

Water-Data Report 2007

0214645080 TRIBUTARY TO BRIAR CREEK AT RUNNYMEADE LANE AT CHARLOTTE, NC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 35°10'01", long 80°50'12" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, on right bank upstream of culvert on Runnymede Lane, 3.5 miles south of city hall in Charlotte.

DRAINAGE AREA.--1.19 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 2005 to September 2007.

GAGE.--Water-stage recorder. Datum of gage is 584.62 ft above NGVD of 1929 (from levels). Radio telemetry at site.

REMARKS.--Records fair, except those for estimated daily discharges, which are poor. Minimum discharge for 2005 water year also occurred June 26. Minimum discharge for 2006 water year also occurred July 22. Minimum discharge for 2007 water year also occurred July 6,7, September 13. Maximum peak stage for 2005 water year, 2006 water year, and period of record from floodmark. Maximum discharge for all years from rating curve extended above 100 ft³/s on basis of culvert computation.

0214645080 TRIBUTARY TO BRIAR CREEK AT RUNNYMEADE LANE AT CHARLOTTE, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	---	---	---	---	32	0.68	0.16
2	---	---	---	---	---	---	---	---	---	1.5	0.50	0.17
3	---	---	---	---	---	---	---	---	---	0.47	0.48	0.17
4	---	---	---	---	---	---	---	---	---	0.33	0.48	0.16
5	---	---	---	---	---	---	---	---	---	0.32	0.42	0.16
6	---	---	---	---	---	---	---	---	---	0.30	0.71	0.16
7	---	---	---	---	---	---	---	---	---	19	0.54	0.29
8	---	---	---	---	---	---	---	---	---	0.66	0.86	0.24
9	---	---	---	---	---	---	---	---	---	0.39	16	0.15
10	---	---	---	---	---	---	---	---	---	0.28	0.83	0.16
11	---	---	---	---	---	---	---	---	---	1.6	0.42	0.14
12	---	---	---	---	---	---	---	---	---	0.51	0.35	0.12
13	---	---	---	---	---	---	---	---	---	2.3	0.37	0.15
14	---	---	---	---	---	---	---	---	---	0.41	5.3	0.17
15	---	---	---	---	---	---	---	---	---	0.33	0.58	0.14
16	---	---	---	---	---	---	---	---	---	0.27	0.34	2.1
17	---	---	---	---	---	---	---	---	---	0.26	0.82	0.16
18	---	---	---	---	---	---	---	---	---	2.8	1.3	0.13
19	---	---	---	---	---	---	---	---	---	0.53	0.31	0.11
20	---	---	---	---	---	---	---	---	---	8.5	0.23	0.16
21	---	---	---	---	---	---	---	---	---	3.7	0.25	0.12
22	---	---	---	---	---	---	---	---	---	5.5	0.20	0.10
23	---	---	---	---	---	---	---	---	---	0.66	28	0.09
24	---	---	---	---	---	---	---	---	---	0.33	0.78	0.29
25	---	---	---	---	---	---	---	---	0.04	0.28	0.32	0.11
26	---	---	---	---	---	---	---	---	1.4	0.35	0.25	0.13
27	---	---	---	---	---	---	---	---	0.18	0.16	0.23	0.21
28	---	---	---	---	---	---	---	---	7.0	0.52	0.22	0.14
29	---	---	---	---	---	---	---	---	0.34	20	0.20	0.34
30	---	---	---	---	---	---	---	---	0.22	7.0	0.36	0.15
31	---	---	---	---	---	---	---	---	---	2.0	0.19	---
Total	---	---	---	---	---	---	---	---	9.18	113.26	62.52	6.88
Mean	---	---	---	---	---	---	---	---	1.53	3.65	2.02	0.23
Max	---	---	---	---	---	---	---	---	7.0	32	28	2.1
Min	---	---	---	---	---	---	---	---	0.04	0.16	0.19	0.09
Cfsm	---	---	---	---	---	---	---	---	1.29	3.07	1.69	0.19
In.	---	---	---	---	---	---	---	---	0.29	3.54	1.95	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2005, BY WATER YEAR (WY)

