APPENDIX D
SUMMIT/LEE MOORE AREA DATA

Project: Summit Area HMS Model Simulation Run: Type II 3-hour

Start of Run:	06Oct2006, 12:00	Basin Model:	Summit Wash and Area
End of Run:	09Oct2006, 00:00	Meteorologic Model:	Type II
Compute Time:	12Jun2008, 15:02:16	Control Specifications:	Type II

Volume Units: AC-FT

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
J1	2.2370	1061.70	06Oct2006, 15:15	211.63
J2	2.4190	1087.31	06Oct2006, 15:15	228.50
J3	2.4590	1091.51	06Oct2006, 15:15	231.80
R0J1	2.2370	1060.57	06Oct2006, 15:15	211.63
R0J2	2.4190	1086.09	06Oct2006, 15:15	228.50
R0S1	1.1850	601.07	06Oct2006, 15:05	114.47
R0S2	1.0520	469.06	06Oct2006, 15:20	97.16
S1	1.1850	602.67	06Oct2006, 15:05	114.47
S2	1.0520	470.00	06Oct2006, 15:15	97.16
S3	0.1820	237.65	06Oct2006, 13:50	16.87
S4	0.0400	46.52	06Oct2006, 13:50	3.30
UN1	1.4330	733.40	06Oct2006, 15:10	146.51
UN2	0.2031	260.78	06Oct2006, 13:55	20.82
UN3	0.1350	191.54	06Oct2006, 13:50	13.01

Project: Summit Area HMS Model Simulation Run: Type II 3-hour

Start of Run:	06Oct2006, 12:00	Basin Model:	Summit Wash and Area
End of Run:	09Oct2006, 00:00	Meteorologic Model:	Type II
Compute Time:	24Jun2008, 10:43:03	Control Specifications:	Type II

Volume Units: IN

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
J1	2.2370	1061.70	06Oct2006, 15:15	1.77
J2	2.4190	1087.31	06Oct2006, 15:15	1.77
J3	2.4590	1091.51	06Oct2006, 15:15	1.77
R0J1	2.2370	1060.57	06Oct2006, 15:15	1.77
R0J2	2.4190	1086.09	06Oct2006, 15:15	1.77
R0S1	1.1850	601.07	06Oct2006, 15:05	1.81
R0S2	1.0520	469.06	06Oct2006, 15:20	1.73
S1	1.1850	602.67	06Oct2006, 15:05	1.81
S2	1.0520	470.00	06Oct2006, 15:15	1.73
S3	0.1820	237.65	06Oct2006, 13:50	1.74
S4	0.0400	46.52	06Oct2006, 13:50	1.55
UN1	1.4330	733.40	06Oct2006, 15:10	1.92
UN2	0.2031	260.78	06Oct2006, 13:55	1.92
UN3	0.1350	191.54	06Oct2006, 13:50	1.81

Project: Summit Area HMS Model Simulation Run: 24-Hour SCS Type I

Start of Run:	06Oct2006, 12:00	Basin Model:	Summit Wash and Area
End of Run:	09Oct2006, 00:00	Meteorologic Model:	24-hour SCS
Compute Time:	12Jun2008, 15:05:28	Control Specifications:	24-hour

Volume Units: AC-FT

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
J1	2.2370	650.35	06Oct2006, 23:36	305.02
J2	2.4190	674.65	06Oct2006, 23:42	329.33
J3	2.4590	679.28	06Oct2006, 23:42	334.19
R0J1	2.2370	649.11	06Oct2006, 23:42	305.02
R0J2	2.4190	674.10	06Oct2006, 23:42	329.33
R0S1	1.1850	361.78	06Oct2006, 23:30	164.04
R0S2	1.0520	292.09	06Oct2006, 23:48	140.98
S1	1.1850	362.21	06Oct2006, 23:30	164.04
S2	1.0520	292.98	06Oct2006, 23:42	140.98
S3	0.1820	113.55	06Oct2006, 22:12	24.31
S4	0.0400	22.43	06Oct2006, 22:12	4.85
UN1	1.4330	450.53	06Oct2006, 23:36	208.42
UN2	0.2031	129.45	06Oct2006, 22:18	29.60
UN3	0.1350	91.30	06Oct2006, 22:12	18.52

Project: Summit Area HMS Model Simulation Run: 24-Hour SCS Type I

Start of Run:	06Oct2006, 12:00	Basin Model:	Summit Wash and Area
End of Run:	09Oct2006, 00:00	Meteorologic Model:	24-hour SCS
Compute Time:	12Jun2008, 15:05:28	Control Specifications:	24-hour

Volume Units: IN

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
J1	2.2370	650.35	06Oct2006, 23:36	2.56
J2	2.4190	674.65	06Oct2006, 23:42	2.55
J3	2.4590	679.28	06Oct2006, 23:42	2.55
R0J1	2.2370	649.11	06Oct2006, 23:42	2.56
R0J2	2.4190	674.10	06Oct2006, 23:42	2.55
R0S1	1.1850	361.78	06Oct2006, 23:30	2.60
R0S2	1.0520	292.09	06Oct2006, 23:48	2.51
S1	1.1850	362.21	06Oct2006, 23:30	2.60
S2	1.0520	292.98	06Oct2006, 23:42	2.51
S3	0.1820	113.55	06Oct2006, 22:12	2.50
S4	0.0400	22.43	06Oct2006, 22:12	2.28
UN1	1.4330	450.53	06Oct2006, 23:36	2.73
UN2	0.2031	129.45	06Oct2006, 22:18	2.73
UN3	0.1350	91.30	06Oct2006, 22:12	2.57

