FEMA Effective Model as of June 18, 2007
TC&R values for FEMA Effective Model
Clear Creek and Armand Bayou Watershed
HCFCD TC&R Excel Template
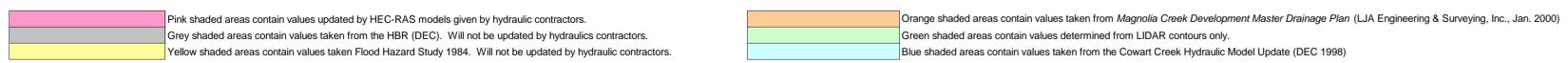
*LOMR Effective October 16. 2015

Subwatershed	Drainage Area (acres)	Drainage Area (sq.mi.)	Watershed Length (mi.) L	Length to Centroid(mi.) Lca	Channel Slope(ft./mi.) S	Overland Slope(ft./mi.) So	D	Percent Urban Development 2002 DLU	Percent Channel Improvement DCI	Percent Channel Conveyance DCC	Percent Ponding DPP	DLU affected by Detention DET	Percent Impervious 2002	(TC+R)"	TC"	R"	DLU Minimum	DLU (Detention)	20% (5-Yr)	10% (100-Yr)	4% (25-Yr)	2% (50-Yr)	1% (100-Yr)	0.2% (500-Yr)
A100A	2056.3	3.21	3.06	1.23	7.4	11.00	2.46	1.3	0.0	100	86	2.7	0.9	7.88	1.06	6.82	17.59	1.30	23.19	21.19	18.27	16.59	14.86	11.71
A100B	1416.3	2.21	3.35	1.74	1.4	5.00	2.46	13.6	100.0	60	59	6.8	9.2	15.10	2.00	13.10	36.04	13.60	41.06	37.74	32.88	30.07	27.15	21.76
A100C	1418.9	2.22	2.54	0.86	3.8	3.00	2.46	20.4	0.0	20	27	3.1	14.3	8.73	0.99	7.74	168.69	20.40	20.54	19.10	17.01	15.77	14.48	12.03
A100D	1060.5	1.66	2.07	0.90	4.4	8.00	2.46	11.9	0.0	100	70	21.1	4.5	7.19	0.98	6.21	17.59	11.90	20.20	18.52	16.06	14.64	13.17	10.48
A100E	2366.7	3.70	4.82	2.82	3.8	5.00	2.46	1.3	0.0	100	98	2.1	1.0	13.73	3.62	10.11	17.59	1.30	35.33	32.22	27.68	25.08	22.41	17.54
A100F	2149.1	3.36	2.77	0.95	2.8	6.00	2.46	17.4	0.0	10	23	0.4	15.5	10.34	1.30	9.04	446.65	17.40	23.16	21.59	19.31	17.96	16.54	13.84
A100G	2048.6	3.20	2.87	1.44	3	3.00	2.46	16.0	0.0	20	15	2.6	11.6	10.35	1.97	8.38	168.69	16.00	8.38	8.38	8.38	8.38	8.38	8.38
A100H	2474.2	3.87	3.32	1.66	1.9	4.00	2.46	3.6	0.0	100	94	3.0	3.2	13.48	2.97	10.51	17.59	3.60	36.41	33.23	28.58	25.91	23.17	18.18
A100I	1170.6	1.83	3.56	1.48	1.9	4.00	2.46	53.9	74.2	100	42	10.5	24.2	7.58	1.59	5.99	17.59	43.36	17.46	16.13	14.19	13.05	11.87	9.66
A100J	4339.8	6.78	4.71	1.42	2.9	8.00	2.46	17.5	0.0	20	8	3.1	12.6	14.87	1.96	12.92	168.69	17.50	12.92	12.92	12.92	12.92	12.92	12.92
A100K	4236.8	6.62	4.53	1.70	1.9	5.00	2.46	31.6	0.0	20	18	2.8	21.4	16.80	2.89	13.91	168.69	31.60	13.91	13.91	13.91	13.91	13.91	13.91
A100L	3868.2	6.04	3.42	0.95	1.4	6.00	2.46	27.8	63.2	30	46	10.2	16.6	15.33	1.31	14.02	95.43	27.80	41.68	38.46	33.74	30.99	28.13	22.81
A100M	3440.6	5.38	6.69	3.32	1.8	3.00	2.46	20.8	74.7	30	18	14.6	9.6	22.54	4.10	18.44	18.44	20.80	18.44	18.44	18.44	18.44	18.44	18.44