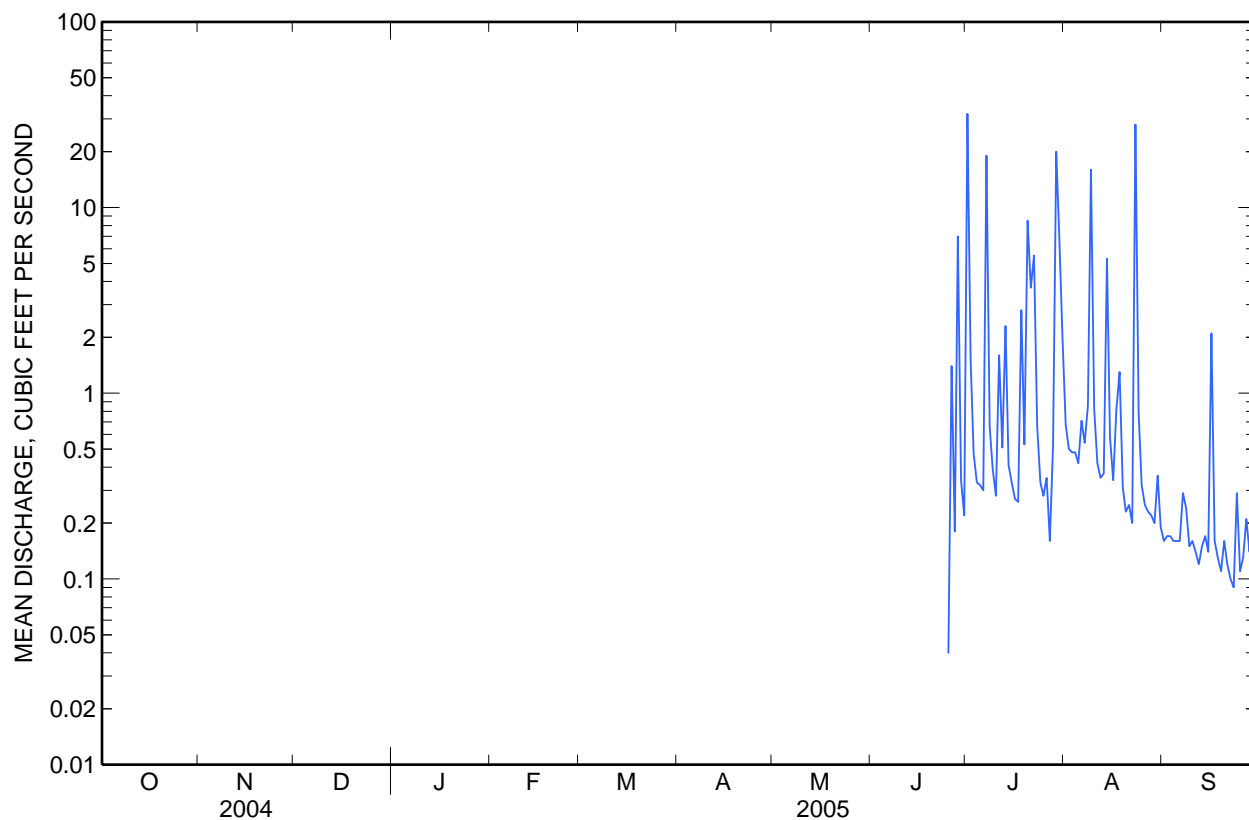
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	---	---	---	---	---	---	---	---	1.53	3.65	2.02	0.23
Max	---	---	---	---	---	---	---	---	1.53	3.65	2.02	0.23
(WY)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(2005)	(2005)	(2005)	(2005)
Min	---	---	---	---	---	---	---	---	1.53	3.65	2.02	0.23
(WY)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(2005)	(2005)	(2005)	(2005)

0214645080 TRIBUTARY TO BRIAR CREEK AT RUNNYMEADE LANE AT CHARLOTTE, NC—Continued

SUMMARY STATISTICS

Water Year 2005	
Annual total	191.84
Annual mean	1.96
Highest daily mean	32 Jul 1
Lowest daily mean	0.04 Jun 25
Annual seven-day minimum	0.12 Sep 17
Maximum peak flow	^a 791 Jul 1
Maximum peak stage	^a 9.33 Jul 1
Instantaneous low flow	^a 0.03 Jun 25
Annual runoff (cfsm)	1.65
Annual runoff (inches)	6.00
10 percent exceeds	5.3
50 percent exceeds	0.33
90 percent exceeds	0.14

^a See Remarks.



