ALABAMA SUPPLEMENTS TO THE

NATIONAL ENGINEERING FIELD HANDBOOK

CHAPTER 2. ESTIMATING RUNOFF AND PEAK DISCHARGES

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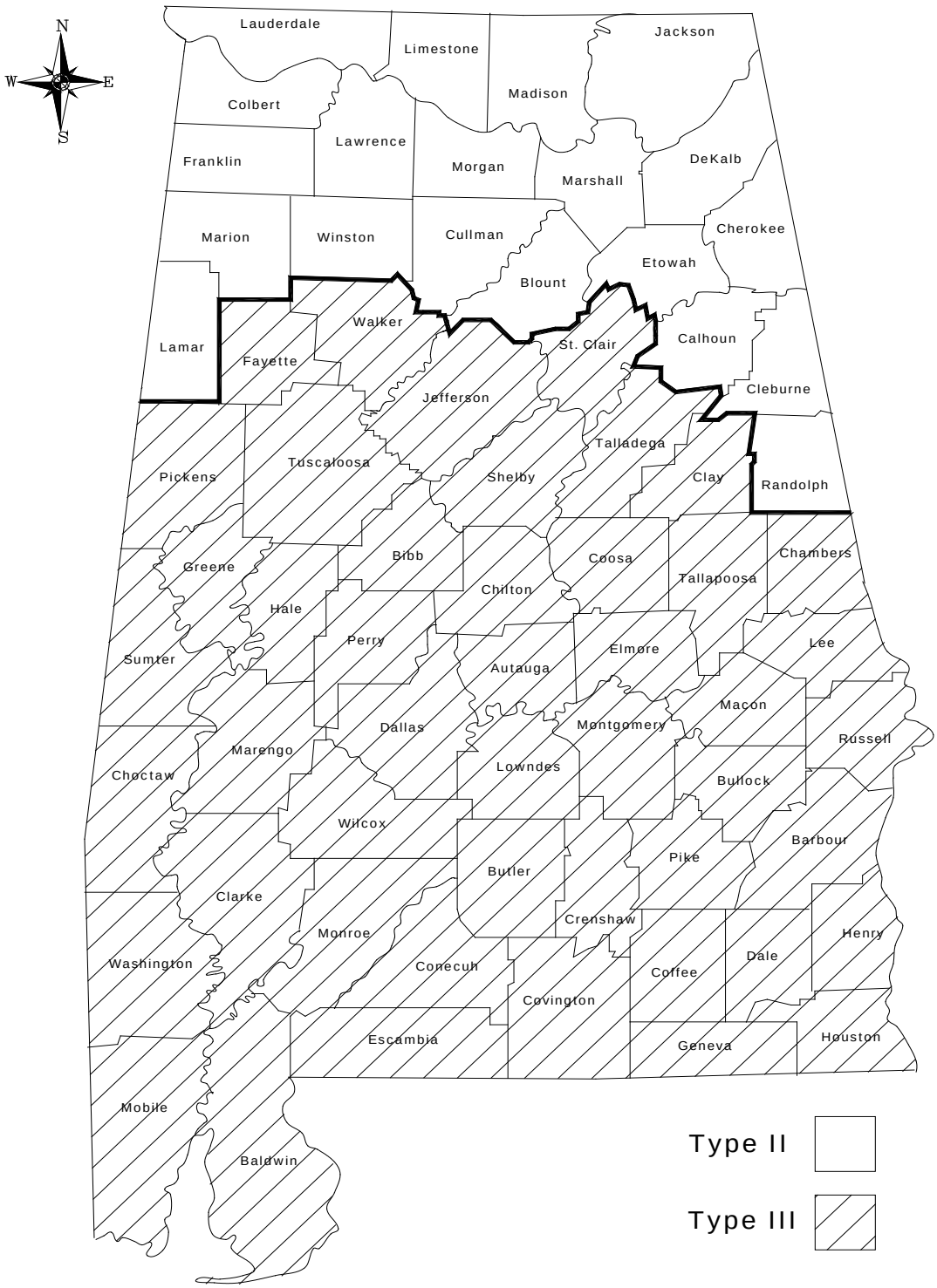

Figure AL 2-1. Alabama Rainfall Distribution Types.

Table AL2-1. Alabama Rainfall (inches) - Frequency for 24-hour Periods.

[From Technical Paper No. 40 (TP40)- See Footnote]
(USE: Ponds - Tile Outlet Waterways, etc.)

