

US EPA ARCHIVE DOCUMENT

Appendix G Meteorological and Hydrologic Data

**Appendix G1 Precipitation and Other Meteorological
Data**

Table G1-1
Daily Climatic Data, NWS Weather Station in Lincoln, Rhode Island

Date	Max. Daily Temp. (°F)	Min. Daily Temp. (°F)	Avg. Daily Temp. (°F)	Avg. Daily Dew Pt. (°F)	Max. 1-Hour Precip (in)	Total Daily Precip (in)	Prevail. Wind Direction (°)	Avg. Wind Speed (mph)	Peak Wind Direction (°)	Peak Wind Speed (mph)	Total Sky Cover (10ths)	Max. Relative Humidity (%)	Max. Relative Humidity (%)	Avg. Sea Level Bar. Pressure (mbars)
1-Aug-03	73	61	67	61.4	0.36	1.04	50	3.6	20	9	10.0	97	75	1020.5
2-Aug-03	82	64	73	65.8	0.08	0.08	220	2.2	40	7	7.3	90	69	1018.5
3-Aug-03	84	72	78	68.6		0.00	200	4.0	210	18	7.2	90	65	1020.1
4-Aug-03	81	72	77	68.3	0.02	0.05	200	5.7	170	18	8.5	90	74	1017.0
5-Aug-03	79	70	75	67.8	0.09	0.24	180	3.6	210	9	9.0	90	74	1013.9
6-Aug-03	82	68	75	64.8		0.00	200	4.5	210	25	5.4	87	56	1013.4
7-Aug-03	81	66	74	66.2	0.36	1.33	160	1.3	210	6	5.7	90	65	1014.3
8-Aug-03	81	66	74	66.1	0.89	2.36	210	2.2	70	28	9.1	93	69	1013.8
9-Aug-03	81	70	76	67.8		0.00	180	1.9	220	6	6.5	87	69	1017.9
10-Aug-03	82	73	78	68.3	0.06	0.08	220	6.8	220	22	7.7	90	65	1016.9
11-Aug-03	84	70	77	66.8		0.00	220	4.9	230	16	4.1	81	63	1016.3
12-Aug-03	82	68	75	67.6		0.00	210	2.7	140	8	5.1	87	65	1021.2
13-Aug-03	84	66	75	67.4	0.88	0.88	250	2.6	270	18	5.4	90	67	1024.6
14-Aug-03	84	66	75	64.6		0.00	320	5.1	310	16	0.1	90	51	1023.6
15-Aug-03	86	64	75	63.2		0.00	250	3.5	280	9	0.3	90	49	1019.1
16-Aug-03	84	66	75	65.3	0.04	0.04	240	4.6	260	17	0.8	90	55	1010.2
17-Aug-03	75	63	69	60.8	0.07	0.13	50	3.7	30	8	4.0	90	63	1012.4
18-Aug-03	75	61	68	58.8	0.42	0.57	30	2.9	80	20	2.3	90	62	1018.7
19-Aug-03	82	61	72	60.9		0.00	250	5.7	270	12	0.0	84	47	1020.8
20-Aug-03	84	61	73	61.6		0.00	260	4.9	260	8	0.0	90	51	1019.6
21-Aug-03	86	63	75	62.7		0.00	280	4.6	250	16	0.0	90	51	1016.6
22-Aug-03	88	70	79	67.2		0.00	230	6.3	240	18	0.5	87	55	1010.2
23-Aug-03	79	54	67	51.9		0.00	320	8.3	280	24	0.6	78	32	1010.9
24-Aug-03	72	46	59	40.8		0.00	300	7.5	300	24	0.0	77	30	1015.8
25-Aug-03	79	52	66	52.2		0.00	230	4.6	240	18	2.6	81	47	1014.5
26-Aug-03	81	61	71	58.1		0.00	230	4.6	240	9	0.8	81	47	1012.3
27-Aug-03	82	63	73	58.0		0.00	240	7.1	280	25	0.1	90	38	1010.2
28-Aug-03	73	50	62	48.2		0.00	340	5.8	300	20	0.3	83	38	1018.8
29-Aug-03	79	48	64	56.0		0.00	190	5.3	210	21	3.0	89	50	1019.9
30-Aug-03	81	61	71	61.0		0.00	270	6.6	30	20	5.2	90	51	1018.2
31-Aug-03	68	52	60	46.2		0.00	30	5.9	20	13	1.2	80	45	1026.3
1-Sep-03	66	54	60	53.0	0.07	0.22	220	2.5	210	5	8.0	90	68	1023.9
2-Sep-03	63	54	59	52.6	0.40	1.46	50	6.2	30	10	8.4	90	72	1022.2
3-Sep-03	70	55	63	52.6		0.00	130	6.0	120	16	8.7	90	56	1021.4
4-Sep-03	73	61	67	63.6	0.31	0.99	210	3.6	210	8	9.3	90	79	1011.4
5-Sep-03	75	57	66	57.8		0.00	350	5.6	350	10	3.2	90	53	1013.0
6-Sep-03	73	52	63	51.0		0.00	360	4.0	350	10	0.4	90	46	1017.3
7-Sep-03	77	48	63	52.1		0.00	280	3.8	310	9	0.0	86	47	1015.3
8-Sep-03	72	50	61	50.6		0.00	40	5.6	30	17	1.5	83	49	1019.4
9-Sep-03	64	43	54	44.6		0.00	40	6.1	40	21	2.2	80	48	1026.1

Table G1-1
Daily Climatic Data, NWS Weather Station in Lincoln, Rhode Island

Date	Max. Daily Temp. (°F)	Min. Daily Temp. (°F)	Avg. Daily Temp. (°F)	Avg. Daily Dew Pt. (°F)	Max. 1-Hour Precip (in)	Total Daily Precip (in)	Prevail. Wind Direction (°)	Avg. Wind Speed (mph)	Peak Wind Direction (°)	Peak Wind Speed (mph)	Total Sky Cover (10ths)	Max. Relative Humidity (%)	Max. Relative Humidity (%)	Avg. Sea Level Bar. Pressure (mbars)
10-Sep-03	72	41	57	43.8		0.00	320	2.4	320	7	0.0	82	43	1023.2
11-Sep-03	73	52	63	50.8		0.00	50	6.9	60	17	0.8	90	43	1025.0
12-Sep-03	70	55	63	50.4		0.00	60	6.5	60	17	3.3	90	42	1027.4
13-Sep-03	73	55	64	57.1		0.00	100	5.6	40	9	9.3	90	68	1026.9
14-Sep-03	79	64	72	63.1	0.02	0.02	150	3.7	130	9	8.0	90	60	1025.5
15-Sep-03	77	64	71	62.6		0.23	150	3.8	140	8	6.8	90	69	1021.0
16-Sep-03	77	59	68	60.7	0.42	1.01	330	5.7	160	20	5.9	90	62	1016.9
17-Sep-03	73	52	63	49.0		0.00	40	5.8	40	10	0.0	80	44	1025.2
18-Sep-03	72	55	64	51.6		0.00	50	9.5	70	25	4.5	83	49	1027.9
19-Sep-03	79	61	70	63.8	0.31	0.91	170	7.9	120	25	10.0	90	62	1021.4
20-Sep-03	81	63	72	62.3		0.00	280	3.9	280	8	4.0	90	54	1019.5
21-Sep-03	73	52	63	50.9		0.00	10	4.3	40	12	3.5	80	46	1023.9
22-Sep-03	72	54	63	50.9	0.42	0.42	120	2.2	20	7	5.0	90	46	1023.0
23-Sep-03	72	55	64	57.0	0.19	0.37	150	7.4	200	30	4.0	90	72	1011.4
24-Sep-03	72	48	60	47.4		0.00	280	4.7	260	10	0.0	89	39	1017.8
25-Sep-03	73	52	63	52.3		0.00	200	4.6	190	20	0.8	90	53	1016.5
26-Sep-03	72	59	66	55.6	0.63	0.63	30	4.3	20	12	8.9	83	63	1018.1
27-Sep-03	75	57	66	58.7		0.00	130	4.6	150	17	7.3	90	62	1017.4
28-Sep-03	70	61	66	61.4	0.01	0.02	150	5.1	110	8	9.0	90	78	1007.9
29-Sep-03	70	46	58	47.2		0.00	290	5.8	300	18	1.5	90	49	1011.0
30-Sep-03	63	41	52	39.3		0.00	280	5.6	260	18	0.0	82	38	1020.4
1-Oct-03	63	39	51	41.7		0.00	250	1.8	220	8	4.9	89	48	1019.8
2-Oct-03	61	39	50	38.2	0.06	0.06	260	5.3	300	26	3.4	89	39	1014.6
3-Oct-03	57	30	44	29.4		0.00	290	4.6	280	10	0.0	89	34	1018.5
4-Oct-03	59	37	48	43.0	0.06	0.09	200	4.3	270	22	6.2	90	66	1011.3
5-Oct-03	57	34	46	34.7		0.00	270	4.8	260	24	1.2	89	39	1012.8
6-Oct-03	57	34	46	32.0		0.00	310	4.2	300	9	0.6	82	45	1018.0
7-Oct-03	61	32	47	33.6		0.00	220	4.0	250	17	0.0	85	36	1021.3
8-Oct-03	70	43	57	49.2		0.00	230	7.1	270	22	0.2	90	49	1021.3
9-Oct-03	73	50	62	50.8		0.00	50	4.1	70	8	0.1	90	49	1022.2
10-Oct-03	64	48	56	47.9		0.00	40	7.7	20	12	5.5	90	67	1023.9
11-Oct-03	64	46	55	45.7		0.00	40	9.3	40	20	3.6	89	52	1021.4
12-Oct-03	57	48	53	48.8	0.04	0.10	10	11.3	20	23	9.7	90	74	1010.4
13-Oct-03	68	48	58	44.1		0.00	330	8.3	340	24	1.2	90	40	1010.2
14-Oct-03	63	39	51	43.2		0.00	140	6.4	120	22	2.1	83	48	1011.2
15-Oct-03	63	46	55	42.8	0.62	2.01	250	14.4	260	39	6.9	90	36	993.6
16-Oct-03	61	39	50	32.3		0.00	260	8.2	270	26	0.7	82	36	1012.5
17-Oct-03	57	36	47	31.7	0.04	0.08	270	3.5	260	17	2.6	82	33	1019.6
18-Oct-03	54	32	43	32.6	0.06	0.10	320	3.6	280	9	3.6	89	39	1015.8
19-Oct-03	45	32	39	29.8	0.06	0.15	20	3.9	10	10	5.4	89	64	1014.8

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Date	Max. Daily Temp. (°F)	Min. Daily Temp. (°F)	Avg. Daily Temp. (°F)	Avg. Daily Dew Pt. (°F)	Max. 1-Hour Precip (in)	Total Daily Precip (in)	Prevail. Wind Direction (°)	Avg. Wind Speed (mph)	Peak Wind Direction (°)	Peak Wind Speed (mph)	Total Sky Cover (10ths)	Max. Relative Humidity (%)	Max. Relative Humidity (%)	Avg. Sea Level Bar. Pressure (mbars)
20-Oct-03	52	27	40	29.0		0.00	180	4.2	260	20	0.0	88	39	1018.6
21-Oct-03	66	41	54	48.4	0.01	0.01	210	9.1	220	30	3.4	89	61	1000.6
22-Oct-03	57	36	47	34.8		0.00	10	8.7	30	13	9.7	89	65	998.6
23-Oct-03	39	30	35	26.0	0.07	0.12	300	8.1	320	24	7.8	82	56	999.9
24-Oct-03	45	27	36	20.4		0.00	260	6.4	290	23	3.5	78	38	1017.5
25-Oct-03	55	25	40	28.6		0.00	200	3.5	220	22	0.7	83	34	1029.6
26-Oct-03	61	45	53	51.1	0.01	0.02	190	7.1	210	30	10.0	90	62	1022.4
27-Oct-03	64	54	59	54.4	0.32	1.52	180	1.7	190	16	9.9	90	73	1009.5
28-Oct-03	63	43	53	39.6	0.01	0.05		0.0		0	3.6	89	42	1012.1
29-Oct-03	66	46	56	49.0	0.51	2.38					9.0	90	63	1004.3
30-Oct-03	57	39	48	33.2	0.29	0.29		0.0		0	0.4	82	38	1020.2
31-Oct-03	66	37	52	40.2		0.00		0.0		0	0.1	89	43	1025.0
Minimum	39	25	35	20.4	0.01	0.00	10	0.0	10	0	0.0	77	30	993.6
Maximum	88	73	79	68.6	0.89	2.38	360	14.4	350	39	10.0	97	79	1029.6
Average	71	52	62	51.4	0.23	0.22	192	5.1	185	16	3.9	87	53	1017.1

