

APPENDIX E

Sample .fw, .ro, and .rf files for DISTFW NLFIT calibration of Soil Site

Data file is for a natural rainfall plot (subcatchment version)
 RUM 95-96 SOIL SITE large scale plot Monitoring
 10/1/96 - Monitored Storm

CATCHMENT

No of elements, No of reservoirs, no of u/S elements
 22 0 4

No of U/S element draining into D/S elements

zero time (hrs), timestep (minutes), time of duration of storm (hrs)

0.7 0.1 2.

OUTPUT PARAMETERS

no of pts for output discharge, psteps

1 1

subareas at which discharge requested

22

maximum discharge on output graph

0.002

INCIDENCES

0	0	0	0	4	0	1	0	8	0	0	9	0	0	0	0	0	0
0	0	0	0	3	0	2	0	7	0	0	10	0	0	0	0	0	0
0	0	0	0	0	0	5	0	0	0	0	11	0	0	0	0	0	0
0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0

PARAMETERS

Kind of element

0

#	No	Area	Length	U/S	D/S	SWSupply	Gamma	Scrp	Phi	GWsupply
#				Elevation	Elevation					

1	85.7	16.42	0.08	-0.28	1.0	1.0	1.0	1.0	1.0	1.0
2	75.0	20.10	0.14	-0.28	1.0	1.0	1.0	1.0	1.0	1.0
3	71.2	18.76	0.14	-0.12	1.0	1.0	1.0	1.0	1.0	1.0
4	28.8	10.05	0.09	-0.12	1.0	1.0	1.0	1.0	1.0	1.0
5	7.1	4.86	-0.12	-0.28	1.0	1.0	1.0	1.0	1.0	1.0
6	23.8	7.37	-0.04	-0.28	1.0	1.0	1.0	1.0	1.0	1.0
7	17.7	6.70	0.08	-0.20	1.0	1.0	1.0	1.0	1.0	1.0
8	18.8	8.71	0.08	-0.20	1.0	1.0	1.0	1.0	1.0	1.0
9	13.7	6.03	-0.20	-0.22	1.0	1.0	1.0	1.0	1.0	1.0
10	41.4	15.24	-0.04	-0.22	1.0	1.0	1.0	1.0	1.0	1.0
11	30.1	10.72	-0.07	-0.22	1.0	1.0	1.0	1.0	1.0	1.0
12	4.1	1.59	-0.22	-0.25	1.0	1.0	1.0	1.0	1.0	1.0
13	37.3	10.05	-0.16	-0.22	1.0	1.0	1.0	1.0	1.0	1.0
14	15.3	6.00	-0.10	-0.22	1.0	1.0	1.0	1.0	1.0	1.0
15	11.3	3.02	0.02	-0.22	1.0	1.0	1.0	1.0	1.0	1.0
16	34.4	10.39	0.14	-0.07	1.0	1.0	1.0	1.0	1.0	1.0
17	11.6	3.85	0.08	-0.07	1.0	1.0	1.0	1.0	1.0	1.0
18	8.8	4.19	0.00	-0.07	1.0	1.0	1.0	1.0	1.0	1.0
19	1.9	1.09	-0.07	-0.10	1.0	1.0	1.0	1.0	1.0	1.0
20	30.9	13.07	0.02	-0.12	1.0	1.0	1.0	1.0	1.0	1.0
21	30.7	12.06	-0.13	-0.30	1.0	1.0	1.0	1.0	1.0	1.0
22	0.01	0.20	-0.25	-0.50	1.0	1.0	0.0001	0.0001	1.0	1.0

Hillslope and Channel conveyances

1st set are hillslope conveyances

2nd set are channel conveyances

Element No, No of conveyances

CR, EM, CONVEY

CONVEYANCES

1 2

0.394	1.	0.
0.394	1.	1000.