COUNTY	RAINFALL FREQUENCY BY YEAR							
	RAINFALL DISTRIBUTION TYPE	1	2	5	10	25	50	100
Autauga	III	3.7	4.5	5.7	6.6	7.6	8.4	9.2
Baldwin	III	4.8	6.0	7.8	9.2	10.4	11.7	13.0
Barbour	III	3.7	4.5	5.8	6.8	7.8	8.7	9.5
Bibb	III	3.6	4.4	5.5	6.4	7.3	8.0	8.8
Blount	II	3.4	3.9	5.0	5.8	6.6	7.3	8.0
Bullock	III	3.7	4.5	5.8	6.7	7.8	8.5	9.5
Butler	III	3.9	4.8	6.2	7.2	8.3	9.4	10.2
Calhoun	II	3.4	3.9	5.1	5.8	6.7	7.4	8.2
Chambers	III	3.5	4.1	5.3	6.2	7.1	7.8	8.6
Cherokee	II	3.3	3.8	4.9	5.7	6.5	7.2	7.8
Chilton	III	3.6	4.4	5.6	6.4	7.4	8.1	8.9
Choctaw	III	3.8	4.7	6.0	7.0	8.0	9.0	10.0
Clarke	III	3.9	4.9	6.4	7.4	8.6	9.7	10.8
Clay	III	3.5	4.1	5.3	6.1	7.0	7.7	8.5
Cleburne	II	3.4	3.9	5.0	5.8	6.7	7.4	8.1
Coffee	III	3.9	4.9	6.3	7.4	8.7	9.7	10.6
Colbert	II	3.3	3.9	4.9	5.6	6.4	7.0	7.6
Conecuh	III	4.0	5.0	6.6	7.7	9.0	10.2	11.0
Coosa	III	3.6	4.3	5.5	6.4	7.2	8.0	8.8
Covington	III	4.2	5.1	6.7	7.8	9.2	10.5	11.0
Crenshaw	III	3.9	4.8	6.2	7.1	8.3	9.3	10.0
Cullman	II	3.4	3.9	5.0	5.8	6.6	7.2	8.0
Dale	III	3.9	4.8	6.2	7.1	8.4	9.4	10.4
Dallas	III	3.8	4.6	5.8	6.8	7.8	8.7	9.5
DeKalb	II	3.3	3.8	4.8	5.5	6.3	7.0	7.6
Elmore	III	3.7	4.4	5.6	6.5	7.5	8.2	9.0
Escambia	III	4.4	5.4	7.2	8.3	9.6	11.2	12.1
Etowah	II	3.4	3.9	5.0	5.7	6.6	7.2	8.0
Fayette	III	3.5	4.1	5.2	6.0	6.8	7.5	8.3
Franklin	II	3.3	3.9	5.0	5.7	6.5	7.1	7.8
Geneva	III	4.0	5.0	6.5	7.6	9.0	10.2	11.0
Greene	III	3.7	4.4	5.5	6.5	7.4	8.1	9.0
Hale	III	3.7	4.5	5.6	6.5	7.6	8.2	9.0
Henry	III	3.8	4.6	6.0	6.9	8.2	9.0	10.0
Houston	III	3.9	4.8	6.3	7.3	8.6	9.5	10.5
Jackson	II	3.3	3.8	4.7	5.4	6.2	6.9	7.4
Jefferson	III	3.5	4.1	5.3	6.1	6.9	7.6	8.4
Lamar	II	3.5	4.1	5.2	5.9	6.8	7.6	8.3
Lauderdale	II	3.3	3.8	4.8	5.5	6.3	6.9	7.5
Lawrence	II	3.3	3.9	4.9	5.6	6.4	7.0	7.7

Table AL2-1 (con't)

COUNTY	RAINFALL FREQUENCY BY YEAR							
	RAINFALL DISTRIBUTION TYPE	1	2	5	10	25	50	100
Lee	III	3.5	4.2	5.4	6.3	7.3	8.0	8.8
Limestone	II	3.3	3.8	4.8	5.5	6.3	6.9	7.5
Lowndes	III	3.8	4.7	5.9	6.8	7.9	8.7	9.7
Macon	III	3.6	4.4	5.6	6.5	7.6	8.3	9.0
Madison	II	3.3	3.8	4.8	5.5	6.2	6.9	7.5
Marengo	III	3.8	4.7	5.9	6.8	7.8	8.8	9.6
Marion	II	3.4	3.9	5.0	5.8	6.7	7.3	8.0
Marshall	II	3.3	3.9	4.9	5.6	6.4	7.0	7.7
Mobile	III	4.7	5.8	7.6	9.0	10.2	11.5	12.7
Monroe	III	4.0	4.9	6.5	7.6	8.8	10.0	11.0
Montgomery	III	3.8	4.6	5.8	6.7	7.8	8.6	9.5
Morgan	II	3.3	3.9	4.9	5.6	6.4	7.0	7.7
Perry	III	3.7	4.5	5.7	6.6	7.6	8.3	9.1
Pickens	III	3.6	4.3	5.4	6.3	7.1	7.8	8.7
Pike	III	3.8	4.7	6.0	6.9	8.1	9.0	9.8
Randolph	II	3.4	4.0	5.2	6.0	6.9	7.6	8.4
Russell	III	3.6	4.3	5.5	6.5	7.5	8.2	8.9
Shelby	III	3.5	4.2	5.4	6.2	7.1	7.8	8.6
St. Clair	III	3.4	4.0	5.1	5.9	6.7	7.4	8.2
Sumter	III	3.7	4.5	5.7	6.7	7.7	8.4	9.3
Talladega	III	3.5	4.1	5.3	6.1	7.0	7.7	8.4
Tallapoosa	III	3.6	4.2	5.4	6.3	7.3	7.9	8.8
Tuscaloosa	III	3.6	4.2	5.4	6.3	7.1	7.8	8.6
Walker	III	3.5	4.0	5.1	5.9	6.8	7.5	8.2
Washington	III	4.0	4.9	6.7	7.7	8.8	10.1	11.1
Wilcox	III	3.9	4.8	6.0	7.0	8.1	9.0	10.0
Winston	II	3.4	3.9	5.0	5.8	6.6	7.2	8.0

Sourse of Data: "Technical Paper No. 40, Rainfall Frequency Atlas of the United States." U.S. Department of Commerce Weather Bureau, Washington, D.C., May 1961.

TP40 provides iso pluvial maps (U.S. map showing states and lines of equal rainfall) for rainfall durations from 30 minutes to 24 hours and return periods from 1 to 100 years. The rainfall values presented in this table have been interpolated from the TP40 map by selecting the rainfall amount for the center of each county. The rainfall amount read from TP40 will vary from this center of county value as the design site moves further from the county center. The value may be up to 10 percent more or less for the 100-year rainfall. For critical designs, the TP40 can be utilized to select design rainfall values.