Note: Source for Lincoln data is the National Weather Service (NWS), Taunton, Massachusetts, <http://www.erh.noaa.gov/box/dailystns.shtml>

Table G1-2
Daily Climatic Data, Onsite Station Compared to NWS Weather Station in Lincoln, Rhode Island

Date	Time	On-site Temp. (°F)	Lincoln Max Daily Temp. (°F)	Lincoln Min Daily Temp. (°F)	Lincoln Avg. Daily Temp. (°F)	On-site Dew Pt. (°F)	Lincoln Avg. Daily Dew Pt. (°F)	Onsite Wind Speed (mph)	Lincoln Avg. Wind Speed (mph)	On-site Pressure (in)	On-site Pressure (mm)	On-site Pressure (mbars)	Lincoln Avg. Sea Level Bar. Pressure (mbars)
25-Aug-03			79	52	66		52.2		4.6				1014.5
26-Aug-03			81	61	71		58.1	0	4.6				1012.3
26-Aug-03	7:30	64.2				48							
26-Aug-03	12:59	82.8				64		0		29.91		1013.9	
26-Aug-03	16:35	80.5				63				29.86		1012.2	
27-Aug-03			82	63	73		58.0		7.1				1010.2
27-Aug-03	6:43	64.9				48				29.79		1009.8	
27-Aug-03	11:38	82.9				64		10		29.83		1011.2	
27-Aug-03	16:30	86.7				68		5		29.82		1010.8	
28-Aug-03			73	50	62		48.2		5.8				1018.8
28-Aug-03	6:49	57.2				41		0		30.05		1018.6	
28-Aug-03	15:00	78.1				61		5		30.09		1020.0	
28-Aug-03	17:49	74.5				57		3		30.10		1020.3	
29-Aug-03			79	48	64		56.0		5.3				1019.9
29-Aug-03	6:47	51.8				37		0		30.20		1023.7	
29-Aug-03	15:34	86.7				68		2		30.09		1020.0	
30-Aug-03			81	61	71		61.0		6.6				1018.2
31-Aug-03			68	52	60		46.2		5.9				1026.3
1-Sep-03			66	54	60		53.0		2.5				1023.9
2-Sep-03			63	54	59		52.6	0	6.2	30.17		1022.7	1022.2
2-Sep-03	7:30	55.2					52.6		6.2				
2-Sep-03	11:14	61.3				45		0		30.19		1023.4	
3-Sep-03			70	55	63		52.6		6.0				1021.4
3-Sep-03	6:57	58.5				41		2		30.25		1025.4	
4-Sep-03			73	61	67		63.6		3.6				1011.4
4-Sep-03	17:12	70.9				54		0		29.82		1010.8	
5-Sep-03			75	57	66		57.8		5.6				1013.0
5-Sep-03	13:02	77.4				59		4		29.92		1014.2	
6-Sep-03			73	52	63		51.0		4.0				1017.3
7-Sep-03			77	48	63		52.1		3.8				1015.3
8-Sep-03			72	50	61		50.6		5.6				1019.4
8-Sep-03	6:40	60.3				43		2		30.15		1022.0	
8-Sep-03	10:07	70.3				52		8		30.20		1023.7	
8-Sep-03	10:49	72.1				54		3		30.18		1023.0	
8-Sep-03	17:25	73.2				55		1		30.17		1022.7	
9-Sep-03			64	43	54		44.6		6.1				1026.1
9-Sep-03	6:56	53.6				37		2		30.32		1027.8	
9-Sep-03	13:30	69.8				50		2		30.36		1029.1	
9-Sep-03	17:06	70.3				50		4		30.33		1028.1	

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Daily Climatic Data, Onsite Station Compared to NWS Weather Station in Lincoln, Rhode Island

Date	Time	On-site Temp. (°F)	Lincoln Max Daily Temp. (°F)	Lincoln Min Daily Temp. (°F)	Lincoln Avg. Daily Temp. (°F)	On-site Dew Pt. (°F)	Lincoln Avg. Daily Dew Pt. (°F)	Onsite Wind Speed (mph)	Lincoln Avg. Wind Speed (mph)	On-site Pressure (in)	On-site Pressure (mm)	On-site Pressure (mbars)	Lincoln Avg. Sea Level Bar. Pressure (mbars)
10-Sep-03			72	41	57		43.8		2.4				1023.2
10-Sep-03	7:34	45.7				30		2		30.29		1026.7	
10-Sep-03	13:30	73.9				54		5		30.21		1024.0	
10-Sep-03	16:18	78.6				59		3		30.15		1022.0	
11-Sep-03			73	52	63		50.8		6.9				1025.0
11-Sep-03	8:00	59.2				41		0		30.25		1025.4	
11-Sep-03	14:30	81.0				61		2		30.33		1028.1	
11-Sep-03	17:30	74.3				54		0		30.34		1028.4	
12-Sep-03			70	55	63		50.4		6.5				1027.4
12-Sep-03	9:16	65.5				48		0		30.44		1031.8	
12-Sep-03	12:45	75.0				55		5		30.40		1030.5	
13-Sep-03			73	55	64		57.1		5.6				1026.9
14-Sep-03			79	64	72		63.1		3.7				1025.5
15-Sep-03		67.1	77	64	71		62.6		3.8				1021.0
15-Sep-03	7:00					48				30.24		1025.0	1021.0
15-Sep-03	16:11	79.7				59		6		30.15		1022.0	
16-Sep-03			77	59	68		60.7		5.7				1016.9
16-Sep-03	6:55	68.9				50		0		30.03		1017.9	
16-Sep-03	16:18	84.0				63		0		30.05		1018.6	
17-Sep-03			73	52	63		49.0		5.8				1025.2
17-Sep-03	6:53	53.4				36		3		30.30		1027.1	
17-Sep-03	17:05	77.4				57					770.9	1028.0	
18-Sep-03			72	55	64		51.6		9.5				1027.9
18-Sep-03	6:44	60.0				41		2			773.4	1031.3	
18-Sep-03	15:16	74.5				54		3			772.9	1030.7	
19-Sep-03			79	61	70		63.8		7.9				1021.4
19-Sep-03	10:06	69.4				52		5			768.3	1024.5	
20-Sep-03			81	63	72		62.3		3.9				1019.5
20-Sep-03	7:48	68.2				48					766.6	1022.3	
21-Sep-03			73	52	63		50.9		4.3				1023.9
22-Sep-03			72	54	63		50.9		2.2				1023.0
23-Sep-03			72	55	64		57.0		7.4				1011.4
24-Sep-03			72	48	60		47.4		4.7				1017.8
25-Sep-03			73	52	63		52.3		4.6				1016.5
26-Sep-03			72	59	66		55.6		4.3				1018.1
27-Sep-03			75	57	66		58.7		4.6				1017.4
28-Sep-03			70	61	66		61.4		5.1				1007.9
29-Sep-03			70	46	58		47.2		5.8				1011.0
29-Sep-03	8:33	56.7				39		4			759.0	1012.1	

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Date	Time	On-site Temp. (°F)	Lincoln Max Daily Temp. (°F)	Lincoln Min Daily Temp. (°F)	Lincoln Avg. Daily Temp. (°F)	On-site Dew Pt. (°F)	Lincoln Avg. Daily Dew Pt. (°F)	Onsite Wind Speed (mph)	Lincoln Avg. Wind Speed (mph)	On-site Pressure (in)	On-site Pressure (mm)	On-site Pressure (mbars)	Lincoln Avg. Sea Level Bar. Pressure (mbars)
30-Sep-03			63	41	52		39.3		5.6				1020.4
30-Sep-03	18:34	53.4				36		0			766.8	1022.5	
1-Oct-03			63	39	51		41.7		1.8				1019.8
1-Oct-03	7:33	44.6				28		0			767.6	1023.6	
2-Oct-03			61	39	50		38.2		5.3				1014.6
2-Oct-03	14:09	62.6				43					760.2	1013.7	
2-Oct-03	19:20	45.7				28		2			762.8	1017.2	
3-Oct-03			57	30	44		29.4		4.6				1018.5
3-Oct-03	7:13	35.8			44	19		0			766.8	1022.5	
4-Oct-03			57	30	48		43.0		4.3				1011.3
4-Oct-03	8:33	50.0				32		0			761.5	1015.5	
5-Oct-03			59	37	46		34.7		4.8				1012.8

Notes: Source for Lincoln data is the National Weather Service (NWS), Taunton, Massachusetts, <http://www.erh.noaa.gov/box/dailystns.shtml>
On-site data collected by Shield personnel at weather station set up next to field trailer.

Appendix G2 Potentiometric Data

Table G2-1
Potentiometric Survey Results - May 6 to 8, 2002
Peterson/Puritan OU2

Measuring Point	FM	Date	Time	DTW Reading (ft)	MP Elevation (ft NGVD29)	Water Level Elevation (ft NGVD29)
GZ-1-1	SH	05/07/02	7:00	8.45	67.08	58.63
L-2	IN	05/07/02	8:15	11.46	69.94	58.48
MW-106A	SH	05/06/02	17:25	10.71	68.61	57.90
MW-107A	SH	05/07/02	9:40	18.25	81.46	63.21
MW-107B	IN	05/07/02	9:40	19.26	81.53	62.27
MW-107C	BR	05/07/02	9:40	20.07	81.55	61.48
MW-108AA	SH	05/07/02	11:25	9.68	69.19	59.51
MW-108A	IN	05/07/02	11:25	9.66	69.00	59.34
MW-108B	DP	05/07/02	11:25	11.18	69.31	58.13
MW-108C	BR	05/07/02	11:25	11.23	69.26	58.03
MW-109AA	SH	05/06/02	11:45	10.66	67.77	57.11
MW-109A	DP	05/06/02	11:45	10.47	68.64	58.17
MW-109B	TL	05/06/02	11:45	11.21	69.13	57.92
MW-109B	TL	05/07/02	12:00	11.39	69.13	57.74
MW-109C	BR	05/06/02	11:45	11.35	69.30	57.95
MW-110A	SH	05/07/02	13:45	7.70	66.91	59.21
MW-110B	TL	05/07/02	13:45	8.73	67.50	58.77
MW-110C	BR	05/07/02	13:45	8.79	67.93	59.14
MW-111AA	SH	05/07/02	15:00	7.80	64.53	56.73
MW-111A	IN	05/07/02	15:00	7.35	64.13	56.78
MW-111B	DP	05/07/02	15:00	7.22	64.01	56.79
MW-111C	BR	05/07/02	15:00	6.06	64.50	58.44
MW-112AA	SH	05/07/02	16:45	10.48	68.59	58.11
MW-112A	IN	05/07/02	16:45	10.23	68.09	57.86
MW-112B	DP	05/07/02	16:45	11.52	68.20	56.68
MW-112C	BR	05/07/02	16:45	11.31	68.09	56.78
MW-A1	DP	05/07/02	8:45	7.06	64.79	57.73
MW-A2	SH	05/07/02	8:45	7.60	65.20	57.60
MW-B1	IN	05/06/02	15:20	3.92	61.91	57.99
MW-B2	SH	05/06/02	15:20	4.76	62.06	57.30
MW-C1	IN	05/06/02	14:45	3.83	60.94	57.11
MW-C2	SH	05/06/02	14:45	4.70	61.38	56.68
P-6	SH	05/06/02	18:00	8.89	67.83	58.94
P-7	IN	05/06/02	17:00	12.39	71.79	59.40
P-8	SH	05/06/02	15:50	5.22	62.49	57.27
P-9	SH	05/08/02	17:45	8.04	66.07	58.03