A100N	1360.0	2.13	4.98	2.05	1.9	16.00	2.46	24.1	25.1	20	1	14.5	12.3	17.96	3.17	14.79	168.69	24.10	14.79	14.79	14.79	14.79	14.79	14.79
A100O	576.0	0.90	2.89	1.36	0.9	6.00	2.46	52.0	0.0	40	0	3.9	26.9	15.91	3.27	12.64	63.71	52.00	12.64	12.64	12.64	12.64	12.64	12.64
A100P	2964.5	4.63	4.94	1.71	1	9.00	2.46	40.1	67.8	40	5	8.0	23.4	22.40	2.74	19.65	63.71	40.10	19.65	19.65	19.65	19.65	19.65	19.65
A100Q	1838.7	2.87	3.13	1.18	1	14.00	2.46	16.0	0.0	60	0	0.0	10.7	16.24	2.85	13.39	13.39	16.00	13.39	13.39	13.39	13.39	13.39	13.39
A100R	5166.1	8.07	5.49	2.56	3.9	7.00	2.46	30.8	0.0	70	1	0.1	24.1	14.25	3.06	11.20	29.03	30.71	11.20	11.20	11.20	11.20	11.20	11.20
A100S	781.4	1.22	2.23	1.30	4.9	13.00	2.46	52.7	0.0	70	4	0.0	45.6	4.82	1.26	3.57	29.03	52.70	3.57	3.57	3.57	3.57	3.57	3.57
A100T	1622.4	2.54	2.00	1.28	4.6	11.00	2.46	48.5	0.0	100	0	0.0	41.0	3.43	1.30	2.13	17.59	48.50	2.13	2.13	2.13	2.13	2.13	2.13
A100U	1076.5	1.68	1.35	0.28	3.6	18.00	2.46	44.9	22.6	90	0	0.0	33.7	3.29	0.26	3.03	20.39	44.90	3.03	3.03	3.03	3.03	3.03	3.03
A10404A	1781.8	2.78	3.14	0.94	10.7	5.00	2.46	16.3	34.0	90	0	1.6	16.1	7.04	0.54	6.50	20.39	16.30	6.50	6.50	6.50	6.50	6.50	6.50
A10407A	1815.0	2.84	5.19	2.47	3.5	2.00	2.46	25.5	72.5	100	0	1.4	20.8	11.89	2.11	9.77	17.59	24.09	9.77	9.77	9.77	9.77	9.77	9.77
A10413A	2036.5	3.18	3.86	2.11	1.7	2.00	2.46	67.3	100.0	100	0	1.9	53.4	6.33	1.82	4.50	17.59	65.36	4.50	4.50	4.50	4.50	4.50	4.50
A104A	1998.7	3.12	4.38	2.32	1.8	7.00	2.46	32.9	72.2	100	0	0.1	24.1	10.83	2.75	8.07	17.59	32.76	8.07	8.07	8.07	8.07	8.07	8.07
A104B	318.7	0.50	1.90	0.98	1.2	8.00	2.46	24.1	0.0	100	0	1.4	43.0	8.88	2.09	6.79	17.59	22.75	6.79	6.79	6.79	6.79	6.79	6.79
A104C	672.0	1.05	1.45	0.44	2.5	8.00	2.46	11.4	0.0	100	0	0.0	28.0	6.81	0.62	6.19	17.59	11.40	6.19	6.19	6.19	6.19	6.19	6.19
A104D	1805.4	2.82	2.70	0.99	3.8	13.00	2.46	44.9	0.0	100	0	0.2	43.7	4.78	1.10	3.69	17.59	44.71	3.69	3.69	3.69	3.69	3.69	3.69
A107A	1312.0	2.05	2.06	0.80	1.4	9.00	2.46	71.1	67.8	100	0	0.0	52.8	4.10	0.93	3.17	17.59	71.10	3.17	3.17	3.17	3.17	3.17	3.17
A107B	1301.1	2.03	2.79	1.53	1.4	9.00	2.46	39.3	15.4	100	0	0.1	30.4	7.60	2.77	4.83	17.59	39.23	4.83	4.83	4.83	4.83	4.83	4.83
A111A	2572.2	4.02	5.23	2.78	6.2	10.00	2.46	23.5	62.8	100	15	3.8	20.5	11.20	1.91	9.29	17.59	19.67	9.29	9.29	9.29	9.29	9.29	9.29
A118A	782.1	1.22	2.11	0.98	8.3	7.00	2.46	57.9	85.0	100	17	10.7	33.3	2.95	0.43	2.52	17.59	47.17	2.52	2.52	2.52	2.52	2.52	2.52
A11902A	896.6	1.40	3.15	1.69	3.1	9.00	2.46	11.6	0.0	100	21	2.5	9.9	10.94	2.30	8.64	17.59	11.60	21.61	20.18	18.11	16.87	15.58	13.11