Table AL2-2. AVERAGE MONTHLY PRECIPITATION (RF) & EVAPORATION (EVAP)

COUNTY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
AUTAUGA	**RF**	5.40	5.23	6.65	5.24	3.86	3.99	5.27	3.91	3.88	2.82	3.98	5.37	55.60
	Evap	1.46	2.00	3.02	4.00	4.87	5.01	5.02	4.75	3.81	2.90	1.92	1.48	40.23
	RF-Evap	3.94	3.23	3.63	1.24	-1.01	-1.02	0.25	-0.84	0.07	-0.08	2.06	3.89	15.37
BALDWIN	**RF**	5.00	5.64	6.00	4.17	4.83	5.53	7.02	7.14	5.70	3.32	4.28	5.03	63.66
	Evap	1.68	2.09	3.28	4.13	4.96	5.12	4.95	4.62	3.92	3.19	2.13	1.68	41.75
	RF-Evap	3.32	3.55	2.72	0.04	-0.13	0.41	2.07	2.52	1.78	0.13	2.15	3.35	21.91
BARBOUR	**RF**	4.90	4.89	6.14	3.91	4.00	4.51	5.19	4.07	3.41	2.44	3.56	4.95	51.97
	Evap	1.66	2.07	3.24	4.08	4.90	5.06	4.89	4.57	3.88	3.15	2.11	1.66	41.25
	RF-Evap	3.24	2.82	2.90	-0.17	-0.90	-0.55	0.30	-0.50	-0.47	-0.71	1.45	3.29	10.72
BIBB	**RF**	5.94	5.60	6.90	5.55	4.41	4.72	5.41	3.77	3.85	3.18	4.33	5.68	59.34
	Evap	1.45	1.99	3.00	3.98	4.84	4.98	4.99	4.72	3.78	2.88	1.91	1.47	39.98
	RF-Evap	4.49	3.61	3.90	1.57	-0.43	-0.26	0.42	-0.95	0.07	0.30	2.42	4.21	19.36
BLOUNT	**RF**	5.62	5.26	6.55	5.75	4.82	3.92	5.66	3.48	4.29	3.21	4.52	5.32	58.40
	Evap	1.22	1.72	2.75	3.94	4.78	4.96	5.00	4.60	3.71	2.71	1.73	1.27	38.38
	RF-Evap	4.40	3.54	3.80	1.81	0.04	-1.04	0.66	-1.12	0.58	0.50	2.79	4.05	20.02
BULLOCK	**RF**	4.96	5.32	6.23	4.34	4.04	5.02	5.56	4.19	3.73	2.68	3.82	5.16	55.05
	Evap	1.48	2.04	3.08	4.08	4.96	5.10	5.12	4.83	3.88	2.95	1.95	1.51	40.98
	RF-Evap	3.48	3.28	3.15	0.26	-0.92	-0.08	0.44	-0.64	-0.15	-0.27	1.87	3.65	14.07
BUTLER	**RF**	5.32	5.68	6.65	4.48	4.22	4.70	5.68	4.60	4.25	2.57	4.26	5.25	57.66
	Evap	1.49	2.05	3.09	4.09	4.97	5.11	5.13	4.85	3.89	2.96	1.96	1.51	41.08
	RF-Evap	3.83	3.63	3.56	0.39	-0.75	-0.41	0.55	-0.25	0.36	-0.39	2.30	3.74	16.58
CALHOUN	**RF**	5.16	5.07	6.21	5.01	4.40	3.86	4.66	3.68	4.08	3.09	3.74	4.82	53.78
	Evap	1.21	1.71	2.74	3.93	4.76	4.94	4.98	4.59	3.69	2.70	1.73	1.27	38.23
	RF-Evap	3.95	3.36	3.47	1.08	-0.36	-1.08	-0.32	-0.91	0.39	0.39	2.01	3.55	15.55
CHAMBERS	**RF**	5.42	5.85	6.78	5.33	4.48	4.13	5.69	3.67	3.71	2.77	4.28	5.45	57.56
	Evap	1.46	2.00	3.02	4.00	4.87	5.01	5.02	4.75	3.81	2.90	1.92	1.48	40.23
	RF-Evap	3.96	3.85	3.76	1.33	-0.39	-0.88	0.67	-1.08	-0.10	-0.13	2.36	3.97	17.33
CHEROKEE	**RF**	5.48	5.26	6.74	5.66	4.58	3.68	5.08	3.65	4.09	3.20	4.27	5.57	57.26
	Evap	1.19	1.68	2.69	3.85	4.66	4.84	4.88	4.50	3.62	2.64	1.69	1.24	37.48
	RF-Evap	4.29	3.58	4.05	1.81	-0.08	-1.16	0.20	-0.85	0.47	0.56	2.58	4.33	19.78
CHILTON	**RF**	5.49	5.26	6.46	5.28	3.93	3.90	5.02	3.91	4.08	2.88	4.14	5.39	55.74
	Evap	1.45	1.99	3.00	3.98	4.84	4.98	4.99	4.72	3.78	2.88	1.91	1.47	39.98
	RF-Evap	4.04	3.27	3.46	1.30	-0.91	-1.08	0.03	-0.81	0.30	0.00	2.23	3.92	15.76