Table G2-2
Potentiometric Survey Results - August 13 and 14, 2003
Peterson/Puritan OU2

Measuring Point	FM	Date	Time	DTW Reading (ft)	MP Elevation (ft NGVD29)	Water Level Elevation (ft NGVD29)
GZ-1-1	SH	08/14/03	11:42	8.98	67.08	58.10
L-2	IN	08/14/03	11:20	12.13	69.94	57.81
MW-106B	IN	08/14/03	8:51	11.46	68.55	57.09
MW-106C	BR	08/14/03	9:10	10.98	68.20	57.22
MW-107A	SH	08/14/03	10:38	19.22	81.46	62.24
MW-107B	IN	08/14/03	10:41	19.91	81.53	61.62
MW-107C	BR	08/14/03	10:43	20.65	81.55	60.90
MW-108AA	SH	08/14/03	14:50	10.14	69.19	59.05
MW-108A	IN	08/14/03	14:51	10.10	69.00	58.90
MW-108B	DP	08/14/03	14:52	11.73	69.31	57.58
MW-108C	BR	08/14/03	14:53	11.77	69.26	57.49
MW-109AA	SH	08/14/03	15:17	11.60	67.77	56.17
MW-109A	DP	08/14/03	15:17	11.27	68.64	57.37
MW-109B	TL	08/14/03	15:17	11.98	69.13	57.15
MW-109C	BR	08/14/03	15:17	12.20	69.30	57.10
MW-110A	SH	08/14/03	16:39	8.28	66.91	58.63
MW-110B	TL	08/14/03	16:39	9.32	67.50	58.18
MW-110C	BR	08/14/03	16:39	9.39	67.93	58.54
MW-111AA	SH	08/14/03	15:30	8.29	64.53	56.24
MW-111A	IN	08/14/03	15:30	7.89	64.13	56.24
MW-111B	DP	08/14/03	15:30	7.75	64.01	56.26
MW-111C	BR	08/14/03	15:30	6.62	64.50	57.88
MW-112AA	SH	08/14/03	16:15	11.25	68.59	57.34
MW-112A	IN	08/14/03	16:15	10.78	68.09	57.31
MW-112B	DP	08/14/03	16:15	12.04	68.20	56.16
MW-112C	BR	08/14/03	16:15	11.87	68.09	56.22
MW-501A	SH	08/14/03	12:05	DRY @ 9.40	68.68	DRY @ 59.28
MW-501B	SH	08/14/03	12:05	10.19	68.46	58.27
MW-501C	DP	08/14/03	12:05	10.15	68.47	58.32
MW-502	DP	08/14/03	11:10	15.56	73.47	57.91
MW-A1	DP	08/14/03	11:30	7.82	64.79	56.97
MW-A2	SH	08/14/03	11:32	8.25	65.20	56.95
MW-B1	IN	08/14/03	13:32	5.15	61.91	56.76
MW-B2	SH	08/14/03	13:32	5.75	62.06	56.31
MW-C1	IN	08/14/03	13:50	4.72	60.94	56.22
MW-C2	SH	08/14/03	13:50	5.61	61.38	55.77
P-6	SH	08/14/03	8:15	9.54	67.83	58.29
P-7	IN	08/14/03	9:27	13.44	71.79	58.35
P-8	SH	08/14/03	13:15	6.22	62.49	56.27
PZ-01 inside	SH	08/13/03	15:05	4.00	59.57	55.57
PZ-01 outside	SW	08/13/03	15:05	4.50	59.57	55.07
PZ-02 inside	SH	08/13/03	14:25	4.56	60.31	55.75
PZ-02 outside	SW	08/13/03	14:25	4.82	60.31	55.49
PZ-03 inside	SH	08/13/03	17:00	4.20	61.11	56.91
PZ-03 outside	SW	08/13/03	17:00	4.72	61.11	56.39
PZ-04 inside	SH	08/13/03	10:45	3.33	56.11	52.78
PZ-04 outside	SW	08/13/03	10:45	3.50	56.11	52.61

Table G2-2
Potentiometric Survey Results - August 13 and 14, 2003
Peterson/Puritan OU2

Measuring Point	FM	Date	Time	DTW Reading (ft)	MP Elevation (ft NGVD29)	Water Level Elevation (ft NGVD29)
PZ-05 inside	SH	08/13/03	16:14	3.44	60.12	56.68
PZ-05 outside	SW	08/13/03	16:14	3.44	60.12	56.68
PZ-06 inside	SH	08/13/03	9:55	4.70	59.48	54.78
PZ-06 outside	SW	08/13/03	9:55	4.89	59.48	54.59
PZ-07 inside	SH	08/13/03	16:15	4.54	59.74	55.20
PZ-07 outside	SW	08/13/03	16:15	4.50	59.74	55.24
PZ-08 inside	SH	08/13/03	16:04	8.18	63.43	55.25
PZ-09 inside	SW	08/13/03	16:40	2.14	58.41	56.27
PZ-09 outside	SW	08/13/03	16:40	2.08	58.41	56.33
PZ-10 inside	SH	08/13/03	15:30	3.98	63.70	59.72
PZ-10 outside	SW	08/13/03	15:30	3.98	63.70	59.72
PZ-11 inside	SH	08/13/03	15:40	3.64	63.53	59.89
PZ-11 outside	SW	08/13/03	15:40	3.64	63.53	59.89
PZ-12 inside	SH	08/13/03	17:20	4.21	64.14	59.93
PZ-12 outside	SW	08/13/03	17:20	4.18	64.14	59.96
PZ-13 inside	SH	08/13/03	18:32	3.98	65.11	61.13
PZ-13 outside	SW	08/13/03	18:32	4.27	65.11	60.84
PZ-14 inside	SH	08/13/03	18:40	4.45	61.72	57.27
PZ-14 outside	SW	08/13/03	18:40	4.56	61.72	57.16
PZ-15 inside	SH	08/13/03	18:10	DRY	68.49	DRY
PZ-15 outside	SW	08/13/03	18:10	1.86	68.49	66.63
PZ-16 inside	SH	08/13/03	16:25	11.00	65.92	54.92
PZ-17 inside	SH	08/13/03	14:35	9.52	65.83	56.31
PZ-17 outside	SW	08/13/03	14:35	DRY	65.83	DRY
PZ-18 inside	SH	08/13/03	14:45	10.08	66.12	56.04
PZ-18 outside	SW	08/13/03	14:45	DRY	66.12	DRY

Table G2-3
Potentiometric Survey Results - August 25 to 27, 2003
Peterson/Puritan OU2

Measuring Point	FM	Date	Time	DTW Reading (ft)	MP Elevation (ft NGVD29)	Water Level Elevation (ft NGVD29)
GZ-1-1	SH	08/25/03	9:40	9.94	67.08	57.14
GZ-4-1	SH	08/25/03	9:13	8.09	63.49	55.40
L-2	IN	08/25/03	9:30	13.27	69.94	56.67
MW-106A	SH	08/25/03	14:40	12.47	68.61	56.14
MW-106B	IN	08/25/03	14:40	12.54	68.55	56.01
MW-106C	BR	08/25/03	14:40	12.00	68.20	56.20
MW-107A	SH	08/25/03	10:00	20.98	81.46	60.48
MW-107B	IN	08/25/03	10:00	21.53	81.53	60.00
MW-107C	BR	08/25/03	10:00	22.17	81.55	59.38
MW-108AA	SH	08/25/03	11:05	11.78	69.19	57.41
MW-108A	IN	08/25/03	11:05	11.73	69.00	57.27
MW-108B	DP	08/25/03	11:05	13.16	69.31	56.15
MW-108C	BR	08/25/03	11:05	13.18	69.26	56.08
MW-109AA	SH	08/25/03	12:15	12.88	67.77	54.89
MW-109A	DP	08/25/03	12:15	12.64	68.64	56.00
MW-109B	TL	08/25/03	12:15	13.32	69.13	55.81
MW-109C	BR	08/25/03	12:15	13.56	69.30	55.74
MW-110A	SH	08/25/03	13:27	9.56	66.91	57.35
MW-110B	TL	08/25/03	13:27	10.64	67.50	56.86
MW-110C	BR	08/25/03	13:27	10.59	67.93	57.34
MW-111AA	SH	08/25/03	12:58	9.59	64.53	54.94
MW-111A	IN	08/25/03	12:58	9.18	64.13	54.95
MW-111B	DP	08/25/03	12:58	9.03	64.01	54.98
MW-111C	BR	08/25/03	12:58	7.86	64.50	56.64
MW-112AA	SH	08/25/03	13:10	12.64	68.59	55.95
MW-112A	IN	08/25/03	13:10	12.34	68.09	55.75
MW-112B	DP	08/25/03	13:10	13.37	68.20	54.83
MW-112C	BR	08/25/03	13:10	13.21	68.09	54.88
MW-501A	SH	08/25/03	10:15	DRY @ 9.76	68.68	DRY @ 58.92
MW-501B	SH	08/25/03	10:15	11.10	68.46	57.36
MW-501C	DP	08/25/03	10:15	11.08	68.47	57.39
MW-502	DP	08/25/03	9:35	16.68	73.47	56.79
MW-A1	DP	08/25/03	9:20	9.13	64.79	55.66
MW-A2	SH	08/25/03	9:25	9.60	65.20	55.60
MW-B1	IN	08/25/03	11:50	6.54	61.91	55.37
MW-B2	SH	08/25/03	11:50	7.06	62.06	55.00
MW-C1	IN	08/25/03	12:00	6.02	60.94	54.92
MW-C2	SH	08/25/03	12:00	6.82	61.38	54.56
P-6	SH	08/25/03	10:20	10.48	67.83	57.35
P-7	IN	08/25/03	14:50	14.89	71.79	56.90
P-8	SH	08/25/03	11:37	7.56	62.49	54.93
P-9	SH	08/25/03	14:10	10.01	66.07	56.06
PZ-01 inside	SH	08/25/03	11:10	5.24	59.57	54.33
PZ-01 inside	SH	08/27/03	15:25	5.40	59.57	54.17
PZ-01 outside	SW	08/25/03	11:10	5.63	59.57	53.94
PZ-01 outside	SW	08/27/03	15:25	5.79	59.57	53.78
PZ-02 inside	SH	08/25/03	11:57	5.73	60.31	54.58

Table G2-3
Potentiometric Survey Results - August 25 to 27, 2003
Peterson/Puritan OU2