SUMMIT AREA HYDROLOGIC PARAMETERS

Basin	D.A. (sq miles)	D.A. (acres)	CN	Tc (min)	T(lag)	Imp %
			Summit Wash			
S1	1.185	758.3	83.6	144.7	86.8	8.6
S2	1.052	673.3	84.1	162.6	97.6	1.1
S3	0.182	116.5	81.8	36.4	21.8	11.3
S4	0.040	25.3	83	35.6	21.4	10.0
UN1	1.433	917.3	85.9	156.1	93.7	1.2
UN2	0.203	130.0	86.5	45.4	27.2	1.6
UN3	0.135	86.6	80.4	32.5	19.5	20.0

Total A **4.230**

SUMMIT WASH SUBREACH DATA

Reach	Length (ft)	Qp (cfs)	Avg V (wted)	L/(V(min)*6)
R0S1	490	500	2.0	1
R0S2	620	400	2.3	1
R0J1S	710	1000	2.9	1
R0J2S	1380	1000	6.5	1

SUMMIT WASH ROUTING REACH DATA

Q (cfs)	R0S1 Storage (Acre-feet)	R0S2 Storage (Acre-feet)	R0J1S Storage (Acre-feet)	R0J2S Storage (Acre-feet)
200	1.3	1.8	2.5	1.7
400	2.4	3.1	4.0	2.7
600	3.3	4.0	5.4	3.6
800	4.1	4.9	6.5	4.5
1000	4.9	5.7	7.5	5.3
1200	5.5	6.5	8.4	6.0
1400	6.1	7.4	9.3	6.8
1600	6.7	8.1	10.1	7.6
1800	7.2	8.9	10.9	8.4
2000	7.7	9.5	11.7	9.2

SUMMIT AREA TIME OF CONCENTRATION DATA

DA	Ovlnd S	Ovlnd n	SC L	SC S	Chnl A	Chnl P	Chnl L	Chnl S	Chnl n	A/P	Reach	Tc	T(lag)
SUMMIT WASH													
S1	0.010	0.15	2850	0.014	10	20	4200	0.009	0.050	0.5	1		
					18.6	44.7	4400	0.009	0.050	0.4	2		
					45.2	36.1	3550	0.008	0.045	1.3	3	144.7	86.8
S2	0.018	0.15	2925	0.009	10	20	4750	0.008	0.050	0.5	1		
					20.3	36	4150	0.009	0.045	0.6	2		
					25	41.1	4640	0.009	0.050	0.6	3	162.6	97.6
S3	0.140	0.15	1200	0.027	13.7	38.9	2070	0.005	0.035	0.4	1	36.4	21.8
S4	0.013	0.15	1750	0.012	11.1	11.2	700	0.008	0.045	1.0	1	35.6	21.4
UNNAMED WASH 1													
UN1	0.020	0.15	2830	0.014	9.4	33.6	2450	0.007	0.030	0.3	1		
					10.1	32.2	2500	0.008	0.045	0.3	2		
					10	20	6570	0.008	0.050	0.5	3	156.1	93.7
UNNAMED WASH 2													
UN2	0.080	0.15	1250	0.027	21.5	41.2	1100	0.004	0.045	0.5	1		
			1700	0.011								45.4	27.2
UNNAMED WASH 3													
UN3	0.060	0.15	1400	0.021									
			1050	0.006								32.5	19.5

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*****************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*****************************************************************

SUMMARY for S1

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .01 ft/ft, n = .15, P(2yr/24hr) = 1.9 in
     Travel Time = 16.8 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2850 ft, S = .014 ft/ft, UNPAVED surface
     Travel time = 24.9 minutes

 Segment 3: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 4200 ft, S = .009 ft/ft, n = .05
     Travel Time = 39.3 minutes

 Segment 4: CHANNEL FLOW
     A = 18.6 ft^2, P = 44.7 ft, L = 4400 ft, S = .009 ft/ft, n = .05
     Travel Time = 46.6 minutes

 Segment 5: CHANNEL FLOW
     A = 45.2 ft^2, P = 36.1 ft, L = 3550 ft, S = .008 ft/ft, n = .045
     Travel Time = 17.2 minutes

TOTAL TRAVEL TIME = 144.7 min.
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*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for S2

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .018 ft/ft, n = .15, P(2yr/24hr) = 1.9 in
     Travel Time = 13.3 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2925 ft, S = .009 ft/ft, UNPAVED surface
     Travel time = 31.8 minutes

 Segment 3: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 4750 ft, S = .008 ft/ft, n = .05
     Travel Time = 47.2 minutes

 Segment 4: CHANNEL FLOW
     A = 20.3 ft^2, P = 36 ft, L = 4150 ft, S = .009 ft/ft, n = .045
     Travel Time = 32.3 minutes

 Segment 5: CHANNEL FLOW
     A = 25 ft^2, P = 41.1 ft, L = 4640 ft, S = .009 ft/ft, n = .05
     Travel Time = 38.1 minutes

TOTAL TRAVEL TIME = 162.6 min.
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*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for S3

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .14 ft/ft, n = .15, P(2yr/24hr) = 1.9 in
     Travel Time = 5.8 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1200 ft, S = .027 ft/ft, UNPAVED surface
     Travel time = 7.5 minutes

 Segment 3: CHANNEL FLOW
     A = 13.7 ft^2, P = 38.9 ft, L = 2070 ft, S = .005 ft/ft, n = .035
     Travel Time = 23 minutes

TOTAL TRAVEL TIME = 36.4 min.
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*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for S4