COUNTY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
CHOCTAW	**RF**	5.77	5.70	7.11	5.22	4.64	4.18	5.61	4.24	3.59	3.31	4.62	6.03	60.02
	Evap	1.66	2.07	3.24	4.08	4.90	5.06	4.89	4.57	3.88	3.15	2.11	1.66	41.25
	RF-Evap	4.11	3.63	3.87	1.14	-0.26	-0.88	0.72	-0.33	-0.29	0.16	2.51	4.37	18.77
CLARKE	**RF**	5.57	5.85	7.10	4.74	4.88	4.54	5.85	4.16	3.81	2.94	4.40	6.06	59.90
	Evap	1.66	2.07	3.24	4.08	4.90	5.06	4.89	4.57	3.88	3.15	2.11	1.66	41.25
	RF-Evap	3.91	3.78	3.86	0.66	-0.02	-0.52	0.96	-0.41	-0.07	-0.21	2.29	4.40	18.65
CLAY	**RF**	5.78	5.66	7.11	5.34	4.51	4.23	5.30	3.71	4.07	3.56	4.11	5.44	58.82
	Evap	1.43	1.97	2.97	3.93	4.78	4.92	4.93	4.66	3.74	2.84	1.88	1.45	39.48
	RF-Evap	4.35	3.69	4.14	1.41	-0.27	-0.69	0.37	-0.95	0.33	0.72	2.23	3.99	19.34
CLEBURNE	**RF**	5.35	5.23	6.79	5.24	4.84	4.21	4.66	3.55	3.62	3.29	4.22	5.18	56.18
	Evap	1.22	1.72	2.76	3.95	4.79	4.97	5.01	4.62	3.71	2.71	1.74	1.28	38.48
	RF-Evap	4.13	3.51	4.03	1.29	0.05	-0.76	-0.35	-1.07	-0.09	0.58	2.48	3.90	17.70
COFFEE	**RF**	5.32	5.39	6.80	4.04	4.60	4.83	6.04	4.52	3.90	2.87	4.20	5.22	57.73
	Evap	1.67	2.07	3.25	4.09	4.91	5.08	4.91	4.58	3.89	3.17	2.11	1.66	41.40
	RF-Evap	3.65	3.32	3.55	-0.05	-0.31	-0.25	1.13	-0.06	0.01	-0.30	2.09	3.56	16.33
COLBERT	**RF**	4.48	4.45	5.90	4.41	5.10	4.07	4.58	3.29	4.08	3.20	4.52	5.77	53.85
	Evap	1.23	1.74	2.80	4.00	4.85	5.03	5.08	4.68	3.76	2.75	1.76	1.29	38.98
	RF-Evap	3.25	2.71	3.10	0.41	0.25	-0.96	-0.50	-1.39	0.32	0.45	2.76	4.48	14.87
CONECUH	**RF**	5.79	5.97	7.07	4.91	5.21	5.62	6.57	4.50	4.53	2.63	4.24	5.79	62.83
	Evap	1.66	2.07	3.24	4.08	4.90	5.06	4.89	4.57	3.88	3.15	2.11	1.66	41.25
	RF-Evap	4.13	3.90	3.83	0.83	0.31	0.56	1.68	-0.07	0.65	-0.52	2.13	4.13	21.58
COOSA	**RF**	5.72	5.67	6.95	5.14	4.18	4.09	5.94	4.11	4.19	3.05	4.14	5.56	58.74
	Evap	1.44	1.99	3.00	3.97	4.83	4.97	4.98	4.70	3.77	2.87	1.90	1.47	39.88
	RF-Evap	4.28	3.68	3.95	1.17	-0.65	-0.88	0.96	-0.59	0.42	0.18	2.24	4.09	18.86
COVINGTON	**RF**	5.27	5.67	6.73	4.26	4.57	5.28	5.94	5.27	4.08	3.05	4.23	5.40	59.75
	Evap	1.67	2.07	3.24	4.08	4.90	5.06	4.90	4.57	3.88	3.16	2.11	1.66	41.30
	RF-Evap	3.60	3.60	3.49	0.18	-0.33	0.22	1.04	0.70	0.20	-0.11	2.12	3.74	18.45
CRENSHAW	**RF**	5.20	5.67	6.77	4.35	4.29	4.67	5.22	4.71	4.02	2.68	4.14	5.08	56.80
	Evap	1.49	2.05	3.09	4.09	4.97	5.11	5.13	4.85	3.89	2.96	1.96	1.51	41.08
	RF-Evap	3.71	3.62	3.68	0.26	-0.68	-0.44	0.09	-0.14	0.13	-0.28	2.18	3.57	15.72
CULLMAN	**RF**	5.48	5.46	6.49	5.38	5.16	4.12	4.84	3.43	4.97	3.42	4.36	5.88	58.99
	Evap	1.22	1.72	2.76	3.95	4.79	4.97	5.01	4.62	3.71	2.71	1.74	1.28	38.48
	RF-Evap	4.26	3.74	3.73	1.43	0.37	-0.85	-0.17	-1.19	1.26	0.71	2.62	4.60	20.51