Measuring Point	FM	Date	Time	DTW Reading (ft)	MP Elevation (ft NGVD29)	Water Level Elevation (ft NGVD29)
PZ-02 outside	SW	08/25/03	11:57	DRY @ 5.14	60.31	DRY @ 55.17
PZ-03 inside	SH	08/25/03	11:45	6.87	61.11	54.24
PZ-03 outside	SW	08/25/03	11:45	DRY @ 4.79	61.11	DRY @ 56.32
PZ-04 inside	SH	08/25/03	10:41	4.03	56.11	52.08
PZ-04 outside	SW	08/25/03	10:41	4.03	56.11	52.08
PZ-05 inside	SH	08/25/03	8:40	5.73	60.12	54.39
PZ-05 outside	SW	08/25/03	8:40	5.67	60.12	54.45
PZ-06 inside	SH	08/25/03	8:47	DRY @ 4.84	59.48	DRY @ 54.64
PZ-06 outside	SW	08/25/03	8:47	DRY @ 4.94	59.48	DRY @ 54.54
PZ-07 inside	SH	08/25/03	10:20	5.57	59.74	54.17
PZ-07 outside	SW	08/25/03	10:20	5.37	59.74	54.37
PZ-08 inside	SH	08/25/03	9:00	9.35	63.43	54.08
PZ-08 outside	SW	08/25/03	9:00	DRY @ 3.89	63.43	DRY @ 59.54
PZ-09 inside	SH	08/25/03	9:45	3.86	58.41	54.55
PZ-09 outside	SW	08/25/03	9:45	3.84	58.41	54.57
PZ-10 inside	SH	08/25/03	11:21	5.46	63.70	58.24
PZ-10 outside	SW	08/25/03	11:21	5.45	63.70	58.25
PZ-11 inside	SH	08/25/03	11:27	5.27	63.53	58.26
PZ-11 inside	SH	08/27/03	16:15	5.67	63.53	57.86
PZ-11 outside	SW	08/25/03	11:27	5.06	63.53	58.47
PZ-11 outside	SW	08/27/03	16:15	DRY	63.53	DRY
PZ-12 inside	SH	08/25/03	12:25	6.07	64.14	58.07
PZ-12 inside	SH	08/27/03	16:00	6.46	64.14	57.68
PZ-12 outside	SW	08/25/03	12:25	DRY @ 5.00	64.14	DRY @ 59.14
PZ-12 outside	SW	08/27/03	16:00	DRY	64.14	DRY
PZ-13 inside	SH	08/25/03	11:43	4.04	65.11	61.07
PZ-13 outside	SW	08/25/03	11:43	4.43	65.11	60.68
PZ-14 inside	SH	08/25/03	12:05	4.63	61.72	57.09
PZ-14 outside	SW	08/25/03	12:05	5.03	61.72	56.69
PZ-15 inside	SH	08/25/03	12:00	DRY @ 6.03	68.49	DRY @ 62.46
PZ-15 outside	SW	08/25/03	12:00	1.87	68.49	66.62
PZ-16 inside	SH	08/25/03	9:12	12.17	65.92	53.75
PZ-16 outside	SW	08/25/03	9:12	DRY @ 3.36	65.92	DRY @ 62.56
PZ-17 inside	SH	08/25/03	9:19	10.87	65.83	54.96
PZ-17 outside	SW	08/25/03	9:19	DRY @ 3.31	65.83	DRY @ 62.52
PZ-18 inside	SH	08/25/03	9:25	11.25	66.12	54.87
PZ-18 outside	SW	08/25/03	9:25	DRY @ 3.67	66.12	DRY @ 62.45
PZ-19 inside	SH	08/27/03	15:45	12.44	69.69	57.25
PZ-19 outside	SW	08/27/03	15:45	DRY	69.69	DRY
HW-01	SW	08/25/03	15:00	3.43	69.64	66.21

Table G2-4
Potentiometric Survey Results - September 25, 2003
Peterson/Puritan OU2

Measuring Point	FM	Date	Time	DTW Reading (ft)	MP Elevation (ft NGVD29)	Water Level Elevation (ft NGVD29)
GZ-1-1	SH	09/25/03	7:55	9.14	67.08	57.94
L-2	IN	09/25/03	7:50	12.50	69.94	57.44
MW-106A	SH	09/25/03	9:08	11.65	68.61	56.96
MW-106B	IN	09/25/03	9:02	11.53	68.55	57.02
MW-106C	BR	09/25/03	9:04	11.08	68.20	57.12
MW-107A	SH	09/25/03	8:15	22.56	81.46	58.90
MW-107B	IN	09/25/03	8:20	22.71	81.53	58.82
MW-107C	BR	09/25/03	8:26	23.00	81.55	58.55
MW-108AA	SH	09/25/03	15:07	11.47	69.19	56.72
MW-108A	IN	09/25/03	15:10	11.33	69.00	57.67
MW-108B	DP	09/25/03	15:12	12.89	69.31	56.42
MW-108C	BR	09/25/03	15:14	12.89	69.26	56.37
MW-109AA	SH	09/25/03	10:26	12.28	67.77	55.49
MW-109A	DP	09/25/03	10:29	12.92	68.64	55.72
MW-109B	TL	09/25/03	10:30	13.53	69.13	55.60
MW-109C	BR	09/25/03	10:32	13.65	69.30	55.65
MW-110A	SH	09/25/03	14:30	11.69	66.91	55.22
MW-110B	TL	09/25/03	14:28	12.38	67.50	55.12
MW-110C	BR	09/25/03	14:25	11.97	67.93	55.96
MW-111AA	SH	09/25/03	10:35	9.65	64.53	54.88
MW-111A	IN	09/25/03	10:37	9.44	64.13	54.69
MW-111B	DP	09/25/03	10:40	9.30	64.01	54.71
MW-111C	BR	09/25/03	10:43	8.74	64.50	55.76
MW-112AA	SH	09/25/03	10:47	14.20	68.59	54.39
MW-112A	IN	09/25/03	10:50	13.77	68.09	54.32
MW-112B	DP	09/25/03	10:51	13.94	68.20	54.26
MW-112C	BR	09/25/03	10:55	13.74	68.09	54.35
MW-501A	SH	09/25/03	16:22	DRY @ 10.41	68.68	DRY @ 58.27
MW-501B	SH	09/25/03	16:25	10.38	68.46	58.08
MW-501C	DP	09/25/03	16:28	10.37	68.47	58.10
MW-502	DP	09/25/03	8:00	15.90	73.47	57.57
MW-A1	DP	09/25/03	7:45	7.91	64.79	56.88
MW-A2	SH	09/25/03	7:45	8.38	65.20	56.82
MW-B1	IN	09/25/03	9:59	5.50	61.91	56.41
MW-B2	SH	09/25/03	9:58	5.82	62.06	56.24
MW-C1	IN	09/25/03	10:15	5.12	60.94	55.82
MW-C2	SH	09/25/03	10:13	5.69	61.38	55.69
MW-EA-1	SH	09/25/03	15:52	30.23	92.24	62.01
MW-EA-2	BR	09/25/03	16:05	15.21	78.32	63.11
MW-EA-3	BR	09/25/03	17:17	20.46	78.76	58.30
MW-EA-4	BR	09/25/03	17:25	17.03	79.75	62.72
P-6	SH	09/25/03	16:34	9.71	67.83	58.12
P-7	IN	09/25/03	8:50	13.61	71.79	58.18
P-8	SH	09/25/03	9:48	6.04	62.49	56.45
P-9	SH	09/25/03	14:51	10.47	66.07	55.60
PZ-01 inside	SH	09/25/03	10:23	4.19	59.58	55.39
PZ-01 outside	SW	09/25/03	10:23	4.29	59.58	55.29

Table G2-4
Potentiometric Survey Results - September 25, 2003
Peterson/Puritan OU2

Measuring Point	FM	Date	Time	DTW Reading (ft)	MP Elevation (ft NGVD29)	Water Level Elevation (ft NGVD29)
PZ-02 inside	SH	09/25/03	10:10	4.60	60.30	55.70
PZ-02 outside	SW	09/25/03	10:10	4.68	60.30	55.62
PZ-03 inside	SH	09/25/03	10:02	4.85	61.11	56.26
PZ-03 outside	SW	09/25/03	10:02	DRY @ 4.72	61.11	DRY @ 56.39
PZ-04 inside	SH	09/25/03	12:18	3.43	56.06	52.63
PZ-04 outside	SW	09/25/03	12:18	3.31	56.06	52.75
PZ-05 inside	SH	09/25/03	12:07	6.33	60.08	53.75
PZ-05 outside	SW	09/25/03	12:07	DRY @ 6.16	60.08	DRY @ 53.92
PZ-06 inside	SH	09/25/03	12:01	DRY @ 4.88	59.46	DRY @ 54.58
PZ-06 outside	SW	09/25/03	12:01	4.83	59.46	54.63
PZ-07 inside	SH	09/25/03	12:04	4.97	59.72	54.75
PZ-07 outside	SW	09/25/03	12:04	4.95	59.72	54.77
PZ-08 inside	SH	09/25/03	11:56	8.71	63.38	54.67
PZ-09 inside	SH	09/25/03	11:36	3.66	58.41	54.75
PZ-09 outside	SW	09/25/03	11:36	3.64	58.41	54.77
PZ-10 inside	SH	09/25/03	14:54	7.31	63.70	56.39
PZ-10 outside	SW	09/25/03	14:54	DRY @ 5.58	63.70	DRY @ 58.12
PZ-11 inside	SH	09/25/03	15:00	7.49	63.53	56.04
PZ-11 outside	SW	09/25/03	15:00	DRY @ 5.36	63.53	DRY @ 58.17
PZ-12 inside	SH	09/25/03	15:25	6.58	64.14	57.56
PZ-12 outside	SW	09/25/03	15:25	DRY @ 4.88	64.14	DRY @ 59.26
PZ-13 inside	SH	09/25/03	17:31	4.22	65.11	60.89
PZ-13 outside	SW	09/25/03	17:31	4.64	65.11	60.47
PZ-14 inside	SH	09/25/03	9:14	4.57	61.72	57.15
PZ-14 outside	SW	09/25/03	9:14	4.61	61.72	57.11
PZ-15 inside	SH	09/25/03	16:50	5.80	68.49	62.69
PZ-15 outside	SW	09/25/03	16:50	1.75	68.49	66.74
PZ-16 inside	SH	09/25/03	11:45	11.24	65.92	54.68
PZ-17 inside	SH	09/25/03	11:22	9.98	65.83	55.85
PZ-18 inside	SH	09/25/03	11:15	10.29	66.12	55.83
PZ-19 inside	SH	09/25/03	15:22	12.38	69.69	57.31
SEA-601	SH	09/25/03	9:31	6.96	63.47	56.51
SEA-602A	SH	09/25/03	9:40	6.00	62.51	56.51
SEA-602B	IN	09/25/03	9:43	5.46	61.99	56.53
SEA-603	SH	09/25/03	9:51	5.61	61.97	56.36
SEA-604	SH	09/25/03	10:06	9.38	65.34	55.96
SEA-605	SH	09/25/03	10:19	9.74	65.20	55.46
SEA-606	SH	09/25/03	12:30	11.29	64.62	53.33
SEA-607	SH	09/25/03	11:40	11.31	65.96	54.65
SEA-608	SH	09/25/03	11:52	12.47	67.16	54.69
HW-01	SW	09/25/03	9:19	DRY @ 3.32	69.64	DRY @ 66.32
HW-02	SW	09/25/03	14:35	2.57	59.37	56.80