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .013 ft/ft, n = .15, P(2yr/24hr) = 1.9 in
     Travel Time = 15.1 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1750 ft, S = .012 ft/ft, UNPAVED surface
     Travel time = 16.5 minutes

 Segment 3: CHANNEL FLOW
     A = 11.1 ft^2, P = 11.2 ft, L = 700 ft, S = .008 ft/ft, n = .045
     Travel Time = 4 minutes

TOTAL TRAVEL TIME = 35.6 min.
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*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for UN1

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .02 ft/ft, n = .15, P(2yr/24hr) = 1.91 in
     Travel Time = 12.7 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2830 ft, S = .014 ft/ft, UNPAVED surface
     Travel time = 24.7 minutes

 Segment 3: CHANNEL FLOW
     A = 9.4 ft^2, P = 33.6 ft, L = 2450 ft, S = .007 ft/ft, n = .03
     Travel Time = 23 minutes

 Segment 4: CHANNEL FLOW
     A = 10.1 ft^2, P = 32.2 ft, L = 2500 ft, S = .008 ft/ft, n = .045
     Travel Time = 30.5 minutes

 Segment 5: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 6570 ft, S = .008 ft/ft, n = .05
     Travel Time = 65.2 minutes

TOTAL TRAVEL TIME = 156.1 min.
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*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for UN2

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .08 ft/ft, n = .15, P(2yr/24hr) = 1.91 in
     Travel Time = 7.3 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1250 ft, S = .027 ft/ft, UNPAVED surface
     Travel time = 7.9 minutes

 Segment 3: CONCENTRATED FLOW
     L = 1700 ft, S = .011 ft/ft, UNPAVED surface
     Travel time = 16.7 minutes

 Segment 4: CHANNEL FLOW
     A = 21.5 ft^2, P = 41.2 ft, L = 1100 ft, S = .004 ft/ft, n = .045
     Travel Time = 13.5 minutes

TOTAL TRAVEL TIME = 45.4 min.
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*****************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*****************************************************************

SUMMARY for UN3

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .06 ft/ft, n = .15, P(2yr/24hr) = 1.9 in
     Travel Time = 8.2 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1400 ft, S = .021 ft/ft, UNPAVED surface
     Travel time = 10 minutes

 Segment 3: CONCENTRATED FLOW
     L = 1050 ft, S = .0057 ft/ft, UNPAVED surface
     Travel time = 14.4 minutes

TOTAL TRAVEL TIME = 32.5 min.
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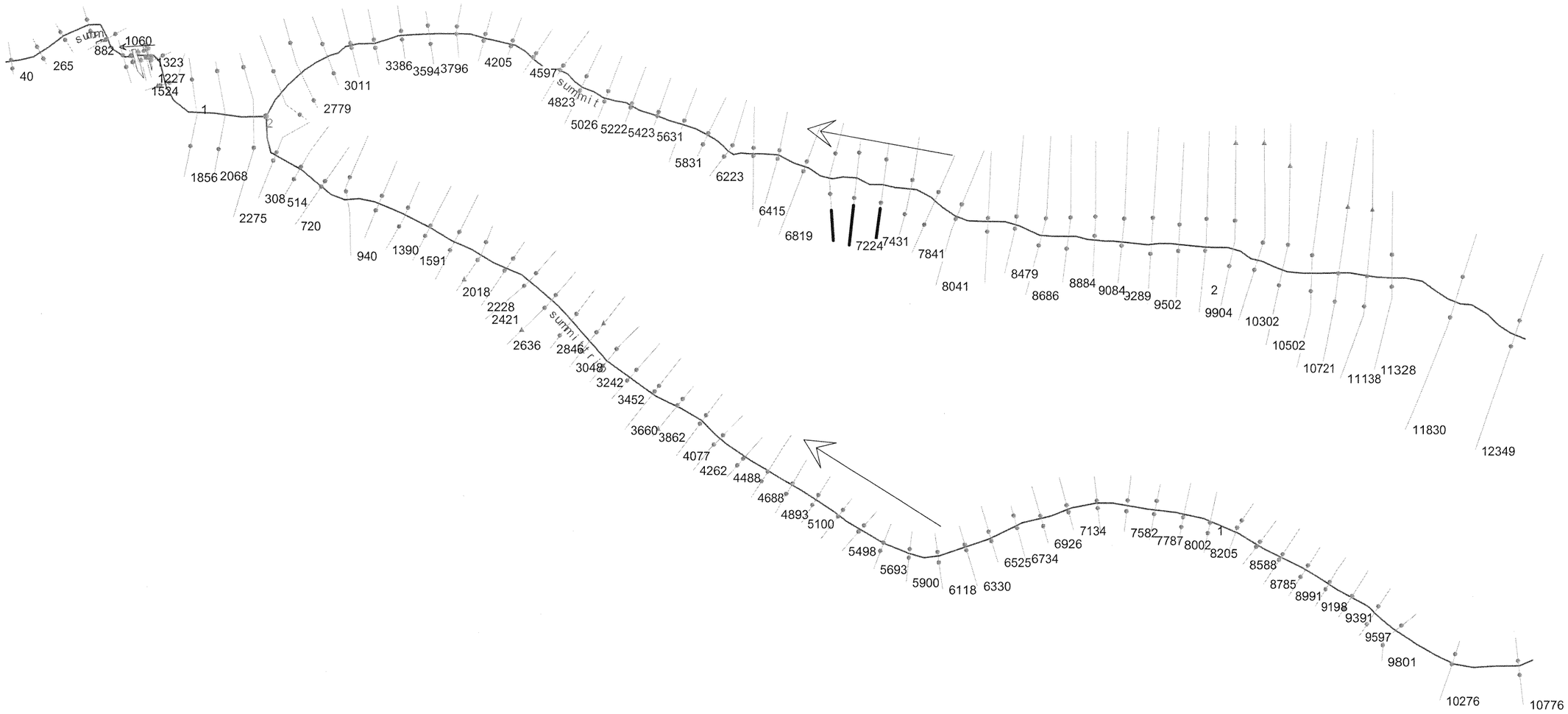