A11905A	599.0	0.94	1.35	0.49	4.8	7.00	2.46	31.4	100.0	80	0	0.2	24.0	4.25	0.26	3.99	24.06	31.40	3.99	3.99	3.99	3.99	3.99	3.99
A11905B	796.2	1.24	2.05	0.95	4.8	7.00	2.46	41.3	100.0	80	15	3.8	31.6	5.07	0.50	4.57	24.06	37.45	4.57	4.57	4.57	4.57	4.57	4.57
A11906A	627.8	0.98	2.05	0.94	3.29	6.00	2.46	60.3	100.0	60	0	2.8	46.4	5.72	0.56	5.15	36.04	57.49	5.15	5.15	5.15	5.15	5.15	5.15
A11906B	240.6	0.38	1.22	0.34	2.4	6.00	2.46	32.7	100.0	30	61	0.0	29.4	6.11	0.25	5.86	95.43	32.70	18.52	17.01	14.81	13.53	12.21	9.77
A11906C	146.6	0.23	1.18	0.68	3.02	6.00	2.46	67.3	100.0	80	2	0.1	59.4	2.72	0.40	2.32	24.06	67.23	2.32	2.32	2.32	2.32	2.32	2.32
A11907A	348.2	0.54	1.29	0.75	4.8	6.00	2.46	82.1	100.0	100	0	6.3	64.8	1.83	0.33	1.49	17.59	75.84	1.49	1.49	1.49	1.49	1.49	1.49
A119A	923.5	1.44	3.04	1.35	3.6	6.00	2.46	79.4	100.0	80	0	8.1	52.1	4.79	0.74	4.05	24.06	71.34	4.05	4.05	4.05	4.05	4.05	4.05
A119B	462.1	0.72	1.30	0.78	3.7	9.00	2.46	74.6	100.0	100	0	8.1	48.2	2.20	0.42	1.79	24.06	66.52	1.79	1.79	1.79	1.79	1.79	1.79
A119C	1441.3	2.25	2.96	1.16	3.3	9.00	2.46	12.7	24.7	80	21	1.5	10.1	10.23	1.33	8.90	24.06	12.70	22.26	20.79	18.66	17.39	16.05	13.51
A120A	1945.6	3.04	3.35	1.39	1.3	8.00	2.46	39.4	78.4	90	0	11.9	25.1	12.53	1.84	10.68	20.39	27.50	10.68	10.68	10.68	10.68	10.68	10.68
A120B	1429.1	2.23	2.76	0.68	4.3	16.00	2.46	77.7	100.0	90	5	15.2	49.2	4.11	0.34	3.77	20.39	62.47	3.77	3.77	3.77	3.77	3.77	3.77
A120C	851.2	1.33	1.95	0.62	2.8	6.00	2.46	92.5	100.0	90	0	26.5	51.5	3.60	0.38	3.22	20.39	66.01	3.22	3.22	3.22	3.22	3.22	3.22
A120D	1784.3	2.79	3.08	1.23	3.6	6.00	2.46	39.3	100.0	100	6	5.1	24.1	6.41	0.78	5.63	17.59	34.22	5.63	5.63	5.63	5.63	5.63	5.63
B100A	917.1	1.43	2.84	1.26	7.9	9.00	2.46	55.1	58.4	40	0	2.4	38.5	7.31	0.67	6.63	63.71	55.10	6.63	6.63	6.63	6.63	6.63	6.63
B100B	873.0	1.36	2.34	1.12	5.1	12.00	2.46	59.6	40.2	80	0	13.2	35.0	4.72	0.86	3.85	24.06	46.45	3.85	3.85	3.85	3.85	3.85	3.85
B100C	186.9	0.29	1.13	0.48	3.6	14.66	2.46	12.1	0.0	80	0	0.8	5.7	5.01	0.55	4.46	24.06	12.10	4.46	4.46	4.46	4.46	4.46	4.46
B100D	1078.4	1.69	3.01	1.60	2.7	7.30	2.46	8.9	0.0	70	0	11.0	3.9	11.11	2.35	8.76	29.03	8.90	8.76	8.76	8.76	8.76	8.76	8.76
B100E	1091.2	1.71	2.38	1.16	4.5	10.00	2.46	24.1	57.8	90	0	0.7	12.7	7.08	0.92	6.16	20.39	23.36	6.16	6.16	6.16	6.16	6.16	6.16
B100F	569.6	0.89	1.65	1.04	0.49	9.00	2.46	51.2	37.8	100	0	0.0	30.4	6.34	2.77	3.57	17.59	51.20	3.57	3.57	3.57	3.57	3.57	3.57