Table G2-5
Summary of Potentiometric Data
Peterson/Puritan OU2

Measuring Point	FM	Shield May 6-8, 2002	Shield August 13-14, 2003	Shield August 24-27, 2003	Shield September 25, 2003
GZ-1-1	SH	58.63	58.10	57.14	57.94
GZ-4-1	SH			55.40	
L-2	IN	58.48	57.81	56.67	57.44
MW-106A	SH	57.90	57.09	56.14	56.96
MW-106B	IN			56.01	57.02
MW-106C	BR		57.22	56.20	57.12
MW-107A	SH	63.21	62.24	60.48	58.90
MW-107B	IN	62.27	61.62	60.00	58.82
MW-107C	BR	61.48	60.90	59.38	58.55
MW-108AA	SH	59.51	59.05	57.41	57.72
MW-108A	IN	59.34	58.90	57.27	57.67
MW-108B	DP	58.13	57.58	56.15	56.42
MW-108C	BR	58.03	57.49	56.08	56.37
MW-109AA	SH	57.11	56.17	54.89	55.49
MW-109A	DP	58.17	57.37	56.00	55.72
MW-109B	TL	57.92	57.15	55.81	55.60
MW-109C	BR	57.95	57.10	55.74	55.65
MW-110A	SH	59.21	58.63	57.35	55.22
MW-110B	TL	58.77	58.18	56.86	55.12
MW-110C	BR	59.14	58.54	57.34	55.96
MW-111A	IN	56.78	56.24	54.95	54.69
MW-111AA	SH	56.73	56.24	54.94	54.88
MW-111B	DP	56.79	56.26	54.98	54.71
MW-111C	BR	58.44	57.88	56.64	55.76
MW-112AA	SH	58.11	57.34	55.95	54.39
MW-112A	IN	57.86	57.31	55.75	54.32
MW-112B	DP	56.68	56.16	54.83	54.26
MW-112C	BR	56.78	56.22	54.88	54.35
MW-501A	SH		DRY @ 59.28	DRY @ 58.92	DRY @ 58.27
MW-501B	SH		58.27	57.36	58.08
MW-501C	DP		58.32	57.39	58.10
MW-502	DP		57.91	56.79	57.57
MW-A1	SH	57.73	56.97	55.66	56.88
MW-A2	SH	57.60	56.95	55.60	56.82
MW-B1	IN	57.99	56.76	55.37	56.41
MW-B2	SH	57.30	56.31	55.00	56.24
MW-C1	IN	57.11	56.22	54.92	55.82
MW-C2	SH	56.68	55.77	54.56	55.69
MW-EA-1	SH				62.01
MW-EA-2	BR				63.11
MW-EA-3	BR				58.30
MW-EA-4	BR				62.72
P-6	SH	58.94	58.29	57.35	58.12
P-7	IN	59.40	58.35	56.90	58.18
P-8	SH	57.27	56.27	54.93	56.45
P-9	SH	58.03		56.06	55.60

Table G2-5
Summary of Potentiometric Data
Peterson/Puritan OU2

Measuring Point	FM	Shield May 6-8, 2002	Shield August 13-14, 2003	Shield August 24-27, 2003	Shield September 25, 2003
PZ-01 inside	SH		55.57	54.33	55.39
PZ-01 outside	SW		55.07	54.17	55.29
PZ-02 inside	SH		55.75	54.58	55.70
PZ-02 outside	SW		55.49	DRY @ 55.17	55.62
PZ-03 inside	SH		56.91	54.24	56.26
PZ-03 outside	SW		56.39	DRY @ 56.32	DRY @ 56.39
PZ-04 inside	SH		52.78	52.08	52.63
PZ-04 outside	SW		52.61	52.08	52.75
PZ-05 inside	SH		56.68	54.39	53.75
PZ-05 outside	SW		56.68	54.45	DRY @ 53.92
PZ-06 inside	SH		54.78	DRY @ 54.64	DRY @ 54.58
PZ-06 outside	SW		54.59	DRY @ 54.54	54.63
PZ-07 inside	SH		55.20	54.17	54.75
PZ-07 outside	SW		55.24	54.37	54.77
PZ-08 inside	SH		55.25	54.08	54.67
PZ-09 inside	SH		56.27	54.55	54.75
PZ-09 outside	SW		56.33	54.57	54.77
PZ-10 inside	SH		59.72	58.24	56.39
PZ-10 outside	SW		59.72	58.25	DRY @ 58.12
PZ-11 inside	SH		59.89	58.26	56.04
PZ-11 outside	SW		59.89	57.86	DRY @ 58.17
PZ-12 inside	SH		59.93	58.07	57.56
PZ-12 outside	SW		59.96	57.68	DRY @ 59.26
PZ-13 inside	SH		61.13	61.07	60.89
PZ-13 outside	SW		60.84	60.68	60.47
PZ-14 inside	SH		57.27	57.09	57.15
PZ-14 outside	SW		57.16	56.69	57.11
PZ-15 inside	SH		DRY	DRY @ 62.46	62.69
PZ-15 outside	SW		66.63	66.62	66.74
PZ-16 inside	SH		54.92	53.75	54.68
PZ-17 inside	SH		56.31	54.96	55.85
PZ-18 inside	SH		56.04	54.87	55.83
PZ-19 inside	SH			57.25	57.31
SEA-601	SH				56.51
SEA-602A	SH				56.51
SEA-602B	IN				56.53
SEA-603	SH				56.36
SEA-604	SH				55.96
SEA-605	SH				55.46
SEA-606	SH				53.33
SEA-607	SH				54.65
SEA-608	SH				54.69
HW-01	SW			66.21	DRY @ 66.32
HW-02	SW				56.80

Table G2-6
Comparison of Potentiometric Survey Results, OU1 and OU2 Overlap Zone - September 25, 2003
Peterson/Puritan OU2

Measuring Point	Shield MP Elevation Aug-03	ENSR MP Elevation	Diff-erence	Shield DTW on 9/25/03	ENSR DTW on 9/25/03	Diff-erence	Shield WLE on 9/25/03	ENSR WLE on 9/25/03	Diff-erence
MW-106A	68.61	68.57	0.04	11.65	11.47	0.18	56.96	57.10	-0.14
MW-106B	68.55	68.59	-0.04	11.53	11.49	0.04	57.02	57.10	-0.08
MW-106C	68.20	68.33	-0.13	11.08	11.00	0.08	57.12	57.33	-0.21
P-6	67.83	67.82	0.01	9.71	9.60	0.11	58.12	58.22	-0.10
MW-501A	68.68	68.38	0.30	DRY @ 10.41	NM	---	DRY @ 58.27	NM	
MW-501B	68.46	68.39	0.07	10.38	10.26	0.12	58.08	58.13	-0.05
MW-501C	68.47	68.62	-0.15	10.37	10.25	0.12	58.10	58.37	-0.27
MW-502	73.47	73.76	-0.29	15.90	15.86	0.04	57.57	57.90	-0.33
GZ-1-1*	67.08	64.88	2.20	9.14	9.10	0.04	57.94	55.78	2.16
GZ-4-1*	63.49	62.61	0.88	NM	6.77	---	NM	55.84	---
MW-A1*	64.79	NM	---	7.91	7.90	0.01	56.88	NM	---
MW-A2*	65.20	64.27	0.93	8.38	8.34	0.04	56.82	55.93	0.89

Notes:

All values in feet

MP = measuring point (top of inner casing)

NM = not measured

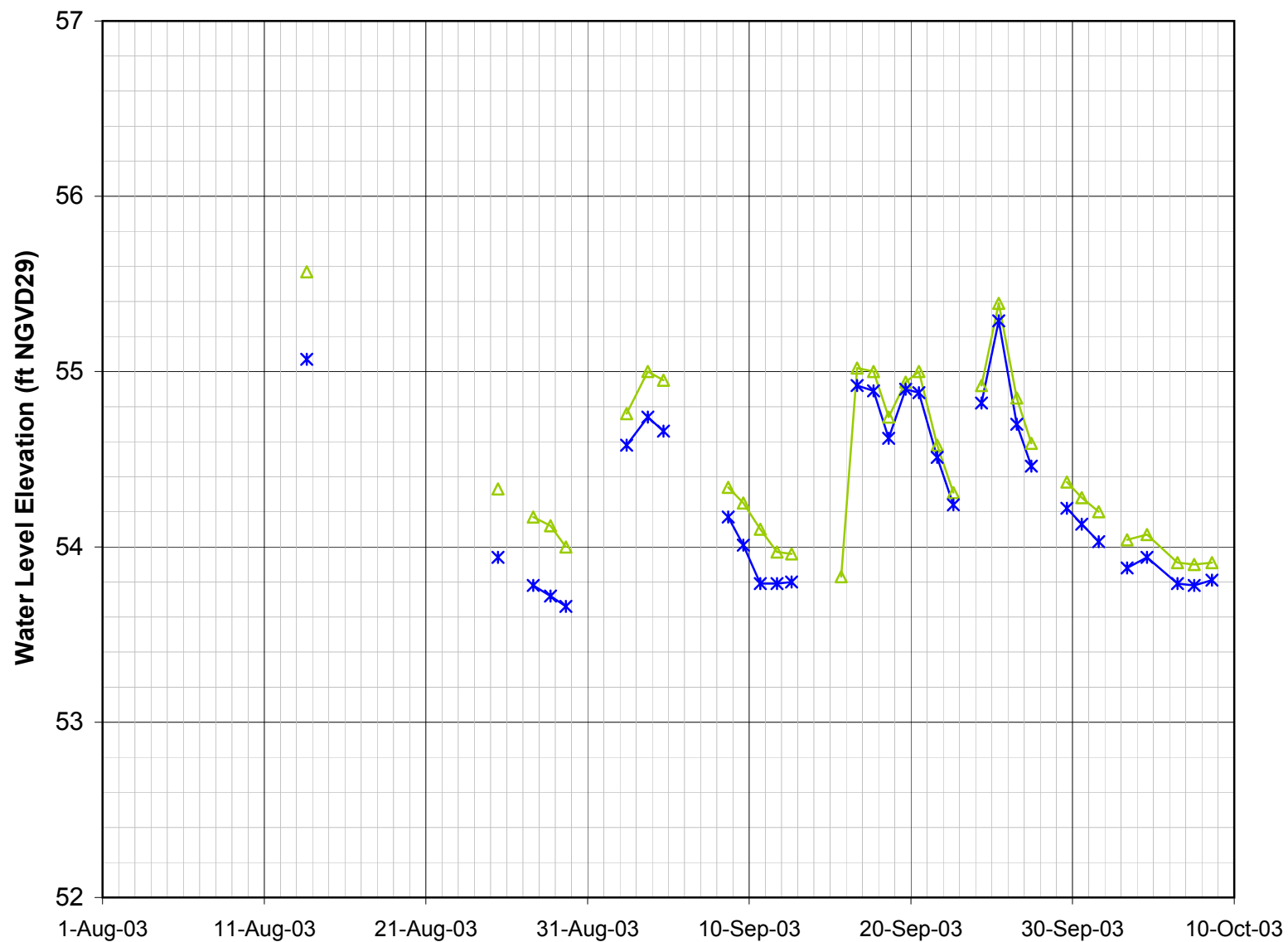
--- = insufficient information

* Shield Aug-03 surveyed MP elevation will supersede previous MP elevation in future surveys at these wells

Table G2-7
Potentiometric Survey Results - September 25, 2003
Peterson/Puritan OU2