COUNTY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
DALE	**RF**	5.22	5.08	6.57	4.21	3.85	4.97	5.95	4.06	3.78	2.68	3.98	5.26	55.61
	Evap	1.67	2.07	3.25	4.09	4.91	5.08	4.91	4.58	3.89	3.17	2.11	1.66	41.40
	RF-Evap	3.55	3.01	3.32	0.12	-1.06	-0.11	1.04	-0.52	-0.11	-0.49	1.87	3.60	14.21
DALLAS	**RF**	5.24	5.16	6.57	4.85	3.79	4.08	4.66	3.80	3.62	2.84	3.84	5.56	54.01
	Evap	1.47	2.02	3.05	4.04	4.91	5.05	5.07	4.79	3.84	2.92	1.94	1.49	40.58
	RF-Evap	3.77	3.14	3.52	0.81	-1.12	-0.97	-0.41	-0.99	-0.22	-0.08	1.90	4.07	13.43
DeKALB	**RF**	5.32	5.23	6.43	5.07	4.84	3.90	5.16	3.70	4.34	3.10	4.52	5.43	57.04
	Evap	1.17	1.66	2.66	3.81	4.61	4.79	4.83	4.45	3.58	2.61	1.68	1.23	37.08
	RF-Evap	4.15	3.57	3.77	1.26	0.23	-0.89	0.33	-0.75	0.76	0.49	2.84	4.20	19.96
ELMORE	**RF**	5.15	5.66	6.56	5.09	3.69	4.07	5.07	4.06	3.87	2.77	4.14	5.53	55.66
	Evap	1.46	2.00	3.02	4.00	4.87	5.01	5.02	4.75	3.81	2.90	1.92	1.48	40.23
	RF-Evap	3.69	3.66	3.54	1.09	-1.18	-0.94	0.05	-0.69	0.06	-0.13	2.22	4.05	15.43
ESCAMBIA	**RF**	5.56	6.07	6.73	4.31	5.13	5.84	7.07	5.71	4.37	2.88	4.46	5.65	63.78
	Evap	1.67	2.07	3.25	4.09	4.91	5.08	4.91	4.58	3.89	3.17	2.11	1.66	41.40
	RF-Evap	3.89	4.00	3.48	0.22	0.22	0.76	2.16	1.13	0.48	-0.29	2.35	3.99	22.38
ETOWAH	**RF**	5.20	4.95	6.57	5.37	4.66	3.84	5.08	3.39	4.04	2.88	4.28	5.27	55.53
	Evap	1.20	1.70	2.72	3.89	4.71	4.89	4.93	4.54	3.66	2.67	1.71	1.26	37.88
	RF-Evap	4.00	3.25	3.85	1.48	-0.05	-1.05	0.15	-1.15	0.38	0.21	2.57	4.01	17.65
FAYETTE	**RF**	5.67	5.27	6.83	5.60	5.20	3.91	4.96	3.43	3.93	3.42	4.62	6.12	58.96
	Evap	1.44	1.99	3.00	3.97	4.83	4.97	4.98	4.70	3.77	2.87	1.90	1.47	39.88
	RF-Evap	4.23	3.28	3.83	1.63	0.37	-1.06	-0.02	-1.27	0.16	0.55	2.72	4.65	19.08
FRANKLIN	**RF**	5.03	5.00	6.44	5.32	5.63	3.89	4.37	3.43	4.03	3.39	4.75	6.12	57.40
	Evap	1.24	1.76	2.82	4.03	4.89	5.07	5.12	4.71	3.79	2.77	1.78	1.30	39.28
	RF-Evap	3.79	3.24	3.62	1.29	0.74	-1.18	-0.75	-1.28	0.24	0.62	2.97	4.82	18.12
GENEVA	**RF**	5.32	5.39	6.80	4.04	4.60	4.83	6.04	4.52	3.90	2.87	4.20	5.22	57.73
	Evap	1.67	2.08	3.26	4.10	4.93	5.09	4.92	4.59	3.90	3.17	2.12	1.67	41.50
	RF-Evap	3.65	3.31	3.54	-0.06	-0.33	-0.26	1.12	-0.07	-0.00	-0.30	2.08	3.55	16.23
GREENE	**RF**	5.32	5.27	6.20	5.50	4.22	3.50	4.28	3.21	3.14	3.07	3.98	5.31	53.00
	Evap	1.47	2.03	3.06	4.05	4.92	5.06	5.08	4.80	3.85	2.93	1.94	1.50	40.68
	RF-Evap	3.85	3.24	3.14	1.45	-0.70	-1.56	-0.80	-1.59	-0.71	0.14	2.04	3.81	12.32
HALE	**RF**	5.46	5.52	6.29	5.55	4.25	3.55	4.73	3.59	3.28	3.02	4.04	5.31	54.59
	Evap	1.46	2.02	3.04	4.03	4.90	5.04	5.05	4.78	3.83	2.91	1.93	1.49	40.48
	RF-Evap	4.00	3.50	3.25	1.52	-0.65	-1.49	-0.32	-1.19	-0.55	0.11	2.11	3.82	14.11

COUNTY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
HENRY	**RF**	5.82	5.49	5.92	4.10	4.38	5.25	5.70	4.62	3.68	2.60	3.88	4.83	56.27
	Evap	1.67	2.08	3.26	4.10	4.93	5.09	4.92	4.59	3.90	3.17	2.12	1.67	41.50
	RF-Evap	4.15	3.41	2.66	-0.00	-0.55	0.16	0.78	0.03	-0.22	-0.57	1.76	3.16	14.77
HOUSTON	**RF**	5.90	5.47	5.56	4.09	4.48	5.14	5.89	4.61	3.62	2.73	3.69	4.87	56.05
	Evap	1.68	2.09	3.28	4.13	4.96	5.12	4.95	4.62	3.92	3.19	2.13	1.68	41.75
	RF-Evap	4.22	3.38	2.28	-0.04	-0.48	0.02	0.94	-0.01	-0.30	-0.46	1.56	3.19	14.30
JACKSON	**RF**	5.31	5.26	6.63	4.96	5.02	4.08	4.99	3.80	4.46	3.46	4.67	5.82	58.46
	Evap	1.16	1.64	2.63	3.76	4.55	4.72	4.76	4.39	3.53	2.58	1.65	1.21	36.58
	RF-Evap	4.15	3.62	4.00	1.20	0.47	-0.64	0.23	-0.59	0.93	0.88	3.02	4.61	21.88
JEFFERSON	**RF**	5.35	4.97	6.52	5.07	4.65	3.97	5.27	3.58	4.27	3.01	4.44	5.34	56.44
	Evap	1.24	1.75	2.81	4.01	4.86	5.05	5.09	4.69	3.77	2.76	1.77	1.30	39.08
	RF-Evap	4.11	3.22	3.71	1.06	-0.21	-1.08	0.18	-1.11	0.50	0.25	2.67	4.04	17.36
LAMAR	**RF**	5.70	5.30	6.48	5.49	4.99	3.83	5.23	3.50	4.18	3.39	5.22	6.13	59.44
	Evap	1.45	2.00	3.02	4.00	4.86	5.00	5.02	4.74	3.80	2.89	1.92	1.48	40.18
	RF-Evap	4.25	3.30	3.46	1.49	0.13	-1.17	0.21	-1.24	0.38	0.50	3.30	4.65	19.26
LAUDERDALE	**RF**	4.48	4.45	5.90	4.41	5.10	4.07	4.58	3.29	4.08	3.20	4.52	5.77	53.85
	Evap	1.22	1.72	2.76	3.95	4.79	4.97	5.01	4.62	3.71	2.71	1.74	1.28	38.48
	RF-Evap	3.26	2.73	3.14	0.46	0.31	-0.90	-0.43	-1.33	0.37	0.49	2.78	4.49	15.37
LAWRENCE	**RF**	5.16	4.72	6.38	5.06	5.10	3.81	4.48	3.44	4.12	3.41	4.86	5.88	56.42
	Evap	1.22	1.72	2.76	3.95	4.79	4.97	5.01	4.62	3.71	2.71	1.74	1.28	38.48
	RF-Evap	3.94	3.00	3.62	1.11	0.31	-1.16	-0.53	-1.18	0.41	0.70	3.12	4.60	17.94
LEE	**RF**	5.22	5.60	6.88	5.25	3.80	4.12	5.89	3.83	3.84	3.02	4.34	5.42	57.21
	Evap	1.47	2.02	3.05	4.04	4.91	5.05	5.07	4.79	3.84	2.92	1.94	1.49	40.58
	RF-Evap	3.75	3.58	3.83	1.21	-1.11	-0.93	0.82	-0.96	-0.00	0.10	2.40	3.93	16.63
LIMESTONE	**RF**	5.05	4.69	6.52	4.92	4.90	4.19	4.74	3.44	3.82	3.44	4.70	5.81	56.22
	Evap	1.19	1.69	2.70	3.87	4.69	4.86	4.91	4.52	3.64	2.66	1.70	1.25	37.68
	RF-Evap	3.86	3.00	3.82	1.05	0.21	-0.67	-0.17	-1.08	0.18	0.78	3.00	4.56	18.54
LOWNDES	**RF**	5.10	5.50	6.79	4.47	3.78	3.94	4.76	3.71	3.94	2.61	3.92	5.07	53.59
	Evap	1.47	2.03	3.06	4.05	4.93	5.07	5.08	4.80	3.85	2.93	1.94	1.50	40.73
	RF-Evap	3.63	3.47	3.73	0.42	-1.15	-1.13	-0.32	-1.09	0.09	-0.32	1.98	3.57	12.86
MACON	**RF**	4.98	5.57	6.60	5.18	3.78	4.10	4.71	4.18	3.63	2.62	4.09	5.19	54.63
	Evap	1.47	2.03	3.06	4.05	4.92	5.06	5.08	4.80	3.85	2.93	1.94	1.50	40.68
	RF-Evap	3.51	3.54	3.54	1.13	-1.14	-0.96	-0.37	-0.62	-0.22	-0.31	2.15	3.69	13.95