0214645080 TRIBUTARY TO BRIAR CREEK AT RUNNYMEADE LANE AT CHARLOTTE, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.11	0.39	0.51	0.88	0.66	0.46	0.35	0.19	0.12	0.21	0.07	1.5
2	0.23	0.51	0.45	6.0	0.68	0.45	0.26	0.18	2.8	0.11	0.07	0.16
3	0.18	0.42	0.54	2.8	0.74	0.41	1.0	0.17	0.21	0.10	0.07	0.12
4	0.17	0.72	2.7	1.2	1.1	0.41	0.30	0.16	0.13	0.11	0.06	0.11
5	0.18	0.83	37	1.2	0.63	0.43	0.24	1.2	0.80	0.53	4.0	0.99
6	14	0.84	3.2	1.4	0.63	0.62	0.23	0.49	0.18	1.5	0.27	0.13
7	15	0.55	1.0	0.92	0.84	0.89	0.24	1.5	0.13	0.33	1.9	0.17
8	4.2	0.56	0.79	0.88	0.62	0.42	0.47	0.23	0.10	0.23	4.9	0.14
9	0.28	0.72	7.0	0.77	0.61	0.40	0.24	0.19	0.11	0.19	0.45	0.29
10	0.92	0.62	0.95	0.68	0.60	0.42	0.19	0.18	0.09	0.18	7.6	0.82
11	5.7	0.59	0.79	2.7	3.5	0.39	0.18	0.16	4.1	0.35	1.6	0.24
12	0.39	0.64	0.70	0.77	0.84	0.36	0.18	0.16	6.3	0.20	5.2	0.15
13	0.19	0.68	0.66	3.1	0.58	0.33	0.22	0.14	1.7	0.15	0.17	30
14	0.28	1.5	0.62	1.7	0.55	0.32	0.22	0.14	19	e0.60	0.15	12
15	0.34	0.60	38	0.52	0.55	0.33	0.18	0.16	0.37	0.63	7.9	0.40
16	0.28	0.57	6.3	0.47	0.54	0.25	0.19	0.27	0.19	0.53	40	0.19
17	0.31	e0.50	1.7	1.4	0.53	0.25	0.19	0.14	0.16	0.54	0.32	0.15
18	0.34	0.63	1.5	5.1	0.57	0.38	0.17	e0.20	0.15	0.13	0.23	0.14
19	0.35	0.70	1.1	0.58	0.53	0.22	2.7	e0.40	0.15	0.08	0.15	0.13
20	0.33	0.69	1.1	0.53	0.54	3.7	0.25	e0.85	0.15	0.11	0.14	0.14
21	0.27	11	1.0	4.9	0.56	3.7	0.20	e0.28	0.15	0.10	0.15	0.17
22	0.45	16	e1.0	1.0	1.2	0.39	5.1	e0.13	0.13	12	2.2	0.17
23	0.61	0.69	e1.0	3.8	2.3	0.33	0.43	0.12	4.8	6.5	0.26	0.16
24	0.73	0.55	0.87	1.5	0.54	0.42	0.33	0.10	1.0	0.18	0.12	0.16
25	0.42	0.51	13	0.95	0.54	0.30	0.30	0.10	0.17	0.18	0.11	0.16
26	e0.40	0.51	1.7	0.80	0.52	0.26	0.89	0.11	4.0	e0.20	0.10	0.16
27	e0.30	0.51	1.1	0.75	0.54	0.25	2.6	0.15	20	0.09	0.10	0.17
28	0.24	1.1	5.2	0.69	0.52	0.26	0.25	0.11	0.31	0.09	0.10	0.19
29	0.40	7.4	2.3	1.0	---	0.26	0.20	0.11	0.17	0.08	0.09	0.17
30	0.25	0.76	1.1	0.66	---	0.25	0.19	0.12	0.14	0.10	6.2	0.13
31	0.25	---	1.2	1.4	---	0.24	---	0.11	---	0.07	19	---
Total	48.10	52.29	136.08	51.05	22.56	18.10	18.49	8.55	67.81	26.40	103.68	49.61
Mean	1.55	1.74	4.39	1.65	0.81	0.58	0.62	0.28	2.26	0.85	3.34	1.65
Max	15	16	38	6.0	3.5	3.7	5.1	1.5	20	12	40	30
Min	0.11	0.39	0.45	0.47	0.52	0.22	0.17	0.10	0.09	0.07	0.06	0.11
Cfsm	1.30	1.46	3.69	1.38	0.68	0.49	0.52	0.23	1.90	0.72	2.81	1.39
In.	1.50	1.63	4.25	1.60	0.71	0.57	0.58	0.27	2.12	0.83	3.24	1.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2006, BY WATER YEAR (WY)