2 2		
0.405	1.	0.
0.405	1.	1000.
3 2		
0.382	1.	0.
0.382	1.	1000.
4 2		
0.482	1.	0.
0.482	1.	1000.
5 2		
1.686	1.	0.
1.686	1.	1000.
6 2		
0.371	1.	0.
0.371	1.	1000.
7 2		
0.571	1.	0.
0.571	1.	1000.
8 2		
0.586	1.	0.
0.586	1.	1000.
9 2		
0.564	1.	0.
0.564	1.	1000.
10 2		
0.505	1.	0.
0.505	1.	1000.
11 2		
0.494	1.	0.
0.494	1.	1000.
12 2		
0.539	1.	0.
0.539	1.	1000.
13 2		
0.434	1.	0.
0.434	1.	1000.
14 2		
0.536	1.	0.
0.536	1.	1000.
15 2		
0.378	1.	0.
0.378	1.	1000.
16 2		
0.412	1.	0.
0.412	1.	1000.
17 2		
0.467	1.	0.
0.467	1.	1000.
18 2		
0.598	1.	0.
0.598	1.	1000.
19 2		
1.16	1.	0.
1.16	1.	1000.
20 2		
0.581	1.	0.
0.581	1.	1000.
21 2		
0.530	1.	0.
0.530	1.	1000.
22 2		
50.3	1.	0.
50.3	1.	1000.

#

Parameter Multipliers

Ch-CR Ch-EM SWSupply SWGamma Sorptivity Phi GWSupply timing(sec)

MULTIPLIERS

7.8 1.33 0.03 0.375 0.00001 6.5 1000. 0.0

1

0.0 0.0

#

No of pluvios

#

RAINFALL #1

1

CUMPLUVIO m011096.rf

1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

#

No of known initial flows at stations

#

INITIALQ

title line 1

title line 2

title line 3

1

stations at which flows known and initial flow (cumecs)

22 0.0

No of stations with known inflows

INFLOWQ NONE

Hydrograph to calibrate with (no of values)

CALIB #1 m011096.ro

END

RUM WRD RUNOFF
SOIL SITE MONITORED STORM
DATE: 10/01/96

111

0.7	0
0.7092593	0.0001749
0.7099537	0.0006358
0.7106481	0.0006889
0.7113426	0.0006889
0.712037	0.000744
0.7127315	0.0008009
0.7134259	0.0006358
0.7141204	0.0005845
0.7148148	0.0004875
0.7155093	0.0003981
0.7162037	0.0003562
0.7168981	0.000535
0.7175926	0.0008009
0.718287	0.0011138
0.7189815	0.0015514
0.7196759	0.0021473
0.7203704	0.0027315
0.7210648	0.0028354
0.7217593	0.0027315
0.7224537	0.002431
0.7231481	0.0021473
0.7238426	0.0019677
0.724537	0.0018806
0.7252315	0.0018806
0.7259259	0.00224
0.7266204	0.0027315
0.7273148	0.003049
0.7280093	0.0033833
0.7287037	0.0036157
0.7293981	0.0038555
0.7300926	0.0037346
0.730787	0.00327
0.7314815	0.0026294
0.7321759	0.00224
0.7328704	0.0021473
0.7335648	0.0021473
0.7342593	0.0017955
0.7349537	0.0018806
0.7356481	0.0021473
0.7363426	0.00224
0.737037	0.0025293
0.7377315	0.0029413
0.7384259	0.00327
0.7391204	0.0034986
0.7398148	0.0037346
0.7405093	0.0037346
0.7412037	0.0037346
0.7418981	0.00327
0.7425926	0.0025293
0.743287	0.00224
0.7439815	0.0019677
0.7446759	0.0017955
0.7453704	0.0016309
0.7460648	0.0014737
0.7467593	0.0013241
0.7474537	0.0011821
0.7481481	0.0010475
0.7488426	0.0009205
0.749537	0.000744
0.7502315	0.0005845
0.7509259	0.0004418

0.7516204	0.0003981
0.7523148	0.0003562
0.7530093	0.0003161
0.7537037	0.0003161
0.7543981	0.000278
0.7550926	0.0002417
0.755787	0.0002074
0.7564815	0.0002074
0.7571759	0.0001749
0.7578704	0.0001442
0.758564815	0.0001442
0.759259259	0.0001442
0.759953704	0.0001442
0.760648148	0.0001442
0.761342593	0.0001155
0.762037037	0.0001155
0.762731481	8.864E-05
0.763425926	8.864E-05
0.764814815	6.366E-05
0.765509259	6.366E-05
0.766203704	6.366E-05
0.767592593	4.056E-05
0.768981481	4.056E-05
0.771064815	1.934E-05
0.773842593	0
0.774	0
0.776	0
0.778	0
0.78	0
0.785	0
0.79	0
0.795	0
0.8	0
0.81	0
0.82	0
0.83	0
0.84	0
0.85	0
0.86	0
0.87	0
0.88	0
0.89	0
0.9	0
1.0	0
1.1	0
1.2	0
1.3	0
1.4	0
1.5	0