SUMMIT WASH
HEC-RAS SCHEMATIC

HEC-RAS Plan: P1 River: summit Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	2275	PF 1	1060.00	2593.69	2595.31	2594.86	2595.38	0.004967	2.09	506.15	592.77	0.40
1	2068	PF 1	1060.00	2592.57	2593.54		2593.67	0.015913	2.99	355.13	595.78	0.68
1	1856	PF 1	1060.00	2590.95	2593.26		2593.28	0.000607	1.16	1050.97	706.66	0.16
1	1524	PF 1	1090.00	2587.07	2592.85	2591.12	2592.98	0.001730	3.27	569.99	357.77	0.30
1	1323	PF 1	1090.00	2587.00	2592.03		2592.40	0.005634	4.91	223.45	93.49	0.52
1	1269	PF 1	1090.00	2586.84	2591.62	2590.44	2592.14	0.002994	5.82	187.29	58.44	0.57
1	1248		Bridge									
1	1227	PF 1	1090.00	2586.56	2591.15	2590.02	2591.66	0.003428	5.93	198.69	82.99	0.54
1	1183	PF 1	1090.00	2586.04	2591.04	2589.72	2591.50	0.003146	5.43	200.74	154.78	0.51
1	1152.5		Culvert									
1	1122	PF 1	1090.00	2586.78	2589.88	2589.88	2591.18	0.009782	9.14	119.22	58.10	1.01
1	1060	PF 1	1090.00	2575.85	2582.21		2582.41	0.002173	3.62	301.31	82.23	0.33
1	882	PF 1	1090.00	2575.50	2581.57	2579.24	2581.94	0.003156	4.83	225.55	51.21	0.41
1	680	PF 1	1090.00	2573.32	2581.46		2581.58	0.000771	2.81	387.69	68.69	0.21
1	472	PF 1	1090.00	2569.71	2581.15		2581.37	0.001252	3.79	287.94	43.05	0.26
1	265	PF 1	1090.00	2569.10	2581.16		2581.22	0.000266	1.93	564.76	79.35	0.13
1	40	PF 1	1090.00	2564.96	2581.00	2571.91	2581.13	0.000557	2.89	377.17	40.35	0.17

SUMMIT WASH REACH 1
EXISTING CONDITIONS

HEC-RAS Plan: P1 River: summit Reach: 2 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
2	12349	PF 1	200.00	2673.15	2673.84	2673.74	2673.88	0.011368	1.76	136.75	614.78	0.48
2	11830	PF 1	200.00	2668.40	2669.39	2669.24	2669.42	0.006795	1.31	178.29	761.98	0.37
2	11328	PF 1	200.00	2664.53	2665.06	2664.97	2665.10	0.011640	1.76	133.15	538.10	0.53
2	11138	PF 1	275.00	2662.75	2663.54	2663.37	2663.56	0.006563	1.56	217.05	811.14	0.41
2	10935	PF 1	275.00	2661.42	2661.90	2661.78	2661.94	0.010634	1.66	184.21	858.96	0.50
2	10721	PF 1	275.00	2659.41	2659.81	2659.54	2659.83	0.007908	0.88	260.79	698.58	0.38
2	10502	PF 1	275.00	2657.37	2657.83	2657.59	2657.85	0.010275	1.12	221.03	697.23	0.45
2	10302	PF 1	330.00	2655.46	2656.19	2655.99	2656.21	0.007443	1.35	325.67	1137.04	0.42
2	10105	PF 1	330.00	2653.78	2654.50	2654.29	2654.52	0.009541	1.31	281.17	887.41	0.45
2	9904	PF 1	330.00	2651.91	2653.04		2653.06	0.005644	1.43	317.80	907.44	0.38
2	9702	PF 1	330.00	2650.77	2651.51	2651.40	2651.55	0.010771	2.04	229.59	753.84	0.53
2	9502	PF 1	330.00	2648.93	2650.02		2650.05	0.005529	1.59	279.40	751.72	0.39
2	9289	PF 1	330.00	2647.18	2648.16	2648.06	2648.23	0.014842	2.26	188.23	672.01	0.61
2	9084	PF 1	330.00	2645.21	2646.42		2646.47	0.005555	2.03	212.81	501.23	0.41
2	8884	PF 1	420.00	2643.82	2644.96	2644.73	2645.04	0.008855	2.37	208.24	456.14	0.51
2	8686	PF 1	420.00	2641.53	2643.43		2643.51	0.006889	2.38	197.64	372.80	0.47
2	8479	PF 1	420.00	2639.94	2641.71		2641.81	0.009967	3.00	191.81	396.48	0.52
2	8272	PF 1	420.00	2638.50	2640.04		2640.09	0.007216	2.29	273.88	527.21	0.43
2	8041	PF 1	420.00	2637.30	2638.17	2637.97	2638.24	0.009582	2.50	222.64	439.65	0.53
2	7841	PF 1	420.00	2635.70	2636.76		2636.80	0.005555	1.86	255.14	402.21	0.37
2	7636	PF 1	465.00	2634.22	2635.49		2635.53	0.006848	1.63	313.03	446.99	0.30
2	7431	PF 1	465.00	2632.70	2633.86		2633.90	0.009158	1.77	266.30	357.93	0.35
2	7224	PF 1	465.00	2630.78	2631.91		2631.96	0.009641	1.77	264.71	357.90	0.35
2	7020	PF 1	465.00	2628.82	2630.07		2630.11	0.008522	1.77	262.70	316.49	0.34
2	6819	PF 1	500.00	2626.03	2628.55		2628.67	0.005885	3.13	241.50	368.55	0.43
2	6607	PF 1	500.00	2624.44	2627.14		2627.28	0.007548	3.48	216.34	288.16	0.49
2	6415	PF 1	500.00	2622.53	2625.63		2625.86	0.007617	4.12	174.93	234.28	0.55
2	6223	PF 1	500.00	2622.47	2624.44		2624.55	0.005409	2.92	222.79	256.54	0.45
2	6029	PF 1	500.00	2621.17	2623.30	2622.94	2623.41	0.006785	3.11	235.64	315.29	0.50
2	5831	PF 1	500.00	2619.39	2621.67	2621.35	2621.88	0.008946	3.83	156.14	193.07	0.58
2	5631	PF 1	500.00	2616.45	2619.80		2620.10	0.008741	5.25	163.76	168.18	0.62
2	5423	PF 1	500.00	2614.54	2618.66		2618.86	0.004177	4.08	166.33	129.40	0.44
2	5222	PF 1	500.00	2614.60	2616.62	2616.56	2617.13	0.025481	5.71	87.60	78.45	0.95
2	5026	PF 1	500.00	2612.39	2615.48		2615.59	0.003370	2.63	190.14	119.08	0.37
2	4823	PF 1	605.00	2610.82	2614.58		2614.74	0.004964	4.00	251.42	209.26	0.47
2	4597	PF 1	605.00	2609.76	2613.31		2613.52	0.005974	4.38	210.53	158.41	0.47
2	4408	PF 1	605.00	2609.07	2611.92		2612.11	0.009094	4.26	216.82	218.72	0.55
2	4205	PF 1	605.00	2607.13	2609.87		2610.10	0.010516	4.53	195.50	220.40	0.59