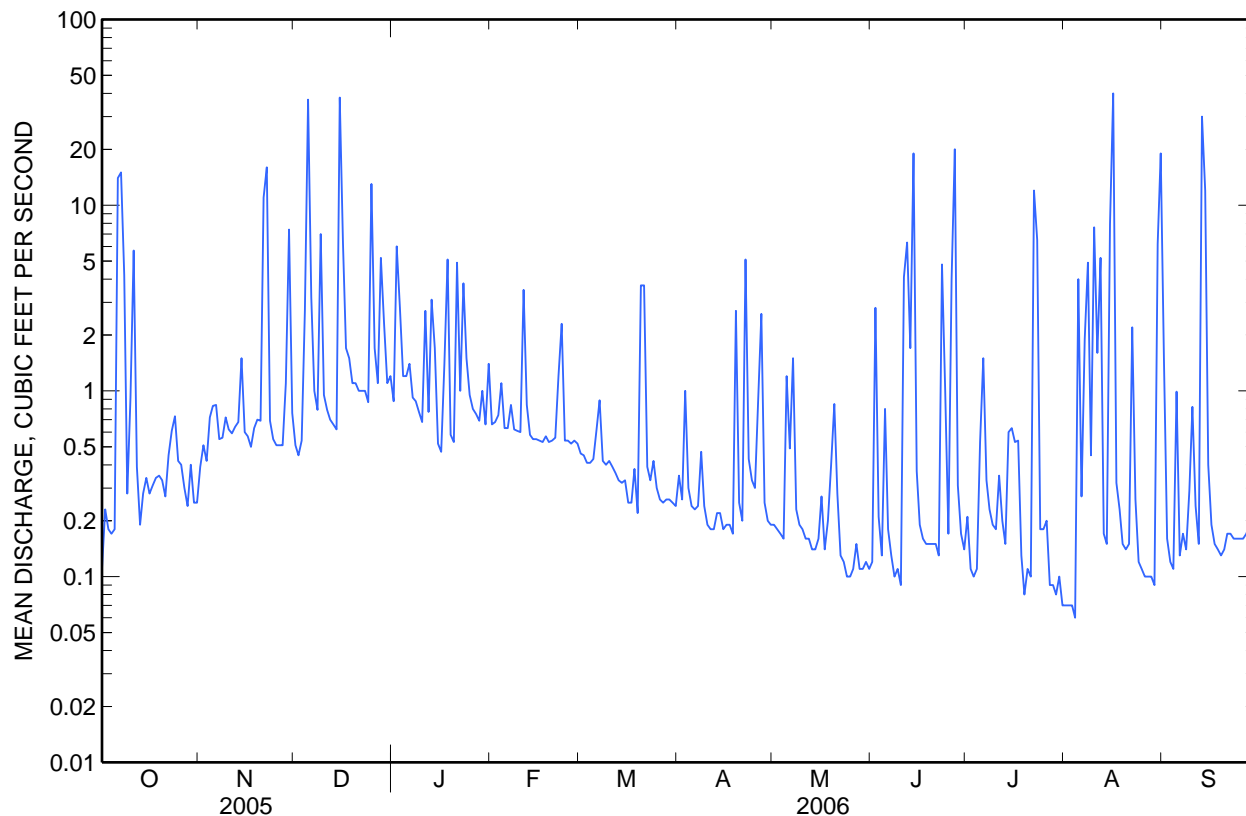
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.55	1.74	4.39	1.65	0.81	0.58	0.62	0.28	2.26	2.25	2.68	0.94
Max	1.55	1.74	4.39	1.65	0.81	0.58	0.62	0.28	2.26	3.65	3.34	1.65
(WY)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2005)	(2006)	(2006)
Min	1.55	1.74	4.39	1.65	0.81	0.58	0.62	0.28	2.26	0.85	2.02	0.23
(WY)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2005)	(2005)