B100G	673.3	1.05	2.58	1.66	1.61	12.00	2.46	14.0	0.0	100	0	0.3	18.0	11.95	3.18	8.77	17.59	14.00	8.77	8.77	8.77	8.77	8.77	8.77
B100H	2433.3	3.80	2.83	0.75	0.2	9.80	2.46	22.5	0.0	100	0	0.0	22.8	22.28	4.05	18.23	17.59	22.49	18.23	18.23	18.23	18.23	18.23	18.23
B10401A	356.5	0.56	1.05	0.83	3	10.40	2.46	44.4	0.0	100	0	0.0	29.2	2.68	1.03	1.65	17.59	44.40	1.65	1.65	1.65	1.65	1.65	1.65
B10402A	591.4	0.92	2.05	1.12	3	7.10	2.46	77.1	100.0	100	0	0.0	46.4	2.96	0.65	2.31	17.59	77.10	2.31	2.31	2.31	2.31	2.31	2.31
B10403A	1777.3	2.78	3.84	2.01	2	10.60	2.46	78.7	100.0	100	0	0.0	46.9	5.24	1.50	3.74	17.59	78.70	3.74	3.74	3.74	3.74	3.74	3.74
B10404A	1472.0	2.30	3.61	1.75	3.9	5.50	2.46	33.7	100.0	66	19	13.8	32.3	11.01	1.10	9.92	31.53	31.53	9.92	9.92	9.92	9.92	9.92	9.92
B10404B	378.9	0.59	1.66	1.07	3.9	10.60	2.46	52.4	100.0	90	14	18.0	30.0	4.45	0.64	3.81	20.39	34.35	3.81	3.81	3.81	3.81	3.81	3.81
B10404C	643.2	1.01	1.76	0.70	3.9	15.10	2.46	17.4	100.0	90	18	37.5	10.4	6.69	0.44	6.25	20.39	17.40	6.25	6.25	6.25	6.25	6.25	6.25
B10404D	253.4	0.40	1.32	0.41	12.6	7.10	2.46	42.3	100.0	100	0	14.0	24.8	2.58	0.13	2.46	17.59	28.30	2.46	2.46	2.46	2.46	2.46	2.46
B10405A	1203.2	1.88	2.66	0.74	8.1	10.00	2.46	7.3	0.0	50	0	0.1	5.3	6.92	0.58	6.33	46.56	7.30	6.33	6.33	6.33	6.33	6.33	6.33
B10405B	526.7	0.82	1.92	1.00	8.1	4.80	2.46	61.2	100.0	100	0	2.7	35.5	2.40	0.37	2.03	17.59	58.51	2.03	2.03	2.03	2.03	2.03	2.03
B10408A	481.3	0.75	1.56	0.69	2	4.50	2.46	92.9	100.0	100	0	0.1	51.5	2.48	0.45	2.03	17.59	92.81	2.03	2.03	2.03	2.03	2.03	2.03
B104A	442.2	0.69	1.05	0.47	2	13.20	2.46	36.5	100.0	100	0	2.0	29.2	3.67	0.39	3.28	17.59	34.53	3.28	3.28	3.28	3.28	3.28	3.28
B104B	796.8	1.25	2.80	1.71	2.6	7.30	2.46	84.6	19.3	50	0	0.2	43.4	7.13	1.99	5.14	46.56	84.43	5.14	5.14	5.14	5.14	5.14	5.14
B104C	630.4	0.99	2.40	1.29	2.6	7.10	2.46	99.6	100.0	50	0	2.0	49.8	5.80	0.74	5.06	46.56	97.63	5.06	5.06	5.06	5.06	5.06	5.06
B104D	428.2	0.67	1.96	0.46	6	6.00	2.46	76.6	100.0	60	4	4.2	38.7	3.84	0.18	3.66	36.04	72.45	3.66	3.66	3.66	3.66	3.66	3.66
B104E	336.6	0.53	1.59	0.55	2.47	4.40	2.46	7.8	49.0	100	7	10.8	5.0	7.31	0.62	6.69	17.59	7.80	6.69	6.69	6.69	6.69	6.69	6.69
B104F	423.0	0.66	1.21	0.62	7.2	10.00	2.46	91.7	100.0	100	0	5.0	52.3	1.38	0.21	1.17	17.59	86.70	1.17	1.17	1.17	1.17	1.17	1.17
B104G	62.1	0.10	0.42	0.19	3.57	4.00	2.46	76.4	100.0	100	0	14.0	49.0	1.04	0.10	0.95	17.59	62.40	0.95	0.95	0.95	0.95	0.95	0.95