SUMMIT WASH REACH 2
EXISTING CONDITIONS

1/2

HEC-RAS Plan: P1 River: summit Reach: 2 Profile: PF 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
2	3997	PF 1	605.00	2605.59	2608.30		2608.44	0.006467	3.52	224.70	220.15	0.46
2	3796	PF 1	605.00	2605.34	2606.82	2606.42	2606.95	0.008709	3.05	217.47	237.84	0.50
2	3594	PF 1	605.00	2602.67	2605.27		2605.41	0.006783	3.53	247.49	237.37	0.47
2	3386	PF 1	605.00	2600.77	2603.70		2603.89	0.008017	4.05	215.79	220.19	0.56
2	3210	PF 1	605.00	2600.40	2602.69		2602.77	0.005003	3.31	301.86	281.49	0.45
2	3011	PF 1	605.00	2599.03	2601.03	2600.73	2601.19	0.014615	3.28	184.45	211.34	0.62
2	2779	PF 1	605.00	2597.29	2599.35		2599.39	0.004678	1.73	349.09	454.55	0.34
2	2576	PF 1	605.00	2596.64	2597.51	2597.37	2597.64	0.020548	2.94	206.40	375.71	0.68

SUMMIT WASH REACH 2
2/2

HEC-RAS Plan: P1 River: summittrib Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	10776	PF 1	200.00	2689.20	2690.52	2690.16	2690.59	0.005008	2.10	102.79	159.70	0.40
1	10276	PF 1	200.00	2685.55	2686.24	2686.14	2686.34	0.016646	2.86	79.46	185.73	0.68
1	9801	PF 1	200.00	2680.68	2681.87	2681.48	2681.91	0.005684	1.64	122.36	199.13	0.36
1	9597	PF 1	200.00	2679.34	2680.03	2679.92	2680.12	0.015056	2.47	84.85	207.45	0.63
1	9391	PF 1	200.00	2676.50	2677.88	2677.57	2677.97	0.007697	2.46	84.17	151.29	0.49
1	9198	PF 1	200.00	2673.97	2675.79	2675.59	2675.99	0.014037	3.70	58.67	106.72	0.68
1	8991	PF 1	200.00	2672.27	2673.75		2673.86	0.007772	2.60	76.85	90.85	0.50
1	8785	PF 1	200.00	2670.32	2672.11	2671.78	2672.25	0.007756	3.15	74.40	117.75	0.52
1	8588	PF 1	200.00	2669.07	2670.63		2670.72	0.007750	2.91	97.67	220.70	0.51
1	8404	PF 1	275.00	2668.18	2669.07	2668.88	2669.16	0.009513	2.76	119.27	211.89	0.55
1	8205	PF 1	275.00	2666.43	2667.41		2667.48	0.007094	2.44	138.01	250.16	0.47
1	8002	PF 1	275.00	2664.58	2665.56	2665.39	2665.66	0.011711	2.82	114.34	228.44	0.59
1	7787	PF 1	275.00	2662.70	2663.76		2663.82	0.006397	2.22	138.62	223.27	0.45
1	7582	PF 1	275.00	2660.87	2661.76	2661.66	2661.87	0.015949	3.06	108.23	246.68	0.68
1	7360	PF 1	275.00	2658.48	2659.86	2659.62	2659.92	0.005657	2.45	147.61	263.47	0.44
1	7134	PF 1	275.00	2656.82	2658.10		2658.22	0.011090	3.18	109.31	219.13	0.60
1	6926	PF 1	275.00	2655.20	2656.22	2655.98	2656.29	0.007843	2.25	129.72	217.61	0.48
1	6734	PF 1	275.00	2653.30	2654.40	2654.25	2654.49	0.011292	2.72	115.03	211.84	0.58
1	6525	PF 1	275.00	2650.62	2652.24		2652.36	0.009231	3.06	109.67	211.05	0.55
1	6330	PF 1	275.00	2649.05	2650.59	2650.44	2650.69	0.008048	3.14	122.42	220.72	0.53
1	6118	PF 1	275.00	2647.16	2648.71		2648.84	0.009264	3.07	106.46	183.13	0.56
1	5900	PF 1	275.00	2645.10	2646.52	2646.33	2646.68	0.010862	3.44	95.72	160.10	0.61