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SUMMARY STATISTICS

	Water Year 2006		Water Years 2005 - 2006	
Annual total	602.72			
Annual mean	1.65		1.65	
Highest annual mean			1.65	2006
Lowest annual mean			1.65	2006
Highest daily mean	40	Aug 16	40	Aug 16, 2006
Lowest daily mean	0.06	Aug 4	0.04	Jun 25, 2005
Annual seven-day minimum	0.07	Jul 29	0.07	Jul 29, 2006
Maximum peak flow	^a 385	Jun 27	^a 791	Jul 1, 2005
Maximum peak stage	^a 5.40	Jun 27	^a 9.33	Jul 1, 2005
Instantaneous low flow	^a 0.04	Jul 19	^a 0.03	Jun 25, 2005
Annual runoff (cfsm)	1.39		1.39	
Annual runoff (inches)	18.84		18.85	
10 percent exceeds	3.7		3.7	
50 percent exceeds	0.42		0.42	
90 percent exceeds	0.13		0.13	

^a See Remarks.



0214645080 TRIBUTARY TO BRIAR CREEK AT RUNNYMEADE LANE AT CHARLOTTE, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.15	0.33	1.8	8.3	9.5	28	0.24	0.20	0.16	0.05	0.08	0.05
2	0.13	0.30	0.54	1.2	3.5	62	0.29	0.20	0.17	0.04	0.08	0.05
3	0.13	0.37	0.47	0.83	0.77	1.3	0.18	0.19	3.4	0.05	0.07	0.05
4	0.13	0.38	0.53	0.68	e0.35	0.75	0.17	0.22	0.29	0.08	0.07	0.05
5	0.12	0.47	0.62	14	e0.30	0.54	0.17	0.46	0.19	0.04	0.07	0.05
6	0.14	0.58	0.44	3.9	0.22	0.49	0.18	0.28	0.15	0.04	0.07	0.05
7	0.17	7.8	0.49	10	0.24	0.45	0.18	0.20	0.13	9.8	0.07	0.05
8	4.2	5.2	0.78	17	0.22	0.39	0.18	0.18	0.14	0.83	0.07	0.05
9	0.12	0.32	0.42	1.0	0.21	0.35	0.22	3.1	0.12	2.4	0.06	0.05
10	0.10	0.21	0.42	0.65	0.20	0.34	0.21	0.53	0.12	0.43	0.06	0.04
11	0.13	7.2	0.42	0.53	0.24	0.33	2.1	0.28	0.91	0.18	0.06	0.04
12	0.81	6.7	0.45	0.38	0.26	e0.27	2.4	0.25	4.9	0.25	0.06	0.04
13	0.12	0.27	0.42	0.37	12	0.31	0.21	0.25	0.83	0.14	0.06	0.06
14	0.13	0.16	0.44	0.34	3.9	0.32	1.6	0.23	4.3	0.16	0.05	0.48
15	0.13	2.1	0.44	0.33	0.61	0.32	9.8	0.32	0.31	0.48	0.06	0.43
16	0.13	25	0.43	0.33	0.48	3.3	0.96	0.22	0.08	0.18	0.05	0.05
17	19	0.69	0.43	0.30	0.52	0.35	0.38	0.20	0.07	0.15	0.05	0.05
18	1.7	0.32	0.43	0.76	0.40	0.29	0.29	0.19	0.06	0.81	0.05	0.06
19	0.32	0.33	0.43	0.30	0.39	0.28	4.9	0.20	0.07	0.10	0.05	0.05
20	0.21	0.30	0.41	0.21	0.40	0.29	2.3	0.19	0.10	0.11	0.04	0.05
21	0.18	28	0.48	6.4	0.42	0.28	0.38	0.25	0.10	0.17	0.16	0.06