B104H	168.3	0.26	0.77	0.31	3.57	4.80	2.46	49.5	100.0	100	0	7.8	28.5	2.12	0.18	1.94	17.59	41.70	1.94	1.94	1.94	1.94	1.94	1.94

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Subwatershed	Drainage Area (acres)	Drainage Area (sq.mi.)	Watershed Length (mi.) L	Length to Centroid(mi.) Lca	Channel Slope(ft./mi) S	Overland Slope(ft./mi.) So	D	Percent Urban Development 2002 DLU	Percent Channel Improvement DCI	Percent Channel Conveyance DCC	Percent Ponding DPP	DLU affected by Detention DET	Percent Impervious 2002	(TC+R)"	TC"	R"	DLU Minimum	DLU (Detention)	20% (5-Yr)	10% (100-Yr)	4% (25-Yr)	2% (50-Yr)	1% (100-Yr)	0.2% (500-Yr)
B104I	199.7	0.31	1.08	0.45	3.6	4.80	2.46	36.0	100.0	100	0	0.2	22.3	2.97	0.27	2.71	17.59	35.80	2.71	2.71	2.71	2.71	2.71	2.71
B104J	162.6	0.25	1.26	0.83	2.63	4.40	2.46	48.7	100.0	100	0	0.0	29.7	3.00	0.57	2.43	17.59	48.70	2.43	2.43	2.43	2.43	2.43	2.43
B104K	197.8	0.31	1.28	0.93	2.63	13.20	2.46	69.3	100.0	100	0	0.0	41.3	2.38	0.59	1.79	17.59	69.30	1.79	1.79	1.79	1.79	1.79	1.79
B104L	235.5	0.37	1.38	0.83	2.16	3.00	2.46	28.3	100.0	90	0	0.0	18.6	5.49	0.69	4.80	20.39	28.30	4.80	4.80	4.80	4.80	4.80	4.80
B104M	245.1	0.38	1.29	0.92	2.16	3.00	2.46	57.5	100.0	90	0	0.0	45.5	3.24	0.69	2.55	20.39	57.50	2.55	2.55	2.55	2.55	2.55	2.55
B104N	436.5	0.68	1.57	0.57	2.16	10.00	2.46	11.4	0.0	70	0	0.0	9.4	7.60	0.88	6.72	29.03	11.40	6.72	6.72	6.72	6.72	6.72	6.72
B106A	1073.9	1.68	2.35	0.91	6.6	8.80	2.46	28.9	93.0	100	0	0.4	20.0	4.84	0.45	4.40	17.59	28.48	4.40	4.40	4.40	4.40	4.40	4.40
B106B	823.7	1.29	1.47	0.46	6.7	8.80	2.46	71.7	100.0	100	0	2.3	39.0	1.89	0.17	1.72	17.59	69.45	1.72	1.72	1.72	1.72	1.72	1.72
B106C	913.9	1.43	1.99	0.58	5.8	8.80	2.46	83.5	100.0	100	0	0.8	47.0	2.19	0.22	1.96	17.59	82.65	1.96	1.96	1.96	1.96	1.96	1.96
B106D	1714.6	2.68	2.92	1.15	1.9	8.80	2.46	35.8	100.0	100	0	10.4	26.2	9.49	1.05	8.44	17.59	25.37	8.44	8.44	8.44	8.44	8.44	8.44
B106E	579.8	0.91	2.91	1.27	1.9	3.00	2.46	29.0	35.0	100	0	5.1	18.8	9.86	1.82	8.04	17.59	23.90	8.04	8.04	8.04	8.04	8.04	8.04
B109A	1839.4	2.87	3.88	1.68	3.4	4.00	2.46	21.4	100.0	100	0	15.9	16.2	12.11	1.19	10.92	17.59	17.59	10.92	10.92	10.92	10.92	10.92	10.92
B111A	608.0	0.95	1.38	0.62	10.1	3.10	2.46	1.3	100.0	100	0	12.1	1.2	4.01	0.24	3.77	17.59	1.30	3.77	3.77	3.77	3.77	3.77	3.77
B111B	280.3	0.44	1.25	0.39	16.9	12.60	2.46	16.3	0.0	80	0	1.3	13.9	3.12	0.20	2.93	24.06	16.30	2.93	2.93	2.93	2.93	2.93	2.93
B11202A	1612.2	2.52	3.66	1.94	3.4	4.40	2.46	26.1	100.0	90	0	1.3	19.8	10.18	1.35	8.83	20.39	24.80	8.83	8.83	8.83	8.83	8.83	8.83