COUNTY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
MADISON	**RF**	5.17	4.87	6.62	4.93	5.08	4.13	4.85	3.47	4.08	3.25	4.86	5.87	57.18
	Evap	1.18	1.67	2.68	3.84	4.65	4.83	4.87	4.48	3.61	2.64	1.69	1.24	37.38
	RF-Evap	3.99	3.20	3.94	1.09	0.43	-0.70	-0.02	-1.01	0.47	0.61	3.17	4.63	19.80
MARENGO	**RF**	5.49	5.11	6.52	5.09	4.08	3.68	4.76	4.00	3.42	3.00	3.96	5.26	54.37
	Evap	1.48	2.04	3.08	4.08	4.96	5.10	5.12	4.83	3.88	2.95	1.95	1.51	40.98
	RF-Evap	4.01	3.07	3.44	1.01	-0.88	-1.42	-0.36	-0.83	-0.46	0.05	2.01	3.75	13.39
MARION	**RF**	5.27	5.10	6.47	5.51	5.69	4.10	4.76	3.91	4.52	3.34	4.99	6.03	59.69
	Evap	1.25	1.77	2.84	4.07	4.93	5.11	5.15	4.75	3.82	2.79	1.79	1.31	39.58
	RF-Evap	4.02	3.33	3.63	1.44	0.76	-1.01	-0.39	-0.84	0.70	0.55	3.20	4.72	20.11
MARSHALL	**RF**	5.12	4.81	6.24	5.23	4.86	3.49	4.94	3.19	4.40	2.98	4.17	5.17	54.60
	Evap	1.19	1.68	2.70	3.86	4.68	4.85	4.89	4.51	3.63	2.65	1.70	1.25	37.58
	RF-Evap	3.93	3.13	3.54	1.37	0.18	-1.36	0.05	-1.32	0.77	0.33	2.47	3.92	17.02
MOBILE	**RF**	4.76	5.46	6.41	4.48	5.74	5.04	6.85	6.96	5.91	2.94	4.10	5.31	63.96
	Evap	1.69	2.10	3.30	4.15	4.99	5.15	4.98	4.65	3.95	3.21	2.14	1.69	42.00
	RF-Evap	3.07	3.36	3.11	0.33	0.75	-0.11	1.87	2.31	1.96	-0.27	1.96	3.62	21.96
MONROE	**RF**	5.34	5.62	6.67	4.63	4.94	4.59	5.61	4.38	3.92	2.73	4.04	5.33	57.80
	Evap	1.66	2.07	3.24	4.08	4.90	5.06	4.89	4.57	3.88	3.15	2.11	1.66	41.25
	RF-Evap	3.68	3.55	3.43	0.55	0.04	-0.47	0.72	-0.19	0.04	-0.42	1.93	3.67	16.55
MONTGOMERY	**RF**	4.68	5.48	6.26	4.49	3.92	3.90	5.19	3.69	4.09	2.45	4.08	5.20	53.43
	Evap	1.47	2.03	3.06	4.05	4.92	5.06	5.08	4.80	3.85	2.93	1.94	1.50	40.68
	RF-Evap	3.21	3.45	3.20	0.44	-1.00	-1.16	0.11	-1.11	0.24	-0.48	2.14	3.70	12.75
MORGAN	**RF**	5.10	4.68	6.36	5.16	4.80	4.10	4.88	3.95	4.17	3.34	4.37	5.32	56.23
	Evap	1.21	1.70	2.73	3.91	4.74	4.92	4.96	4.57	3.68	2.68	1.72	1.26	38.08
	RF-Evap	3.89	2.98	3.63	1.25	0.06	-0.82	-0.08	-0.62	0.49	0.66	2.65	4.06	18.15
PERRY	**RF**	5.67	5.26	6.47	5.32	4.01	3.88	4.90	3.84	3.67	2.83	4.11	5.38	55.34
	Evap	1.46	2.01	3.03	4.02	4.89	5.03	5.04	4.76	3.82	2.91	1.93	1.49	40.38
	RF-Evap	4.21	3.25	3.44	1.30	-0.88	-1.15	-0.14	-0.92	-0.15	-0.08	2.18	3.89	14.96
PICKENS	**RF**	5.44	5.24	6.42	5.83	4.23	3.79	4.94	3.61	3.58	3.09	4.33	5.63	56.13
	Evap	1.46	2.01	3.03	4.02	4.89	5.03	5.04	4.76	3.82	2.91	1.93	1.49	40.38
	RF-Evap	3.98	3.23	3.39	1.81	-0.66	-1.24	-0.10	-1.15	-0.24	0.18	2.40	4.14	15.75
PIKE	**RF**	5.39	5.19	6.39	5.62	4.35	3.85	4.95	3.64	3.78	3.12	4.28	5.53	56.09
	Evap	1.49	2.05	3.10	4.10	4.98	5.13	5.14	4.86	3.90	2.97	1.96	1.52	41.18
	RF-Evap	3.90	3.14	3.29	1.52	-0.63	-1.28	-0.19	-1.22	-0.12	0.15	2.32	4.01	14.91