1	5693	PF 1	340.00	2643.09	2645.07	2644.68	2645.19	0.005573	2.99	132.06	150.08	0.46
1	5498	PF 1	340.00	2642.16	2643.56	2643.34	2643.71	0.010562	3.47	117.51	170.03	0.60
1	5308	PF 1	340.00	2639.82	2641.50		2641.66	0.011275	3.54	109.87	148.66	0.62
1	5100	PF 1	340.00	2638.33	2639.83		2639.95	0.006301	2.89	138.97	197.58	0.47
1	4893	PF 1	340.00	2636.69	2638.24		2638.39	0.009191	3.26	115.49	150.06	0.56
1	4688	PF 1	400.00	2634.95	2636.67	2636.31	2636.82	0.006692	3.20	143.82	177.43	0.50
1	4488	PF 1	400.00	2633.30	2635.20		2635.34	0.008133	3.38	149.42	217.64	0.54
1	4262	PF 1	400.00	2631.48	2633.04	2632.90	2633.18	0.011382	3.38	144.00	243.80	0.61
1	4077	PF 1	400.00	2629.58	2631.23	2630.95	2631.36	0.008842	3.36	154.74	242.67	0.56
1	3862	PF 1	400.00	2627.52	2629.34	2629.19	2629.45	0.008648	3.12	167.80	286.61	0.54
1	3660	PF 1	400.00	2626.48	2627.52	2627.30	2627.61	0.009936	2.55	170.25	283.15	0.54
1	3452	PF 1	400.00	2624.08	2625.31		2625.42	0.010805	2.87	163.35	258.50	0.53
1	3242	PF 1	400.00	2622.00	2623.25	2622.99	2623.35	0.009165	2.57	170.35	260.96	0.49
1	3048	PF 1	470.00	2619.98	2621.39	2621.14	2621.50	0.009821	2.70	194.40	354.25	0.51
1	2846	PF 1	470.00	2618.29	2619.34	2619.13	2619.43	0.010733	2.51	212.45	421.03	0.52
1	2636	PF 1	470.00	2616.29	2617.40	2617.17	2617.46	0.008115	2.18	249.42	498.96	0.45

SUMMIT TRIBUTARY
EXISTING CONDITIONS
1/2

HEC-RAS Plan: P1 River: summittrib Reach: 1 Profile: PF 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	2421	PF 1	470.00	2614.40	2615.28	2615.09	2615.33	0.011698	2.13	256.39	607.48	0.51
1	2228	PF 1	470.00	2612.74	2613.78	2613.47	2613.83	0.006599	2.18	252.42	383.71	0.41
1	2018	PF 1	470.00	2611.21	2612.14	2611.84	2612.21	0.008873	2.29	211.41	385.46	0.47
1	1801	PF 1	470.00	2609.23	2610.34		2610.41	0.008194	2.36	249.51	464.38	0.46
1	1591	PF 1	470.00	2607.70	2608.61	2608.32	2608.67	0.008410	2.48	269.35	441.41	0.51
1	1390	PF 1	470.00	2606.02	2607.27		2607.32	0.005163	2.09	285.38	408.57	0.37
1	1177	PF 1	470.00	2604.31	2605.49	2605.32	2605.63	0.013908	3.29	180.69	314.58	0.61
1	940	PF 1	470.00	2602.00	2603.39		2603.47	0.006166	2.50	228.45	307.31	0.42
1	720	PF 1	470.00	2600.21	2601.39	2601.08	2601.47	0.009664	3.05	226.56	316.82	0.52
1	514	PF 1	470.00	2598.35	2599.33	2599.12	2599.41	0.010022	2.63	238.81	428.13	0.51
1	308	PF 1	470.00	2596.05	2597.25	2597.11	2597.37	0.013418	3.45	188.21	327.52	0.61

SUMMIT TRIBUTARY
2/2

Project: Lee Moore Channel HMS Model Simulation Run: 24- Hour SCS Type 1

Start of Run: 06Oct2006, 12:00 Basin Model: Lee Moore Channel
End of Run: 11Oct2006, 00:00 Meteorologic Model: SCS 24-hour Storm
Compute Time: 24Jun2008, 10:56:00 Control Specifications: Control 1