22	0.30	58	15	4.6	0.40	0.29	0.31	0.18	0.12	0.09	0.05	0.06
23	0.25	2.9	1.9	0.44	0.27	0.31	0.27	0.17	0.08	0.10	0.12	0.05
24	0.20	1.00	0.77	0.57	0.26	0.28	0.31	0.17	2.9	0.09	0.09	0.05
25	0.16	0.69	21	0.29	7.9	0.27	0.28	0.14	8.7	0.10	0.05	0.04
26	0.38	0.58	2.3	0.24	0.80	0.26	0.25	0.14	0.20	0.10	0.05	0.05
27	7.5	0.52	0.84	0.22	0.42	0.26	2.6	0.14	0.05	9.9	0.07	0.06
28	6.3	0.49	0.65	0.23	0.36	0.25	0.24	0.18	0.04	0.66	0.08	0.05
29	0.55	0.53	0.62	0.26	---	0.57	0.20	0.21	0.04	0.13	0.07	0.06
30	0.45	1.6	0.61	0.34	---	0.18	0.21	0.16	1.1	0.16	0.09	0.07
31	0.44	---	2.2	0.36	---	0.19	---	0.15	---	0.09	0.51	---
Total	44.78	153.34	57.18	75.36	45.54	103.81	32.01	9.78	29.83	27.91	2.57	2.35
Mean	1.44	5.11	1.84	2.43	1.63	3.35	1.07	0.32	0.99	0.90	0.08	0.08
Max	19	58	21	17	12	62	9.8	3.1	8.7	9.9	0.51	0.48
Min	0.10	0.16	0.41	0.21	0.20	0.18	0.17	0.14	0.04	0.04	0.04	0.04
Cfsm	1.21	4.30	1.55	2.04	1.37	2.81	0.90	0.27	0.84	0.76	0.07	0.07
In.	1.40	4.79	1.79	2.36	1.42	3.25	1.00	0.31	0.93	0.87	0.08	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.50	3.43	3.12	2.04	1.22	1.97	0.84	0.30	1.63	1.80	1.81	0.65
Max	1.55	5.11	4.39	2.43	1.63	3.35	1.07	0.32	2.26	3.65	3.34	1.65
(WY)	(2006)	(2007)	(2006)	(2007)	(2007)	(2007)	(2007)	(2007)	(2006)	(2005)	(2006)	(2006)
Min	1.44	1.74	1.84	1.65	0.81	0.58	0.62	0.28	0.99	0.85	0.08	0.08
(WY)	(2007)	(2006)	(2007)	(2006)	(2006)	(2006)	(2006)	(2006)	(2007)	(2006)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 2005 - 2007	
Annual total	621.55		584.46			
Annual mean	1.70		1.60		1.63	
Highest annual mean					1.65	2006
Lowest annual mean					1.60	2007
Highest daily mean	58	Nov 22	62	Mar 2	62	Mar 2, 2007
Lowest daily mean	0.06	Aug 4	0.04	Jun 28	0.04	Jun 25, 2005
Annual seven-day minimum	0.07	Jul 29	0.05	Sep 6	0.05	Sep 6, 2007
Maximum peak flow			^a 277	Mar 2	^a 791	Jul 1, 2005
Maximum peak stage			^a 5.33	Mar 2	9.33	Jul 1, 2005
Instantaneous low flow			^a 0.03	Jul 5	^a 0.03	Jun 25, 2005
Annual runoff (cfsm)	1.43		1.35		1.37	
Annual runoff (inches)	19.43		18.27		18.57	
10 percent exceeds	3.7		3.2		3.5	
50 percent exceeds	0.38		0.27		0.32	
90 percent exceeds	0.12		0.05		0.08	

^a See Remarks.