Date	Time	MP Elevation (ft NGVD29)	PZ-01 inside (SH)		PZ-01 outside (SW)	
			DTW Reading (ft)	Water Level Elevation (ft NGVD29)	DTW Reading (ft)	Water Level Elevation (ft NGVD29)
08/13/03	15:05	59.57	4.00	55.57	4.50	55.07
08/25/03	11:10	59.57	5.24	54.33	5.63	53.94
08/27/03	15:25	59.57	5.40	54.17	5.79	53.78
08/28/03	17:00	59.57	5.45	54.12	5.85	53.72
08/29/03	15:50	59.57	5.57	54.00	5.91	53.66
09/02/03	9:55	59.57	4.81	54.76	4.99	54.58
09/03/03	17:40	59.57	4.57	55.00	4.83	54.74
09/04/03	16:50	59.57	4.62	54.95	4.91	54.66
09/08/03	16:40	59.57	5.23	54.34	5.40	54.17
09/09/03	15:10	59.57	5.32	54.25	5.56	54.01
09/10/03	16:22	59.57	5.47	54.10	5.78	53.79
09/11/03	17:15	59.57	5.60	53.97	5.78	53.79
09/12/03	15:00	59.57	5.61	53.96	5.77	53.80
09/15/03	16:27	59.58	5.75	53.83	DRY @ 5.97	
09/16/03	16:00	59.58	4.56	55.02	4.66	54.92
09/17/03	16:30	59.58	4.58	55.00	4.69	54.89
09/18/03	15:00	59.58	4.84	54.74	4.96	54.62
09/19/03	16:00	59.58	4.64	54.94	4.68	54.90
09/20/03	11:50	59.58	4.58	55.00	4.70	54.88
09/21/03	15:00	59.58	5.00	54.58	5.07	54.51
09/22/03	15:05	59.58	5.27	54.31	5.34	54.24
09/24/03	8:40	59.58	4.66	54.92	4.76	54.82
09/25/03	10:23	59.58	4.19	55.39	4.29	55.29
09/26/03	13:15	59.58	4.73	54.85	4.88	54.70
09/27/03	10:50	59.58	4.99	54.59	5.12	54.46
09/29/03	15:33	59.58	5.21	54.37	5.36	54.22
09/30/03	13:47	59.58	5.30	54.28	5.45	54.13
10/01/03	14:55	59.58	5.38	54.20	5.55	54.03
10/03/03	8:50	59.58	5.54	54.04	5.70	53.88
10/04/03	14:26	59.58	5.51	54.07	5.64	53.94
10/06/03	11:53	59.58	5.67	53.91	5.79	53.79
10/07/03	12:25	59.58	5.68	53.90	5.80	53.78
10/08/03	15:05	59.58	5.67	53.91	5.77	53.81

Comparative Hydrographs, Peterson/Puritan OU2 Blackstone River at PZ-01



Appendix G3 Blackstone River Flow and Stage Data

Appendix G3.1 Historic River Records - Woonsocket

Appendix G3.1 Historic River Records, Woonsocket, Rhode Island

General Information:

USGS 01112500 BLACKSTONE RIVER AT WOONSOCKET, RI

<http://waterdata.usgs.gov/ri/nwis/uv?01112500>

LOCATION.--Lat 42° 00'22", long 71° 30'13", Providence County, Hydrologic Unit 01090003, on right bank 50 ft upstream from Peters River pressure conduit at Woonsocket. Records include flow of Peters River.

DRAINAGE AREA.--416 mi².

PERIOD OF RECORD.--Discharge: February 1929 to current year.

Water-quality records: Water years 1952–53, 1957–58, 1962–67.

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1931(M). WSP 871: 1938. WSP 1051: 1931.

GAGE.--Water-stage recorder. Datum of gage is 107.42 ft above sea level.

REMARKS.--Records good. Flow regulated by powerplants, by West Hill Reservoir since May 1961, and by other reservoirs upstream. Extremes and figures of daily discharge include flow diverted from Nashua River basin and, at times since January 1966, from Quabbin Reservoir for supply of Worcester, MA, and, prior to July 1964, flow diverted around station in Hamlet Trench. Telephone and satellite gage-height telemeters at station.

COOPERATION BY.-- Rhode Island Department of Environmental Management.

Blackstone River at Woonsocket

Source: http://waterdata.usgs.gov/ri/nwis/monthly/?site_no=01112500&agency_cd=USGS

YEAR	Monthly mean streamflow, in ft ³ /s											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1929			1,480	1,729	1,204	397	234	190	195	207	224	296
1930	529	624	792	625	303	181	136	129	130	136	224	218
1931	298	494	1,759	1,190	824	1,514	405	318	240	128	127	193
1932	580	555	740	1,179	436	250	147	182	533	838	1,719	674
1933	717	868	1,827	2,520	598	394	191	192	625	455	353	499
1934	1,114	426	1,539	1,923	1,040	501	240	224	403	659	557	754
1935	1,532	879	1,492	1,497	711	831	419	244	296	165	245	364
1936	946	499	4,063	1,622	700	280	171	201	367	423	414	1,824
1937	1,608	1,048	991	1,096	845	472	276	283	368	328	1,113	1,360
1938	1,405	1,176	952	831	681	1,030	2,453	933	1,427	885	747	1,288
1939	765	1,089	1,643	1,850	593	363	193	229	252	190	433	413
1940	487	458	1,190	2,518	978	817	412	197	209	211	530	619
1941	608	975	792	714	487	376	243	167	143	137	200	269
1942	439	707	1,955	802	477	379	356	250	163	226	439	1,175
1943	842	1,095	1,547	890	1,249	484	246	192	121	225	436	280
1944	236	384	816	1,223	574	426	213	154	405	269	511	1,039
1945	910	795	1,882	855	1,364	939	482	291	232	235	555	1,380
1946	1,395	1,095	1,479	707	937	1,032	253	486	308	401	268	404
1947	688	799	1,132	1,026	940	620	321	247	307	174	496	394
1948	408	873	2,198	1,242	1,135	1,322	675	305	166	208	495	450
1949	843	1,077	1,003	988	631	263	129	142	199	142	195	284
1950	478	691	1,276	1,139	736	439	211	229	192	203	527	820
1951	979	1,763	1,301	1,409	811	599	253	321	236	342	1,574	1,267
1952	1,476	1,196	1,573	1,199	1,019	889	219	270	193	185	222	413
1953	1,026	1,472	2,034	2,387	1,206	319	196	158	138	193	473	1,089
1954	650	789	1,081	1,187	1,462	453	205	255	1,980	692	1,317	1,810
1955	1,066	925	1,435	967	666	383	213	2,703	857	2,007	2,233	677
1956	1,341	1,369	1,584	2,646	841	568	279	169	228	257	352	816
1957	814	782	982	1,330	490	213	125	121	113	140	203	573
1958	1,529	1,063	2,144	2,268	1,318	387	271	262	393	508	625	749
1959	656	754	1,615	1,685	669	462	857	310	327	550	900	1,501
1960	1,209	1,734	1,154	1,986	1,001	509	340	289	504	452	782	737
1961	748	1,097	1,830	1,967	1,112	538	248	204	549	515	536	593
1962	1,354	694	1,839	1,738	829	514	217	202	228	980	1,168	1,046
1963	851	765	1,842	993	713	369	233	158	206	184	591	687
1964	1,269	1,084	1,514	1,472	478	216	179	136	156	169	203	513
1965	356	832	971	706	373	257	132	151	128	167	153	186
1966	203	580	1,099	479	525	328	152	111	172	214	401	319
1967	553	549	1,027	1,822	1,756	901	447	346	249	301	384	841
1968	697	830	2,764	934	646	1,181	500	193	192	169	460	830
1969	588	514	1,559	2,211	948	354	228	249	326	293	924	1,474
1970	927	2,493	1,058	1,844	744	491	195	191	172	188	387	419
1971	425	934	1,847	1,070	1,084	374	183	161	199	222	310	782
1972	859	967	3,078	1,443	1,779	1,847	687	280	362	510	1,767	2,265
1973	1,544	1,580	1,069	1,567	1,095	620	722	334	311	296	463	1,792
1974	1,514	1,455	1,467	1,578	943	446	235	165	474	636	536	1,066
1975	1,481	1,166	1,307	1,109	493	369	166	165	397	1,011	1,506	1,402
1976	1,971	1,822	1,214	832	698	253	171	376	224	361	257	344
1977	427	502	2,141	1,510	1,056	369	206	168	324	974	1,001	1,550
1978	2,041	995	1,727	1,706	1,142	493	216	649	209	282	249	564
1979	3,167	1,287	1,669	1,177	1,217	634	346	520	400	675	1,039	576
1980	455	262	1,468	1,637	857	381	345	300	170	301	390	358
1981	183	1,285	928	767	731	350	376	165	276	442	725	1,260
1982	1,691	1,633	1,212	1,321	582	2,826	436	257	201	338	524	459
1983	892	1,502	2,973	2,924	1,227	738	203	207	189	303	814	1,804
1984	817	1,773	1,959	2,355	1,230	1,787	723	235	193	312	430	564
1985	430	643	729	490	551	342	239	446	487	489	1,214	910
1986	945	1,014	1,481	697	416	1,274	411	511	203	247	810	1,932
1987	1,143	637	1,364	3,643	1,258	412	257	172	325	460	483	691
1988	492	1,244	1,120	886	1,050	346	527	221	195	245	1,033	584
1989	415	568	653	1,428	1,465	1,039	510	803	607	1,382	1,642	645
1990	938	1,555	1,003	1,306	1,477	592	330	928	283	1,331	945	1,187
1991	947	1,108	1,404	1,025	862	289	179	533	545	595	1,167	1,071
1992	994	740	1,061	1,089	623	719	245	423	256	271	647	1,540
1993	1,433	902	1,596	2,359	641	274	152	101	204	253	475	1,283
1994	1,010	973	2,410	1,472	892	303	201	395	363	308	575	1,279
1995	1,424	828	1,126	644	514	241	144	127	106	507	1,091	535
1996	1,706	1,723	1,385	1,792	1,221	456	561	294	568	1,354	954	2,371
1997	1,319	1,156	1,058	2,111	932	295	126	124	104	123	431	346
1998	1,278	1,627	2,245	1,191	1,423	1,714	860	217	155	466	336	300
1999	1,398	1,501	1,625	628	477	137	120	71.5	433	470	461	601
2000	694	932	1,374	1,733	1,028	1,076	313	272	188	240	394	694
2001	416	648	2,323	1,920	443	1,015	404	239	150	149	157	222
2002	270	345	622	675	1,117	699	153	102	131			
Mean of monthly stream-	957	1,003	1,508	1,424	886	621	333	305	322	423	651	856

Blackstone River at WoonsocketSource: http://nwis.waterdata.usgs.gov/ri/nwis/dvstat/?site_no=01112500&agency_cd=USGS

Day of month	Mean of daily mean values for this day for 74 years of record ¹ , in ft ³ /s											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	789	904	1090	1731	1056	825	469	270	277	340	471	783
2	864	903	1079	1731	1013	793	417	263	260	338	506	793
3	867	1055	1133	1723	991	819	369	250	241	336	554	806
4	880	1132	1223	1700	1053	741	328	244	242	340	591	783
5	902	1039	1255	1707	1031	723	323	241	228	332	584	810
6	858	946	1319	1746	964	794	346	231	222	340	586	839
7	882	928	1386	1690	931	859	338	249	228	391	563	932
8	937	998	1328	1591	912	765	335	310	232	389	591	895
9	951	940	1419	1480	911	696	303	302	229	378	619	856
10	1023	871	1445	1448	936	744	305	297	235	379	642	878
11	939	884	1366	1450	996	723	306	295	259	367	668	868
12	880	927	1445	1402	996	654	293	333	336	339	686	885
13	827	921	1475	1437	974	657	292	326	335	343	684	884
14	847	939	1442	1428	953	689	327	325	299	394	702	864
15	859	961	1477	1374	922	651	320	295	307	396	698	888
16	895	1006	1499	1360	906	586	302	263	312	453	665	869
17	862	998	1569	1459	883	596	290	265	381	486	658	856
18	797	981	1729	1451	857	632	282	283	399	486	626	907
19	805	1014	1834	1398	855	594	265	431	384	484	599	909
20	868	1028	1751	1389	843	580	289	643	420	504	602	907
21	915	1025	1671	1313	845	543	319	447	431	584	671	908
22	978	1049	1835	1287	836	491	373	352	446	539	701	984
23	947	1035	1879	1259	777	465	373	312	411	475	685	902
24	1001	1027	1714	1206	755	437	471	306	377	489	656	815
25	1216	1117	1645	1243	787	426	433	298	356	507	658	782
26	1356	1173	1612	1185	836	423	356	289	365	486	721	817
27	1303	1127	1622	1156	791	412	318	267	366	456	772	858
28	1282	1090	1643	1149	752	432	296	266	371	444	726	831
29	1149	1080	1588	1156	704	442	293	264	361	446	810	812
30	1022		1612	1117	674	437	312	263	360	438	837	812
31	957		1661		730		282	265		442		816

1 -- Available period of record may be less than value shown for certain days of the year.