COUNTY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
RANDOLPH	**RF**	5.49	5.60	6.41	4.90	4.39	4.01	5.27	3.45	3.53	3.04	4.15	5.40	55.64
	Evap	1.43	1.97	2.97	3.93	4.78	4.92	4.93	4.66	3.74	2.84	1.88	1.45	39.48
	RF-Evap	4.06	3.63	3.44	0.97	-0.39	-0.91	0.34	-1.21	-0.21	0.20	2.27	3.95	16.16
RUSSELL	**RF**	5.07	4.78	5.43	4.06	3.73	3.70	4.92	4.08	3.31	2.21	3.61	4.66	49.56
	Evap	1.48	2.04	3.08	4.08	4.96	5.10	5.12	4.83	3.88	2.95	1.95	1.51	40.98
	RF-Evap	3.59	2.74	2.35	-0.02	-1.23	-1.40	-0.20	-0.75	-0.57	-0.74	1.66	3.15	8.58
SHELBY	**RF**	5.93	5.54	6.81	5.41	4.39	4.48	5.35	3.95	3.70	1.50	4.17	5.41	56.64
	Evap	1.25	1.77	2.83	4.05	4.91	5.10	5.14	4.74	3.81	2.78	1.78	1.31	39.48
	RF-Evap	4.68	3.77	3.98	1.36	-0.52	-0.62	0.21	-0.79	-0.11	-1.28	2.39	4.10	17.16
ST. CLAIR	**RF**	5.38	4.99	6.69	5.02	4.40	3.77	5.51	3.43	4.40	3.21	4.50	5.35	56.65
	Evap	1.22	1.72	2.76	3.95	4.79	4.97	5.01	4.62	3.71	2.71	1.74	1.28	38.48
	RF-Evap	4.16	3.27	3.93	1.07	-0.39	-1.20	0.50	-1.19	0.69	0.50	2.76	4.07	18.17
SUMTER	**RF**	5.43	5.09	6.41	5.48	4.25	3.87	5.87	3.83	3.22	3.56	4.09	5.95	57.05
	Evap	1.48	2.04	3.08	4.08	4.96	5.10	5.12	4.83	3.88	2.95	1.95	1.51	40.98
	RF-Evap	3.95	3.05	3.33	1.40	-0.71	-1.23	0.75	-1.00	-0.66	0.61	2.14	4.44	16.07
TALLADEGA	**RF**	5.61	5.17	6.81	5.10	4.44	4.18	5.08	4.12	4.03	3.03	4.02	5.24	56.83
	Evap	1.23	1.74	2.80	4.00	4.85	5.03	5.08	4.68	3.76	2.75	1.76	1.29	38.98
	RF-Evap	4.38	3.43	4.01	1.10	-0.41	-0.85	0.00	-0.56	0.27	0.28	2.26	3.95	17.85
TALLAPOOSA	**RF**	5.50	5.37	6.77	5.00	4.35	4.24	5.47	4.16	3.92	3.23	4.09	5.83	57.93
	Evap	1.45	2.00	3.01	3.99	4.85	4.99	5.00	4.73	3.79	2.89	1.91	1.48	40.08
	RF-Evap	4.05	3.37	3.76	1.01	-0.50	-0.75	0.47	-0.57	0.13	0.34	2.18	4.35	17.85
TUSCALOOSA	**RF**	5.42	5.25	6.44	5.28	4.46	4.03	5.19	3.72	3.49	3.23	4.18	5.37	56.06
	Evap	1.45	2.00	3.01	3.99	4.85	4.99	5.00	4.73	3.79	2.89	1.91	1.48	40.08
	RF-Evap	3.97	3.25	3.43	1.29	-0.39	-0.96	0.19	-1.01	-0.30	0.34	2.27	3.89	15.98
WALKER	**RF**	5.63	5.26	6.62	5.32	4.78	3.94	5.25	3.65	3.93	3.38	4.21	5.71	57.68
	Evap	1.24	1.76	2.82	4.03	4.88	5.06	5.11	4.71	3.79	2.77	1.77	1.30	39.23
	RF-Evap	4.39	3.50	3.80	1.29	-0.10	-1.12	0.14	-1.06	0.14	0.61	2.44	4.41	18.45
WASHINGTON	**RF**	5.44	6.10	6.61	4.81	5.34	4.25	6.16	4.73	3.97	3.16	4.49	6.19	61.25
	Evap	1.68	2.08	3.26	4.11	4.94	5.10	4.94	4.61	3.91	3.18	2.12	1.67	41.60
	RF-Evap	3.76	4.02	3.35	0.70	0.40	-0.85	1.22	0.12	0.06	-0.02	2.37	4.52	19.65
WILCOX	**RF**	5.26	5.50	6.49	4.73	4.44	3.98	5.23	3.99	3.34	2.67	4.12	5.84	55.59
	Evap	1.48	2.04	3.08	4.08	4.96	5.10	5.12	4.83	3.88	2.95	1.95	1.51	40.98
	RF-Evap	3.78	3.46	3.41	0.65	-0.52	-1.12	0.11	-0.84	-0.54	-0.28	2.17	4.33	14.61
WINSTON	**RF**	5.53	5.20	6.80	5.78	5.66	4.17	4.90	3.94	4.56	3.56	5.25	6.34	61.69
	Evap	1.23	1.74	2.79	3.99	4.84	5.02	5.06	4.66	3.75	2.74	1.76	1.29	38.88
	RF-Evap	4.30	3.46	4.01	1.79	0.82	-0.85	-0.16	-0.72	0.81	0.82	3.49	5.05	22.81