Volume Units: AC-FT

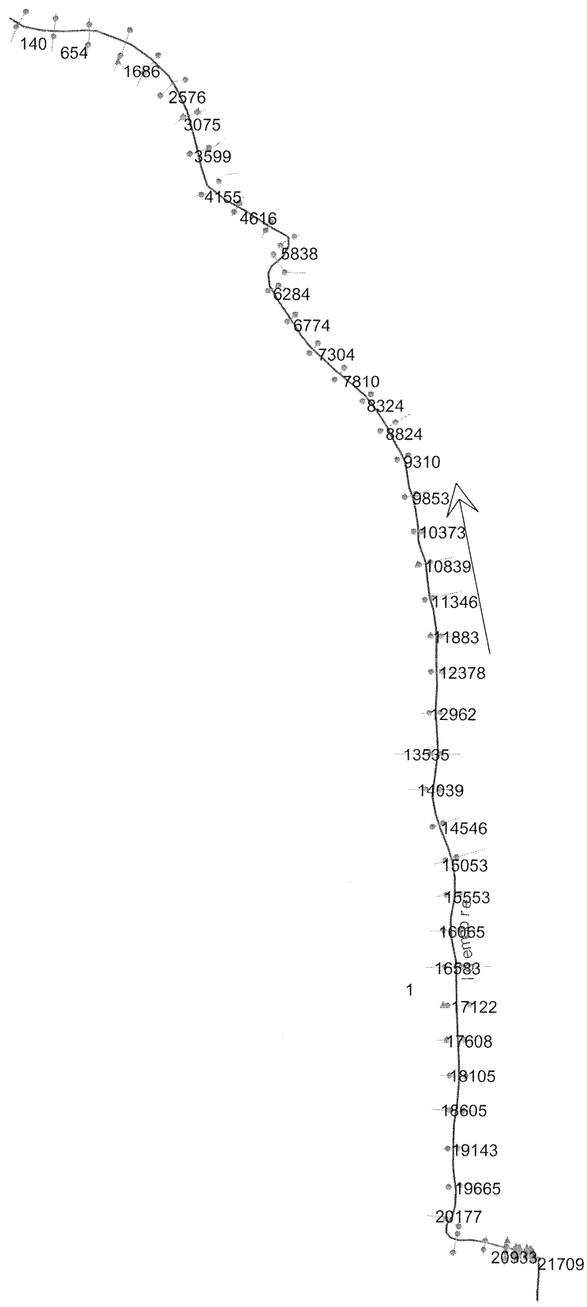
Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
Flato J17	29.0900	2193.32	07Oct2006, 04:36	2219.90
LMJ1	160.8611	21929.41	07Oct2006, 05:24	21234.72
LMJ2	163.2801	21911.33	07Oct2006, 05:36	21568.81
LMJ3	163.2801	21821.84	07Oct2006, 05:42	21568.72
LMW2D	130.0000	20050.31	07Oct2006, 05:12	18758.41
RLMJ1	160.8611	21737.71	07Oct2006, 05:36	21234.63
RLMJ2	163.2801	21821.84	07Oct2006, 05:42	21568.72
RLMW2D	130.0000	19704.16	07Oct2006, 05:24	18758.28
Summit J3S	2.4190	679.28	06Oct2006, 23:42	334.19
UN1	1.4330	450.53	06Oct2006, 23:36	208.42
UN2	0.2031	129.45	06Oct2006, 22:18	29.60
UN3	0.1350	91.30	06Oct2006, 22:12	18.52

Project: Lee Moore Channel HMS Model Simulation Run: 24- Hour SCS Type 1

Start of Run: 06Oct2006, 12:00 Basin Model: Lee Moore Channel
End of Run: 11Oct2006, 00:00 Meteorologic Model: SCS 24-hour Storm
Compute Time: 24Jun2008, 10:56:00 Control Specifications: Control 1

Volume Units: IN

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
Flato J17	29.0900	2193.32	07Oct2006, 04:36	1.43
LMJ1	160.8611	21929.41	07Oct2006, 05:24	2.48
LMJ2	163.2801	21911.33	07Oct2006, 05:36	2.48
LMJ3	163.2801	21821.84	07Oct2006, 05:42	2.48
LMW2D	130.0000	20050.31	07Oct2006, 05:12	2.71
RLMJ1	160.8611	21737.71	07Oct2006, 05:36	2.48
RLMJ2	163.2801	21821.84	07Oct2006, 05:42	2.48
RLMW2D	130.0000	19704.16	07Oct2006, 05:24	2.71
Summit J3S	2.4190	679.28	06Oct2006, 23:42	2.59
UN1	1.4330	450.53	06Oct2006, 23:36	2.73
UN2	0.2031	129.45	06Oct2006, 22:18	2.73
UN3	0.1350	91.30	06Oct2006, 22:12	2.57