B112A	2021.1	3.16	3.31	1.75	3.8	7.30	2.46	62.3	100.0	90	0	1.0	38.9	4.94	0.99	3.95	20.39	61.34	3.95	3.95	3.95	3.95	3.95	3.95
B112B	1237.1	1.93	2.75	1.22	5	13.00	2.46	44.9	90.9	100	0	3.8	29.1	4.66	0.69	3.97	17.59	41.06	3.97	3.97	3.97	3.97	3.97	3.97
B113A	977.9	1.53	2.19	0.62	4.7	4.20	2.46	69.1	100.0	50	0	30.7	41.0	7.30	0.32	6.98	46.50	46.50	6.98	6.98	6.98	6.98	6.98	6.98
B113B	1376.0	2.15	3.50	1.86	4.7	4.20	2.46	44.7	74.3	50	0	39.3	25.7	10.17	1.24	8.93	46.50	44.70	8.93	8.93	8.93	8.93	8.93	8.93
B114A	785.9	1.23	2.25	0.59	6.99	17.60	2.46	63.6	100.0	60	0	1.9	42.7	4.47	0.23	4.25	36.04	61.67	4.25	4.25	4.25	4.25	4.25	4.25
B115A	720.0	1.13	1.97	1.10	7.6	6.80	2.46	68.2	100.0	80	0	5.7	48.5	2.97	0.42	2.55	24.06	62.51	2.55	2.55	2.55	2.55	2.55	2.55
B115B	990.1	1.55	3.07	2.31	1.6	6.80	2.46	71.4	100.0	80	0	30.1	44.3	9.30	2.27	7.03	24.06	41.34	7.03	7.03	7.03	7.03	7.03	7.03
CH100A	2803.8	4.38	4.52	1.26	3.7	5.00	2.46	4.0	0.0	100	56	2.6	2.6	13.24	1.55	11.69	17.59	4.00	36.24	33.34	29.08	26.62	24.06	19.33
CH100B	2804.5	4.38	3.94	2.61	4	3.00	2.46	13.4	0.0	100	3	5.3	7.0	11.70	3.18	8.52	17.59	13.40	8.52	8.52	8.52	8.52	8.52	8.52
CH100C	1759.4	2.75	3.51	1.91	7	5.00	2.46	31.8	0.0	100	0	12.4	14.2	8.17	1.67	6.50	17.59	19.40	6.50	6.50	6.50	6.50	6.50	6.50
CH100D	798.7	1.25	2.13	0.94	7	5.00	2.46	31.0	0.0	100	39	22.4	14.3	6.14	0.80	5.34	17.59	17.59	15.32	14.17	12.49	11.50	10.48	8.56
CH100E	480.0	0.75	1.52	0.52	7	5.00	2.46	49.8	0.0	100	44	23.6	20.7	3.69	0.42	3.27	17.59	26.23	9.62	8.88	7.80	7.17	6.51	5.29
CH100F	1624.3	2.54	2.89	1.54	7	5.00	2.46	17.3	0.0	100	34	12.2	11.5	7.71	1.34	6.37	17.59	17.30	17.76	16.46	14.56	13.45	12.28	10.10
CW100A	1887.4	2.95	4.97	2.78	2.6	3.00	2.46	26.1	0.0	100	18	4.1	10.8	13.62	4.20	9.42	17.59	21.97	9.42	9.42	9.42	9.42	9.42	9.42
CW100B	1173.1	1.83	2.82	1.29	5.3	2.00	2.46	10.7	0.0	100	43	9.2	9.6	8.36	1.31	7.05	17.59	10.70	20.66	19.08	16.77	15.42	14.02	11.40
CW100C	787.8	1.23	1.99	0.90	4.9	7.00	2.46	39.5	0.0	100	0	0.2	20.8	3.84	0.88	2.96	17.59	39.31	2.96	2.96	2.96	2.96	2.96	2.96
CW100D	2211.8	3.46	4.13	2.19	6.62	6.00	2.46	48.9	0.0	70	0	10.8	22.4	8.35	1.92	6.43	29.03	38.11	6.43	6.43	6.43	6.43	6.43	6.43
CW102A	1915.5	2.99	3.73	1.79	3.8	4.00	2.46	7.8	0.0	100	70	2.6	3.3	11.45	2.22	9.23	17.59	7.80	30.03	27.53	23.87	21.76	19.58	15.57
CW102B	1089.9	1.70	3.56	1.50	5.8	5.00	2.46	7.1	0.0	100	1	0.1	4.8	9.55	1.47	8.08	17.59	7.10	8.08	8.08	8.08	8.08	8.08	8.08