TABLE AL2-3
RAINFALL - RUNOFF RELATION

RAINFALL (INCHES)	RUNOFF CURVE NUMBER (CN)							
	50	55	60	65	70	75	80	85
2.7	.05	.12	.23	.37	.55	.77	1.03	1.34
2.9	.09	.15	.30	.46	.65	.89	1.17	1.51
3.1	.11	.22	.37	.55	.77	1.02	1.33	1.68
3.3	.15	.28	.45	.65	.89	1.16	1.48	1.85
3.4	.17	.31	.49	.70	.95	1.23	1.56	1.93
3.5	.20	.34	.53	.75	1.01	1.30	1.64	2.02
3.6	.22	.37	.57	.80	1.07	1.37	1.72	2.11
3.7	.25	.41	.62	.86	1.13	1.44	1.80	2.20
3.8	.27	.45	.67	.91	1.19	1.52	1.88	2.28
3.9	.30	.49	.72	.97	1.25	1.59	1.96	2.37
4.0	.33	.53	.76	1.03	1.33	1.67	2.04	2.46
4.1	.36	.57	.81	1.09	1.40	1.74	2.12	2.55
4.2	.40	.61	.86	1.15	1.46	1.82	2.20	2.64
4.3	.43	.65	.91	1.21	1.53	1.89	2.29	2.73
4.4	.46	.69	.97	1.27	1.60	1.97	2.38	2.82
4.5	.50	.73	1.03	1.33	1.67	2.04	2.46	2.91
4.6	.54	.78	1.08	1.39	1.74	2.12	2.55	3.00
4.7	.57	.83	1.13	1.45	1.81	2.20	2.63	3.09
4.8	.61	.88	1.19	1.52	1.88	2.28	2.72	3.19
4.9	.65	.93	1.25	1.58	1.96	2.36	2.81	3.28
5.0	.69	.98	1.30	1.65	2.04	2.44	2.89	3.37
5.1	.73	1.03	1.36	1.72	2.11	2.52	2.98	3.47
5.2	.78	1.08	1.42	1.78	2.19	2.61	3.07	3.56
5.3	.82	1.13	1.48	1.85	2.26	2.69	3.16	3.65
5.4	.86	1.18	1.54	1.92	2.33	2.77	3.25	3.74
5.5	.91	1.23	1.61	1.99	2.41	2.85	3.34	3.84
5.6	.95	1.28	1.67	2.06	2.49	2.94	3.43	3.93
5.7	1.00	1.34	1.73	2.13	2.57	3.02	3.52	4.03
5.8	1.05	1.40	1.80	2.20	2.64	3.11	3.61	4.12
5.9	1.09	1.46	1.86	2.28	2.72	3.19	3.69	4.21

RAINFALL (INCHES)	RUNOFF CURVE NUMBER (CN)							
	50	55	60	65	70	75	80	85
6.0	1.14	1.52	1.92	2.35	2.80	3.27	3.78	4.31
6.2	1.24	1.63	2.06	2.50	2.96	3.45	3.96	4.50
6.4	1.34	1.75	2.19	2.64	3.13	3.62	4.14	4.69
6.6	1.45	1.87	2.33	2.80	3.29	3.79	4.32	4.87
6.8	1.56	1.99	2.47	2.94	3.45	3.97	4.51	5.06
7.0	1.67	2.12	2.61	3.10	3.61	4.15	4.69	5.26
7.2	1.78	2.24	2.75	3.25	3.79	4.32	4.88	5.45
7.4	1.89	2.38	2.89	3.41	3.95	4.49	5.06	5.64
7.6	2.01	2.51	3.04	3.57	4.12	4.67	5.25	5.84
7.8	2.13	2.64	3.18	3.73	4.28	4.86	5.44	6.03
8.0	2.25	2.78	3.34	3.89	4.46	5.04	5.62	6.22
8.2	2.37	2.92	3.49	4.05	4.64	5.22	5.81	6.41
8.4	2.50	3.06	3.64	4.22	4.81	5.40	6.00	6.60
8.6	2.62	3.20	3.79	4.38	4.98	5.58	6.19	6.80
8.8	2.75	3.34	3.95	4.54	5.16	5.76	6.38	6.99
9.0	2.88	3.48	4.10	4.71	5.33	5.94	6.57	7.19
9.2	3.01	3.63	4.26	4.88	5.51	6.13	6.76	7.38
9.4	3.15	3.78	4.42	5.05	5.69	6.32	6.95	7.57
9.6	3.28	3.92	4.58	5.22	5.87	6.50	7.14	7.77
9.8	3.42	4.07	4.74	5.39	6.05	6.68	7.33	7.97
10.0	3.56	4.22	4.90	5.56	6.23	6.87	7.52	8.16
10.5	3.91	4.61	5.31	5.99	6.68	7.34	8.00	8.65
11.0	4.26	4.99	5.73	6.43	7.13	7.82	8.49	9.14
11.5	4.63	5.39	6.14	6.87	7.58	8.29	8.97	9.63
12.0	5.00	5.79	6.57	7.31	8.05	8.76	9.45	10.12