**Appendix G3.2 River Records at Woonsocket During Phase
1A Field Work**

Table G3.2-1
Blackstone River at Woonsocket, RI
August-October 2003

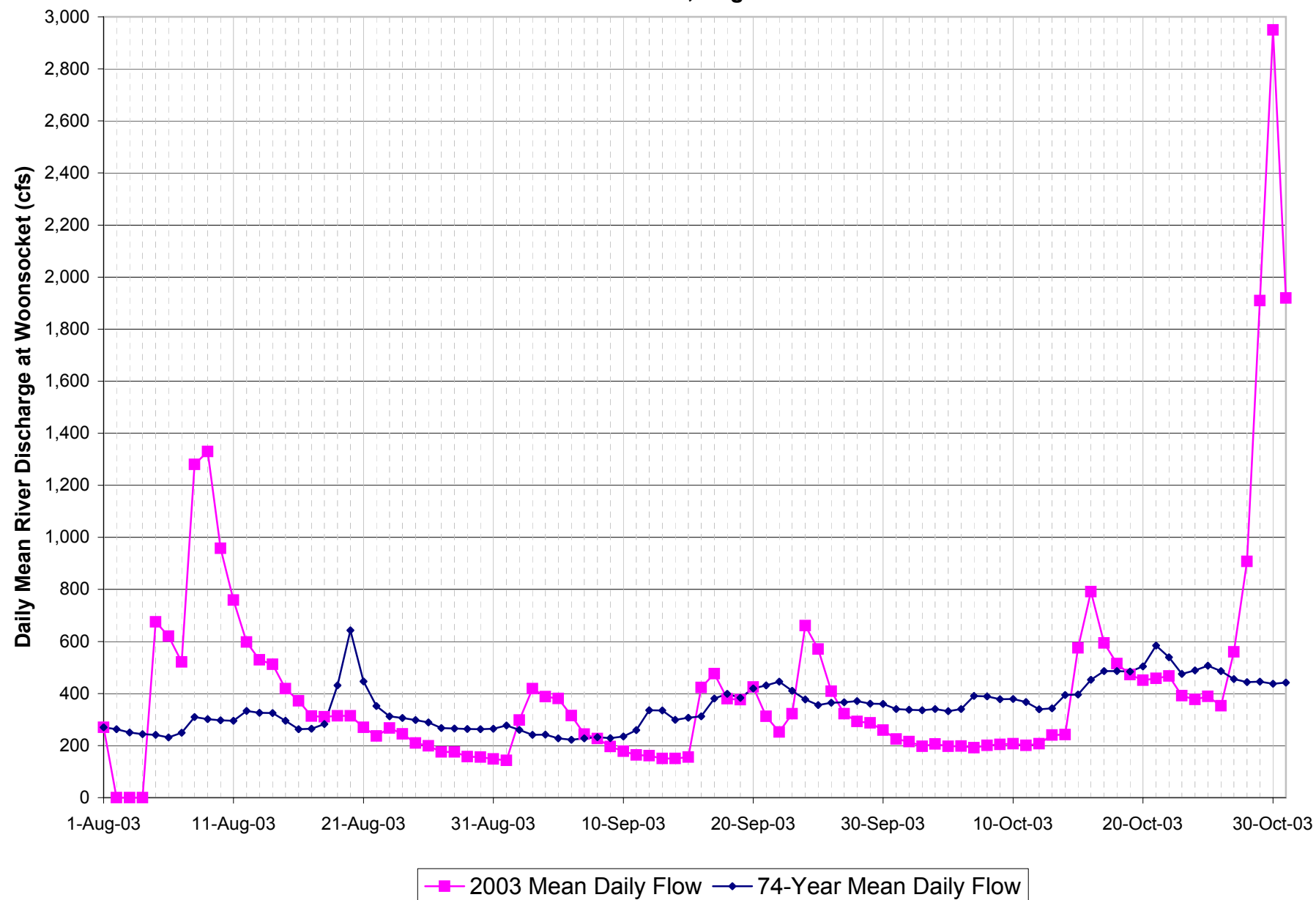
Date	2003 Daily Mean Discharge (cfs)	74-Year Mean of Daily Mean Discharge (cfs)
1-Aug-03	270	270
2-Aug-03	---	263
3-Aug-03	---	250
4-Aug-03	---	244
5-Aug-03	675	241
6-Aug-03	620	231
7-Aug-03	521	249
8-Aug-03	1,280	310
9-Aug-03	1,330	302
10-Aug-03	958	297
11-Aug-03	759	295
12-Aug-03	598	333
13-Aug-03	529	326
14-Aug-03	512	325
15-Aug-03	419	295
16-Aug-03	372	263
17-Aug-03	313	265
18-Aug-03	311	283
19-Aug-03	314	431
20-Aug-03	314	643
21-Aug-03	270	447
22-Aug-03	237	352
23-Aug-03	267	312
24-Aug-03	245	306
25-Aug-03	210	298
26-Aug-03	199	289
27-Aug-03	176	267
28-Aug-03	176	266
29-Aug-03	158	264
30-Aug-03	156	263
31-Aug-03	149	265
1-Sep-03	143	277
2-Sep-03	298	260
3-Sep-03	419	241
4-Sep-03	388	242
5-Sep-03	381	228
6-Sep-03	315	222
7-Sep-03	244	228
8-Sep-03	227	232
9-Sep-03	196	229
10-Sep-03	178	235
11-Sep-03	164	259
12-Sep-03	161	336
13-Sep-03	150	335
14-Sep-03	150	299
15-Sep-03	156	307
16-Sep-03	423	312
17-Sep-03	476	381

Table G3.2-1
Blackstone River at Woonsocket, RI
August-October 2003

Date	2003 Daily Mean Discharge (cfs)	74-Year Mean of Daily Mean Discharge (cfs)
18-Sep-03	380	399
19-Sep-03	376	384
20-Sep-03	425	420
21-Sep-03	312	431
22-Sep-03	252	446
23-Sep-03	322	411
24-Sep-03	661	377
25-Sep-03	571	356
26-Sep-03	409	365
27-Sep-03	322	366
28-Sep-03	293	371
29-Sep-03	287	361
30-Sep-03	259	360
1-Oct-03	225	340
2-Oct-03	215	338
3-Oct-03	197	336
4-Oct-03	206	340
5-Oct-03	197	332
6-Oct-03	198	340
7-Oct-03	192	391
8-Oct-03	201	389
9-Oct-03	204	378
10-Oct-03	207	379
11-Oct-03	201	367
12-Oct-03	207	339
13-Oct-03	240	343
14-Oct-03	242	394
15-Oct-03	575	396
16-Oct-03	791	453
17-Oct-03	594	486
18-Oct-03	515	486
19-Oct-03	473	484
20-Oct-03	451	504
21-Oct-03	458	584
22-Oct-03	467	539
23-Oct-03	392	475
24-Oct-03	377	489
25-Oct-03	389	507
26-Oct-03	353	486
27-Oct-03	560	456
28-Oct-03	908	444
29-Oct-03	1,910	446
30-Oct-03	2,950	438
31-Oct-03	1,920	442

Source: http://waterdata.usgs.gov/ri/nwis/dv?format=html&period=50&site_no=1112500

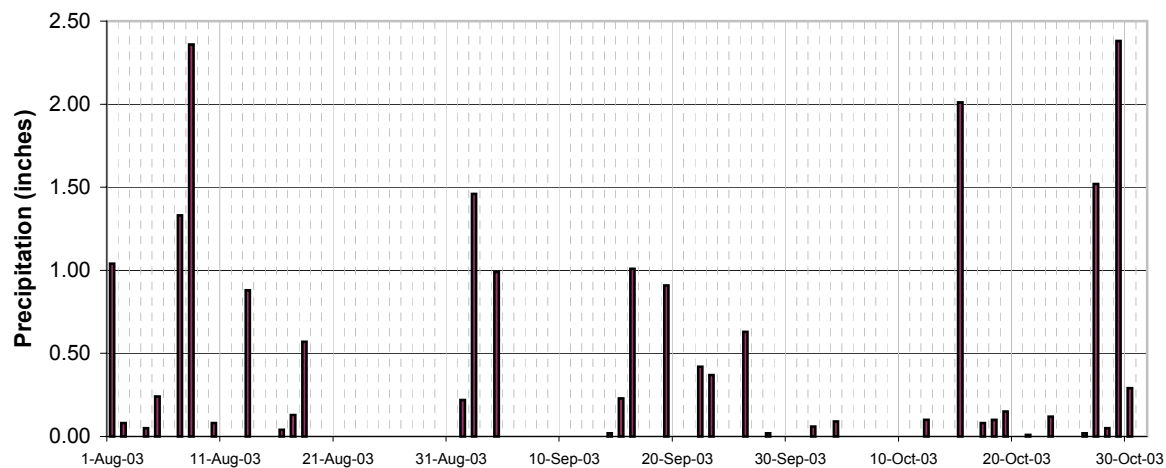
Figure G3.2-1
Daily River Flow at Woonsocket, RI
Blackstone River, August-October 2003