CW103A	864.6	1.35	3.44	2.00	3.3	4.00	2.46	19.2	0.0	100	0	1.7	8.4	11.23	2.63	8.60	17.59	17.59	8.60	8.60	8.60	8.60	8.60	8.60
CW103B	1235.2	1.93	3.72	1.60	3.7	6.00	2.46	10.1	0.0	100	65	0.6	4.3	11.56	1.98	9.58	17.59	10.10	30.66	28.14	24.44	22.31	20.11	16.05
CW103C	1047.7	1.64	2.69	1.16	3.6	6.00	2.46	4.2	0.0	100	20	0.2	3.1	9.27	1.45	7.82	17.59	4.20	7.82	7.82	7.82	7.82	7.82	7.82
CW104A	1032.3	1.61	2.71	1.12	2.6	3.00	2.46	22.4	0.0	100	58	15.9	9.1	10.32	1.62	8.70	17.59	17.59	27.17	24.98	21.77	19.92	17.99	14.43
HI100A	2306.6	3.60	3.60	1.31	2.5	2.00	2.46	11.5	0.0	100	60	17.1	9.5	12.96	1.97	10.98	17.59	11.50	34.56	31.76	27.65	25.28	22.82	18.28
HI100B	2629.1	4.11	5.73	2.58	3.8	5.00	2.46	26.8	0.0	100	21	4.6	14.6	13.09	3.17	9.92	17.59	22.18	24.94	23.28	20.88	19.45	17.95	15.09
JB100A	3068.2	4.79	3.98	1.68	3.1	5.00	2.46	54.2	49.3	100	0	0.0	30.1	5.94	1.60	4.33	17.59	54.20	4.33	4.33	4.33	4.33	4.33	4.33
LD100A	1459.2	2.28	2.78	1.53	7	7.00	2.46	50.6	100.0	100	8	0.0	22.6	3.62	0.65	2.97	17.59	50.60	2.97	2.97	2.97	2.97	2.97	2.97
MA100A	2526.1	3.95	3.91	2.37	4	5.00	2.46	44.4	53.5	100	35	46.9	20.5	11.48	2.17	9.31	17.59	17.59	26.11	24.19	21.38	19.74	18.02	14.79
MA100B	670.7	1.05	2.49	1.14	2.4	2.00	2.46	18.9	0.0	100	45	22.3	8.4	10.00	1.71	8.29	17.59	17.59	24.51	22.62	19.86	18.25	16.57	13.45
MA100C	3100.2	4.84	4.39	1.72	3.9	2.00	2.46	31.9	0.0	70	11	16.2	16.8	12.64	2.01	10.63	29.03	29.03	10.63	10.63	10.63	10.63	10.63	10.63
MA100D	1580.8	2.47	3.32	1.57	3.5	2.00	2.46	32.9	0.0	55	25	7.9	20.0	10.86	1.92	8.95	40.73	32.90	23.34	21.73	19.39	18.01	16.56	13.80
MA100E	2497.9	3.90	4.55	2.57	8.9	8.00	2.46	45.2	79.0	60	0	14.7	21.4	9.71	1.24	8.47	36.04	36.04	8.47	8.47	8.47	8.47	8.47	8.47
MG100A	880.0	1.38	2.21	1.06	2.64	10.00	2.46	0.0	0.0	100	96	0.4	1.6	9.00	1.57	7.43	17.59	0.00	25.86	23.59	20.28	18.38	16.43	12.88
MG100B	1214.1	1.90	2.16	1.17	2.64	10.00	2.46	0.5	100.0	100	58	0.0	0.5	8.88	0.98	7.89	17.59	0.50	24.65	22.66	19.75	18.07	16.32	13.09
MG100C	693.8	1.08	2.20	1.10	2.64	10.00	2.46	100.0	100.0	100	0	0.0	30.0	2.73	0.62	2.11	17.59	100.00	2.11	2.11	2.11	2.11	2.11	2.11
MG100D	150.4	0.24	0.47	0.51	2.64	10.00	2.46	100.0	100.0	100	0	0.0	30.0	0.92	0.27	0.64	17.59	100.00	0.64	0.64	0.64	0.64	0.64	0.64
MG100E	97.9	0.15	0.40	0.25	2.64	10.00	2.46	100.0	100.0	100	0	0.0	30.0	0.82	0.13	0.69	17.59	100.00	0.69	0.69	0.69	0.69	0.69	0.69
MG100F	113.9	0.18	0.45	0.34	2.64	10.00	2.46	100.0	100.0	100	0	0.0	30.0	0.89	0.18	0.71	17.59	100.00	0.71	0.71	0.71	0.71	0.71	0.71