LEE MOORE CHANNEL
HEC-RAS SCHEMATIC

HEC-RAS Plan: Plan 04 River: leemoore Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	21709	PF 1	20050.00	2617.14	2637.26		2639.08	0.002301	12.33	2086.71	215.00	0.52
1	21585	PF 1	20050.00	2616.17	2634.59	2631.14	2638.13	0.004930	15.10	1328.06	95.70	0.68
1	21573.5		Bridge									
1	21562	PF 1	20050.00	2614.85	2631.24	2630.70	2636.74	0.008893	18.82	1065.31	84.74	0.94
1	21522	PF 1	20050.00	2616.05	2632.05	2630.62	2636.00	0.005509	16.17	1323.60	172.68	0.77
1	21422	PF 1	20050.00	2615.76	2631.85	2629.34	2635.37	0.004484	15.20	1364.52	108.32	0.73
1	21395		Bridge									
1	21368	PF 1	20050.00	2615.38	2630.29	2628.83	2634.69	0.006324	16.85	1205.03	101.69	0.83
1	21238	PF 1	20050.00	2614.64	2630.60	2629.12	2633.11	0.003877	14.23	1868.53	343.41	0.68
1	20933	PF 1	20050.00	2613.63	2630.42		2632.00	0.002037	10.63	2223.68	247.05	0.51
1	20533	PF 1	20050.00	2612.54	2630.63		2631.22	0.000783	6.18	3246.19	269.28	0.31
1	20177	PF 1	20050.00	2611.07	2629.53		2630.76	0.001761	8.91	2251.06	196.07	0.46
1	19665	PF 1	20050.00	2609.20	2628.26		2629.78	0.001955	9.88	2028.95	162.28	0.49
1	19143	PF 1	20050.00	2607.49	2623.50	2622.55	2627.76	0.006920	16.58	1209.57	112.97	0.89
1	18605	PF 1	20050.00	2606.20	2621.93		2624.35	0.004207	12.48	1605.97	162.38	0.70
1	18105	PF 1	20050.00	2605.31	2620.52		2622.34	0.003217	10.85	1848.15	189.85	0.61
1	17608	PF 1	20050.00	2604.50	2620.06	2615.01	2621.06	0.001454	8.01	2503.44	357.35	0.42
1	17122	PF 1	20050.00	2602.96	2619.79	2614.14	2620.38	0.000920	6.22	3355.42	367.55	0.33
1	16583	PF 1	20050.00	2601.46	2618.42		2619.64	0.001852	8.85	2265.23	206.88	0.47
1	16065	PF 1	20050.00	2600.00	2617.54		2618.75	0.001579	8.80	2278.22	185.36	0.44
1	15553	PF 1	20050.00	2597.99	2615.53		2617.55	0.003208	11.41	1757.54	164.18	0.61
1	15053	PF 1	20050.00	2596.40	2614.15		2616.07	0.002615	11.12	1802.51	149.25	0.56
1	14546	PF 1	20050.00	2594.56	2612.18		2614.56	0.003234	12.37	1620.72	132.80	0.62
1	14039	PF 1	20050.00	2592.81	2612.22		2613.21	0.001178	8.00	2508.61	217.49	0.39
1	13535	PF 1	20050.00	2590.93	2611.16	2603.36	2612.52	0.001474	9.33	2159.53	713.17	0.43
1	12962	PF 1	20050.00	2588.67	2609.48		2611.36	0.002604	11.03	1899.25	367.79	0.56
1	12378	PF 1	20050.00	2586.67	2608.26		2609.96	0.002061	10.46	1917.04	148.45	0.50
1	11883	PF 1	20050.00	2582.91	2607.63	2599.72	2609.01	0.001463	9.48	2206.48	235.47	0.43
1	11346	PF 1	21930.00	2580.77	2604.17	2600.56	2607.42	0.005431	14.47	1515.48	113.87	0.70
1	10839	PF 1	21930.00	2578.27	2604.35	2595.91	2605.50	0.001475	8.66	2701.86	451.70	0.39
1	10373	PF 1	21930.00	2576.71	2597.04	2597.04	2603.47	0.012046	20.34	1077.96	84.83	1.01
1	9853	PF 1	21930.00	2574.27	2592.87		2596.48	0.005557	15.23	1440.08	129.95	0.81
1	9310	PF 1	21930.00	2572.89	2591.51		2593.65	0.003564	11.75	1865.68	144.47	0.58
1	8824	PF 1	21930.00	2572.06	2590.91		2592.01	0.002151	8.46	2617.96	258.57	0.45
1	8324	PF 1	21930.00	2571.40	2589.04		2590.87	0.002137	10.94	2073.23	170.57	0.52
1	7810	PF 1	21930.00	2570.08	2588.73		2589.95	0.001028	8.87	2471.56	178.32	0.42
1	7304	PF 1	21930.00	2568.63	2583.40	2583.40	2588.50	0.006472	18.13	1209.77	119.07	1.00
1	6774	PF 1	21930.00	2567.04	2580.95		2583.77	0.005702	13.68	1692.70	187.61	0.73

LEE MOORE CHANNEL
EXISTING CONDITIONS
1/2

HEC-RAS Plan: Plan 04 River: leemoore Reach: 1 Profile: PF 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	6284	PF 1	21930.00	2564.64	2581.21		2582.02	0.001363	8.11	3452.85	401.02	0.41
1	5838	PF 1	21930.00	2562.63	2581.44		2581.61	0.000281	3.63	6714.31	526.20	0.17
1	5473	PF 1	21930.00	2560.97	2580.64		2581.37	0.001082	6.83	3210.95	230.13	0.32
1	5127	PF 1	21930.00	2559.70	2575.75	2574.48	2580.18	0.008424	16.90	1297.80	109.15	0.86
1	4616	PF 1	21930.00	2557.99	2571.22	2571.22	2575.33	0.010314	16.41	1396.88	191.93	0.95
1	4155	PF 1	21930.00	2554.98	2568.61		2569.75	0.002440	8.77	2844.27	547.57	0.53
1	3599	PF 1	21930.00	2553.29	2567.86		2568.64	0.001392	7.38	3344.96	429.40	0.41
1	3075	PF 1	21930.00	2551.71	2563.27	2563.27	2566.85	0.009350	15.17	1446.41	317.48	1.00
1	2576	PF 1	21930.00	2550.30	2562.21		2563.04	0.002027	7.33	2992.96	394.87	0.47
1	2160	PF 1	21930.00	2548.32	2560.06		2561.72	0.004806	10.34	2122.36	324.07	0.71
1	1686	PF 1	21930.00	2546.34	2559.35	2556.05	2560.14	0.001811	7.20	3263.11	561.63	0.45
1	1147	PF 1	21930.00	2544.66	2558.38		2559.22	0.001623	7.60	3111.88	371.93	0.43
1	654	PF 1	21930.00	2543.49	2556.93		2558.22	0.002370	9.20	2575.25	398.70	0.53
1	140	PF 1	21930.00	2542.25	2555.68	2552.56	2556.98	0.002401	9.38	2624.72	406.74	0.53

LEE MOORE CHANNEL
EXISTING CONDITIONS