RUM WRD RAINFALL
SOIL SITE MONITORED STORM
DATE:10/01/96

176	
0.7	0
0.704166667	0
0.704513889	0
0.704861111	0
0.705208333	0.4
0.705555556	0.8
0.705902778	1.6
0.70625	2.4
0.706597222	3
0.706944444	3.4
0.707291667	4
0.707638889	4.8
0.707986111	5.2
0.708333333	6.2
0.708680556	6.8
0.709027778	7.6
0.709375	8.6
0.709722222	9.4
0.710069444	10.4
0.710416667	11.2
0.710763889	11.8
0.711111111	12.6
0.711458333	13
0.711805556	13.8
0.712152778	14.6
0.7125	15
0.712847222	15.6
0.713194444	16
0.713541667	16.4
0.713888889	16.8
0.714236111	17.2
0.714583333	17.4
0.714930556	17.8
0.715277778	18
0.715625	18.2
0.715972222	18.4
0.716319444	19
0.716666667	19.6
0.717013889	20.4
0.717361111	21.4
0.717708333	22
0.718055556	23
0.718402778	24.2
0.71875	25.6
0.719097222	27
0.719444444	28.6
0.719791667	30.2
0.720138889	32.2
0.720486111	33.8
0.720833333	35.4
0.721180556	37
0.721527778	38.6
0.721875	39.8
0.722222222	41
0.722569444	42
0.722916667	42.8
0.723263889	43.6
0.723611111	44.6
0.723958333	45.2
0.724305556	45.8
0.724652778	46.6
0.725	47.2

0.725347222	48
0.725694444	48.8
0.726041667	49.6
0.726388889	50.6
0.726736111	51.6
0.727083333	52.2
0.727430556	53
0.727777778	53.8
0.728125	54.6
0.728472222	55.4
0.728819444	56.2
0.729166667	57
0.729513889	57.6
0.729861111	58.2
0.730208333	58.6
0.730555556	58.8
0.730902778	59.2
0.73125	59.6
0.731597222	59.8
0.731944444	60.2
0.732291667	60.6
0.732638889	61.2
0.732986111	62
0.733333333	62.6
0.733680556	63
0.734027778	63.4
0.734375	64
0.734722222	64.6
0.735069444	65.2
0.735416667	66.2
0.735763889	67
0.736111111	67.8
0.736458333	68.6
0.736805556	69.6
0.737152778	70.4
0.7375	71.2
0.737847222	72.2
0.738194444	73
0.738541667	73.8
0.738888889	74.6
0.739236111	75.4
0.739583333	76.2
0.739930556	76.6
0.740277778	77.4
0.740625	78
0.740972222	78.6
0.741319444	79.2
0.741666667	79.6
0.742013889	80
0.742361111	80.2
0.742708333	80.6
0.743055556	80.8
0.743402778	81.2
0.74375	81.4
0.744097222	81.6
0.744444444	82.2
0.744791667	82.6
0.745138889	82.8
0.745486111	83
0.745833333	83.2
0.746180556	83.8
0.746527778	84
0.746875	84.2
0.747222222	84.4
0.747569444	84.6
0.747916667	85

0.748263889	85.2
0.748611111	85.4
0.748958333	85.4
0.749305556	85.6
0.749652778	85.6
0.75	85.6
0.750347222	85.6
0.750694444	85.8
0.751041667	85.8
0.751388889	86
0.751736111	86
0.752083333	86.2
0.752430556	86.2
0.752777778	86.4
0.753125	86.4
0.753472222	86.4
0.753819444	86.6
0.754166667	86.8
0.754513889	86.8
0.754861111	87
0.755208333	87
0.755555556	87
0.755902778	87.2
0.75625	87.2
0.756597222	87.2
0.756944444	87.2
0.757291667	87.2
0.757638889	87.4
0.757986111	87.4
0.758333333	87.4
0.758680556	87.6
0.759027778	87.8
0.759375	88
0.759722222	88.2
0.760069444	88.4
0.760416667	88.4
0.760763889	88.4
0.761111111	88.6
0.765972222	88.6
0.766319444	88.8
0.78	88.8
0.9	88.8
1.0	88.8
1.1	88.8
1.2	88.8
1.3	88.8
1.4	88.8
1.5	88.8