MG100G	193.3	0.30	0.72	0.36	2.64	10.00	2.46	100.0	100.0	100	0	0.0	30.0	1.24	0.19	1.05	17.59	100.00	1.05	1.05	1.05	1.05	1.05	1.05
MG100H	196.5	0.31	0.74	0.40	2.64	10.00	2.46	100.0	100.0	100	0	0.0	30.0	1.26	0.21	1.05	17.59	100.00	1.05	1.05	1.05	1.05	1.05	1.05
MG100I	73.0	0.11	0.40	0.21	2.64	10.00	2.46	100.0	100.0	100	0	0.0	30.0	0.82	0.11	0.71	17.59	100.00	0.71	0.71	0.71	0.71	0.71	0.71
MG100J	48.6	0.08	0.32	0.25	2.64	10.00	2.46	100.0	100.0	100	0	0.0	17.1	0.70	0.13	0.57	17.59	100.00	0.57	0.57	0.57	0.57	0.57	0.57
RB100A	3479.0	5.44	4.89	2.24	5.5	9.00	2.46	23.0	31.9	80	0	0.0	14.1	12.19	1.81	10.37	24.06	23.00	10.37	10.37	10.37	10.37	10.37	10.37

Pink shaded areas contain values updated by HEC-RAS models given by hydraulic contractors.

Grey shaded areas contain values taken from the HBR (DEC). Will not be updated by hydraulics contractors.

Yellow shaded areas contain values taken Flood Hazard Study 1984. Will not be updated by hydraulic contractors.

Orange shaded areas contain values taken from *Magnolia Creek Development Master Drainage Plan* (LJA Engineering & Surveying, Inc., Jan. 2000)

Green shaded areas contain values determined from LIDAR contours only.

Blue shaded areas contain values taken from the Cowart Creek Hydraulic Model Update (DEC 1998)

FEMA Effective Model as of June 18, 2007
TC&R values for FEMA Effective Model
Clear Creek and Armand Bayou Watershed
HCFCD TC&R Excel Template

*LOMR Effective October 16. 2015

Subbasin	Drainage Area (acres) DA	Drainage Area (mi²)	Watershed Length (mi) L	Length to Centroid (mi) Lca	Channel Slope (ft/mi) S	Watershed Slope (ft/mi) So	D Value	Development (Unadjusted) % DLU	Channel Improvement % DCI	Channel Conveyance % DCC	Ponding % DPP	Development Affected by Detention % DET	Impervious %	(TC+R)"	Time of Concentration (HR.) TC"	R"	Development (Minimum) % DLU_Min	Development (Adjusted) % DLU_Det	Storage Coefficient 10% (10-YR)	Storage Coefficient 2% (50-YR)	Storage Coefficient 1% (100-YR)	Storage Coefficient 0.2% (500-YR)
B113A	977.92	1.528	2.193	0.624	4.7	4.2	2.5	69.1	100.0	50	0	30.67	41.0		0.32		46.5	46.5	6.98	6.98	6.98	6.98
B113B	1376	2.150	3.503	1.859	4.7	4.2	2.5	44.7	74.3	50	0	39.31	25.7		1.24		46.5	44.7	8.93	8.93	8.93	8.93
B115A	720	1.125	1.971	1.100	7.6	6.8	2.5	68.2	100.0	80	0	5.69	48.5		0.42		24.1	62.5	2.55	2.55	2.55	2.55
B115B	990.08	1.547	3.070	2.306	1.6	6.8	2.5	71.4	100.0	80	0	30.06	44.3	9.31	2.27	7.04	24.1	41.3	7.03	7.03	7.03	7.03