	2	100	56	0.00	0.86	14.92	2.97	11.95	17.59	0.95	37.04	34.07	29.73	27.21	24.60	19.76
T100H	6489.6	10.14	7.36	3.33	4.22	4.22	2.46	13.49	55	100	0	0.59	6.88	17.84	3.02	14.82	17.59	13.49	14.82	14.82	14.82	14.82	14.82	14.82
T100I	7200.0	11.25	6.82	3.82	1.06	1.06	2.46	2.15	1	100	0	0.53	1.90	27.56	9.78	17.78	17.59	2.15	17.78	17.78	17.78	17.78	17.78	17.78
T101A	2201.6	3.44	4.44	2.76	4.96	6.34	2.46	28.52	100	100	0	9.66	19.76	11.10	1.64	9.46	17.59	18.86	9.46	9.46	9.46	9.46	9.46	9.46
T101B	1881.6	2.94	6.20	2.61	4.34	5.81	2.46	42.99	100	100	0	12.16	32.22	10.57	1.59	8.98	17.59	30.83	8.98	8.98	8.98	8.98	8.98	8.98
T101C	972.8	1.52	2.54	1.10	4.75	4.75	2.46	8.58	3	100	0	2.28	7.27	8.08	1.15	6.93	17.59	8.58	6.93	6.93	6.93	6.93	6.93	6.93
T101D	1619.2	2.53	3.62	1.941	6.64	7.39	2.46	37.82	100	100	0	8.35	25.54	6.41	0.93	5.48	17.59	29.47	5.48	5.48	5.48	5.48	5.48	5.48
T101E	1075.2	1.68	3.46	1.622	8.98	8.98	2.46	70.88	100	30	0	5.28	48.42	8.02	0.56	7.46	95.43	70.88	7.46	7.46	7.46	7.46	7.46	7.46
T101F	729.6	1.14	2.41	1.361	8.75	8.98	2.46	32.26	60	70	0	19.32	27.15	6.22	0.74	5.48	29.03	29.03	5.48	5.48	5.48	5.48	5.48	5.48
T101G	2412.8	3.77	2.63	0.977	8.75	12.67	2.46	84.73	100	100	0	43.57	53.84	3.70	0.37	3.33	17.59	41.16	3.33	3.33	3.33	3.33	3.33	3.33
T101H	729.6	1.14	1.80	0.569	6.32	7.39	2.46	7.15	63	80	0	5.82	5.37	5.73	0.36	5.37	24.06	7.15	5.37	5.37	5.37	5.37	5.37	5.37
T103A	3699.2	5.78	4.64	1.632	6.47	8.45	2.46	79.41	100	30	0	4.11	43.96	11.08	0.64	10.44	95.43	79.41	10.44	10.44	10.44	10.44	10.44	10.44
T103B	921.6	1.44	3.09	1.238	7.39	7.39	2.46	33.68	100	60	0	13.82	19.68	7.94	0.54	7.41	36.04	33.68	7.41	7.41	7.41	7.41	7.41	7.41
T109A	1523.2	2.38	3.05	0.707	6.34	6.34	2.46	16.02	37	100	0	15.46	18.19	8.30	0.52	7.78	17.59	16.02	7.78	7.78	7.78	7.78	7.78	7.78

*This sub area is using a modified percent ponding equation.