Appendix G3.3 On-site River Stage and Flow Data

**Figure G3.3-1
Peterson/Puritan OU2**

Daily Precipitation at Lincoln, RI



Daily River Flow and Stage, Blackstone River

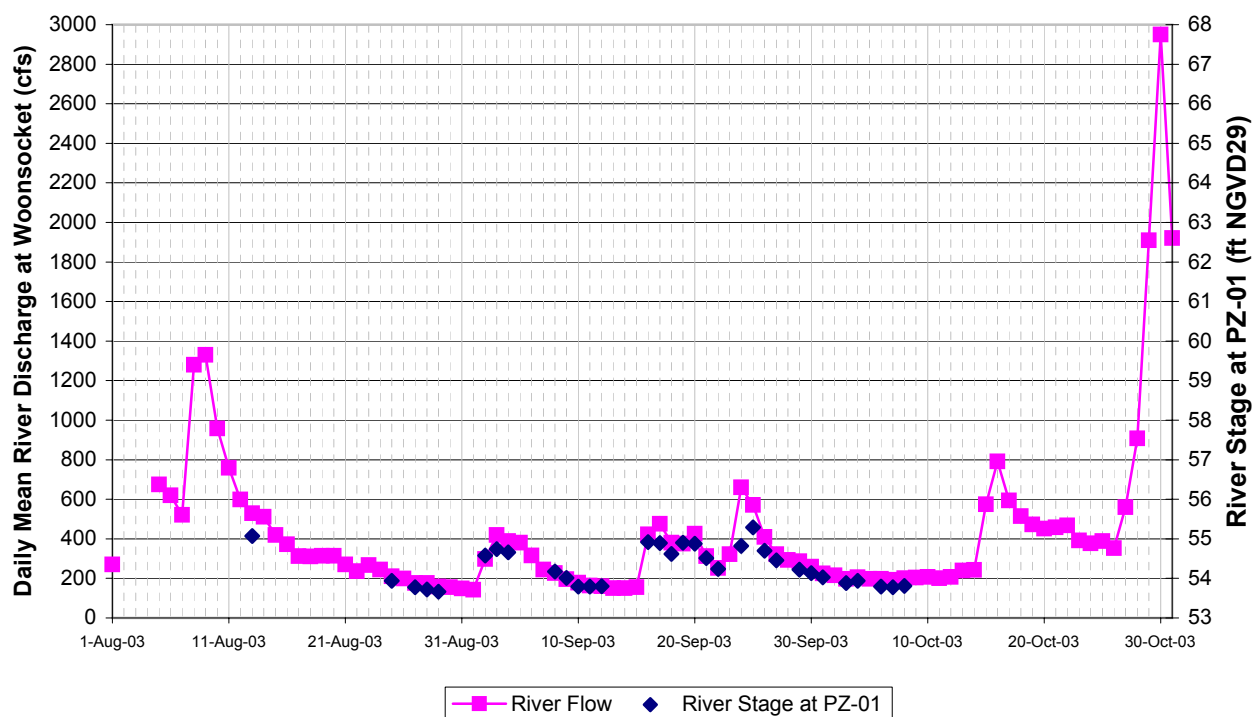


Figure G3.3-2
Correlation Between Flow and Stage, Blackstone River

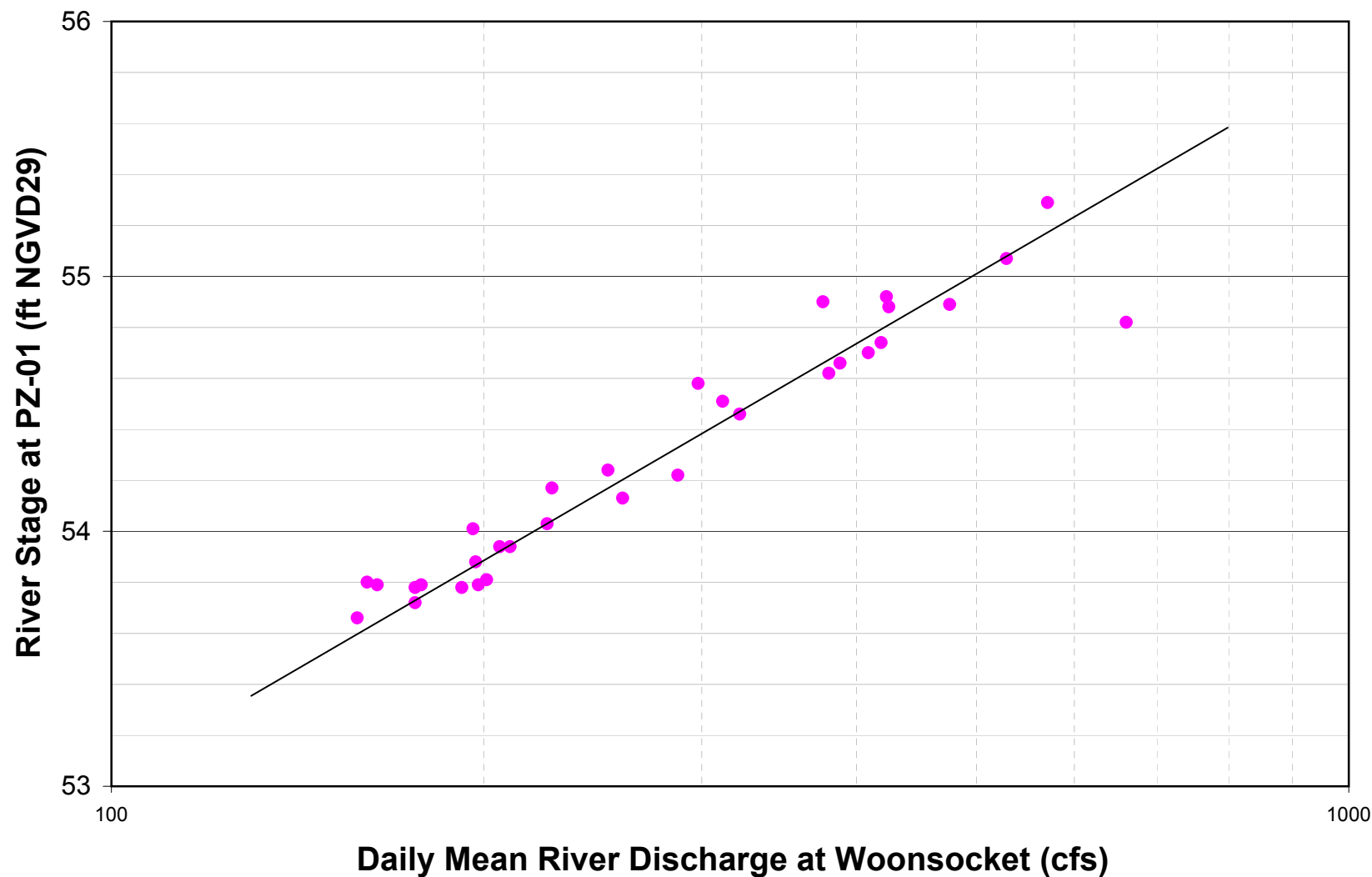


Table G3.3-1
Surface Water Flow Measurements - Blackstone River
Peterson/Puritan OU2

Summary

Location	Gauging Station	Date	Time	Flow Rate (cfs)
OU2	BRF-01	8/15/2003	10:00 to 13:00	215.9*
OU2	BRF-02	8/15/2003	14:00 to 16:00	376.2
OU2	BRF-02	8/15/2003	16:00 to 17:00	411.6
OU2		8/15/2003	Best Estimate	394
Woonsocket	USGS	8/15/2003	Daily Mean	419
			Percent Difference	-6.0%
OU2	BRF-01	9/26/2003	11:00 to 12:30	513.9
OU2		9/26/2003	Best Estimate	514
Woonsocket	USGS	9/26/2003	Daily Mean	409
			Percent Difference	25.7%
OU2	BRF-01	9/27/2003	13:30 to 14:30	393.3
OU2	BRF-03	9/27/2003	10:00 to 11:00	383.9
OU2	BRF-05	9/27/2003	12:00 to 13:00	452.2*
OU2		9/27/2003	Best Estimate	389
Woonsocket	USGS	9/27/2003	Daily Mean	322
			Percent Difference	20.8%

Note: * value not considered representative, not included in best estimate

Location: Blackstone River
Station: BRF-01
Date: 8/15/2003
Time: 10:00 to 13:00

Measurements by Channel Segment

Channel Segment	Width (ft)	Average Depth (ft)	Average Velocity (fps)	Flow Rate (cfs)
A	3	0.4	0.00	0.0
B	2	0.5	0.37	0.4
C	2	0.9	0.75	1.4
D	2	1.0	0.77	1.5
E	2	0.6	0.67	0.8
F	2	0.9	0.95	1.7
G	2	0.9	0.86	1.5
H	2	0.9	0.82	1.5
I	2	0.8	0.83	1.3
J	2	1.0	1.07	2.1
K	2	0.9	1.06	1.9
L	2	0.8	0.96	1.5
M	2	1.1	1.01	2.2
N	2	0.9	0.90	1.6
O	2	1.6	1.11	3.6

Table G3.3-1
Surface Water Flow Measurements - Blackstone River
Peterson/Puritan OU2

P	2	0.9	0.97	1.7
Q	2	1.0	0.82	1.6
R	2	1.0	0.82	1.6
S	2	1.0	0.97	1.9
T	2	1.0	1.01	2.0
U	2	1.0	1.09	2.1
V	2	1.0	0.95	1.9
W	2	1.1	0.97	2.1
X	2	1.1	1.05	2.2
Y	2	1.1	1.05	2.2
Z	2	1.2	1.09	2.7
AA	2	1.3	0.98	2.6
AB	2	1.4	1.20	3.4
AC	2	1.5	1.14	3.3
AD	2	1.4	1.32	3.6
AE	2	1.5	1.26	3.7
AF	2	1.6	1.14	3.6
AG	2	1.6	1.36	4.5
AH	2	1.7	1.40	4.8
AI	2	1.9	1.28	4.8
AJ	2	2.1	1.23	5.1
AK	2	2.2	3.29	14.3
AL	2	2.3	1.19	5.4
AM	2	2.5	2.21	11.0
AN	2	2.5	1.11	5.6
AO	2	2.6	1.09	5.7
AP	2	2.8	1.61	9.1
AQ	2	3.2	1.62	10.4
AR	2	2.9	1.37	7.9
AS	2	2.9	1.00	5.8
AT	2	3.1	1.09	6.8
AU	2	3.3	0.95	6.3
AV	2	3.4	1.32	9.0
AW	2	3.7	1.19	8.8
AX	21	1.3	0.95	25.5
Totals:	120			215.9

Table G3.3-1
Surface Water Flow Measurements - Blackstone River
Peterson/Puritan OU2

Location: Blackstone River
Station: BRF-02
Date: 8/15/2003
Time: 14:00 to 16:00

Measurements by Channel Segment

Channel Segment	Width (ft)	Average Depth (ft)	Average Velocity (fps)	Flow Rate (cfs)
A	3	0.1	0.00	0.0
B	12	3.5	2.11	88.6
C	10	3.5	2.44	85.4
D	10	1.6	1.58	25.3
E	10	1.5	2.03	30.5
F	10	1.5	1.98	29.7
G	10	1.4	2.03	28.4
H	10	2.0	2.16	43.2
I	10	2.6	1.42	36.9
J	10	1.6	0.51	8.2
Totals:	95			376.2

Location: Blackstone River
Station: BRF-02
Date: 8/15/2003
Time: 16:00 to 17:00

Measurements by Channel Segment

Channel Segment	Width (ft)	Average Depth (ft)	Average Velocity (fps)	Flow Rate (cfs)
A	3	0.1	0.00	0.0
B	12	3.5	2.06	86.5
C	10	3.5	2.26	79.1
D	10	1.6	1.90	30.4
E	10	1.5	2.30	34.5
F	10	1.5	2.66	39.9
G	10	1.4	2.03	28.4
H	10	2.0	2.42	48.4
I	10	2.6	2.13	55.4
J	10	1.6	0.56	9.0
Totals:	95			411.6

**Table G3.3-1
Surface Water Flow Measurements - Blackstone River
Peterson/Puritan OU2**

Location: Blackstone River
Station: BRF-01
Date: 9/26/2003
Time: 11:00 to 12:30

Measurements by Channel Segment

Channel Segment	Width (ft)	Average Depth (ft)	Average Velocity (fps)	Flow Rate (cfs)
A	35	2.0	0.69	48.3
B	35	3.0	1.63	171.2
C	21	3.9	2.04	167.1
D	14	4.4	1.42	87.5
E	21	2.5	0.76	39.9
Totals:	126			513.9

Location: Blackstone River
Station: BRF-01
Date: 9/27/2003
Time: 13:30 to 14:30

Measurements by Channel Segment

Channel Segment	Width (ft)	Average Depth (ft)	Average Velocity (fps)	Flow Rate (cfs)
A	23	1.8	0.33	13.7
B	25	2.5	1.08	67.5
C	25	3.2	1.80	144.0
D	25	3.7	1.71	158.2
E	25	2.5	0.16	10.0
Totals:	123			393.3

Location: Blackstone River
Station: BRF-03
Date: 9/27/2003
Time: 10:00 to 11:00

Measurements by Channel Segment

Channel Segment	Width (ft)	Average Depth (ft)	Average Velocity (fps)	Flow Rate (cfs)
A	15	2.1	2.49	78.4
B	15	3.7	2.86	158.7
C	15	3.7	2.16	119.9
D	14	1.6	1.20	26.9
Totals:	59			383.9

Table G3.3-1
Surface Water Flow Measurements - Blackstone River
Peterson/Puritan OU2

Location: Blackstone River
Station: BRF-05
Date: 9/27/2003
Time: 12:00 to 13:00

Measurements by Channel Segment

Channel Segment	Width (ft)	Average Depth (ft)	Average Velocity (fps)	Flow Rate (cfs)
01-A	16	1.0	3.52	56.3
01-B	15.5	1.1	3.32	56.6
02-A	18	1.0	2.47	44.5
02-B	20	2.0	5.26	210.4
02-C	18	1.2	3.91	84.5
Totals:	88			452.2