

Water-Data Report 2010

**0208735012 ROCKY BRANCH BELOW PULLEN DRIVE AT RALEIGH, NC**

Neuse Basin  
Upper Neuse Subbasin

LOCATION.--Lat 35°46'48", long 78°39'59" referenced to North American Datum of 1983, Wake County, NC, Hydrologic Unit 03020201, on right bank, 0.1 mi below Pullen Drive at Pullen Park and 1.5 mi north of Raleigh.

DRAINAGE AREA.--1.17 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1996 to current year. Fragmentary records, June 1992 to September 1996, are unpublished and available from the files of the USGS Water Science Center, Raleigh, NC.

GAGE.--Water-stage recorder. Datum of gage is 308.61 ft above North American Vertical Datum of 1988. Satellite telemetry at streamgage.

REMARKS.--Records fair. Minimum discharge for period of record, no flow, also occurred May 6, July 3, 1999, and March 9-11, 2009, due to diversion by City of Raleigh.

## 0208735012 ROCKY BRANCH BELOW PULLEN DRIVE AT RALEIGH, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.23	5.2	0.71	0.66	2.1	0.70	0.49	0.35	13	0.26	1.6	0.24
2	0.23	0.33	46	0.49	3.9	2.1	0.48	0.35	12	0.18	0.33	0.24
3	0.21	0.24	7.7	0.88	5.6	3.0	0.45	0.42	0.47	0.18	0.28	0.22
4	0.19	0.21	0.89	0.67	1.1	0.88	0.44	0.35	0.37	e0.16	0.32	0.20
5	0.65	0.19	4.7	0.51	48	0.86	0.46	0.34	0.32	e0.16	27	0.19
6	0.43	0.20	0.95	0.47	4.4	0.85	0.44	0.34	0.42	e0.17	1.6	0.18
7	0.26	0.18	0.67	0.46	0.98	0.85	0.45	0.30	0.35	e0.16	0.54	0.23
8	0.22	0.19	4.4	0.56	0.78	0.84	1.1	0.31	0.33	e0.15	0.42	0.21
9	0.25	0.19	21	0.44	6.2	0.85	7.8	0.31	0.31	e0.14	0.42	0.20
10	0.21	14	1.00	0.43	1.2	1.2	0.56	0.27	0.24	e0.61	0.41	0.18
11	0.53	70	0.67	0.48	0.75	6.5	e0.50	0.28	0.20	e0.15	0.53	0.21
12	0.70	5.7	0.59	0.42	0.67	1.3	e0.58	0.33	0.36	e0.14	1.5	0.26
13	0.29	1.1	2.4	0.42	1.8	10	e0.50	0.29	1.8	e0.16	0.46	1.0
14	1.4	0.44	0.66	0.39	0.67	1.3	e0.50	0.30	0.39	e0.17	0.39	e0.16
15	0.44	0.37	0.48	0.40	0.59	0.55	e0.48	0.32	0.33	e0.15	0.42	0.17
16	0.29	0.33	0.43	0.36	0.60	0.49	e0.45	7.9	0.29	e5.1	0.39	0.18
17	0.18	0.30	0.41	27	0.60	0.47	0.42	12	0.34	4.0	0.38	0.17
18	0.17	3.0	3.3	1.3	0.62	0.48	0.41	12	0.24	0.38	1.4	0.17
19	0.30	0.69	12	0.75	0.48	0.49	0.41	15	0.24	0.23	1.2	0.18
20	0.20	0.35	0.80	0.52	0.47	0.46	0.43	0.58	0.25	0.20	6.2	0.19
21	0.15	0.29	0.56	13	0.47	0.69	1.5	0.49	0.23	0.19	0.30	0.19
22	0.16	1.1	0.46	3.1	2.5	0.56	0.94	3.2	0.24	0.18	0.38	0.19
23	0.16	3.6	0.46	0.76	0.57	0.50	0.37	10	2.2	e0.18	5.7	0.20
24	0.37	0.69	0.42	1.2	0.87	0.44	0.45	1.1	0.36	e0.18	12	0.20
25	0.20	e0.36	11	22	0.63	0.45	3.4	0.66	0.29	e0.17	0.72	0.17
26	0.30	e0.30	1.1	0.80	0.48	0.62	0.45	0.44	0.28	e0.16	0.33	23
27	0.36	e0.40	0.55	0.56	0.46	0.42	0.38	0.41	0.25	2.2	0.29	18
28	0.90	e0.30	0.47	0.54	0.44	0.48	0.36	8.6	0.21	0.28	0.28	1.3
29	0.22	e0.32	0.46	0.57	---	20	0.37	3.2	0.23	14	0.26	31
30	0.21	2.4	0.67	0.92	---	0.71	0.33	0.33	0.47	2.7	0.29	45
31	0.34	---	3.7	1.1	---	0.51	---	0.29	---	0.35	0.24	---
<b>Total</b>	10.75	112.97	129.61	82.16	87.93	59.55	25.90	81.06	37.01	33.44	66.58	124.03
<b>Mean</b>	0.35	3.77	4.18	2.65	3.14	1.92	0.86	2.61	1.23	1.08	2.15	4.13
<b>Max</b>	1.4	70	46	27	48	20	7.8	15	13	14	27	45
<b>Min</b>	0.15	0.18	0.41	0.36	0.44	0.42	0.33	0.27	0.20	0.14	0.24	0.16
<b>Cfsm</b>	0.30	3.22	3.57	2.27	2.68	1.64	0.74	2.23	1.05	0.92	1.84	3.53
<b>In.</b>	0.34	3.59	4.12	2.61	2.80	1.89	0.82	2.58	1.18	1.06	2.12	3.94

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2010, BY WATER YEAR (WY)

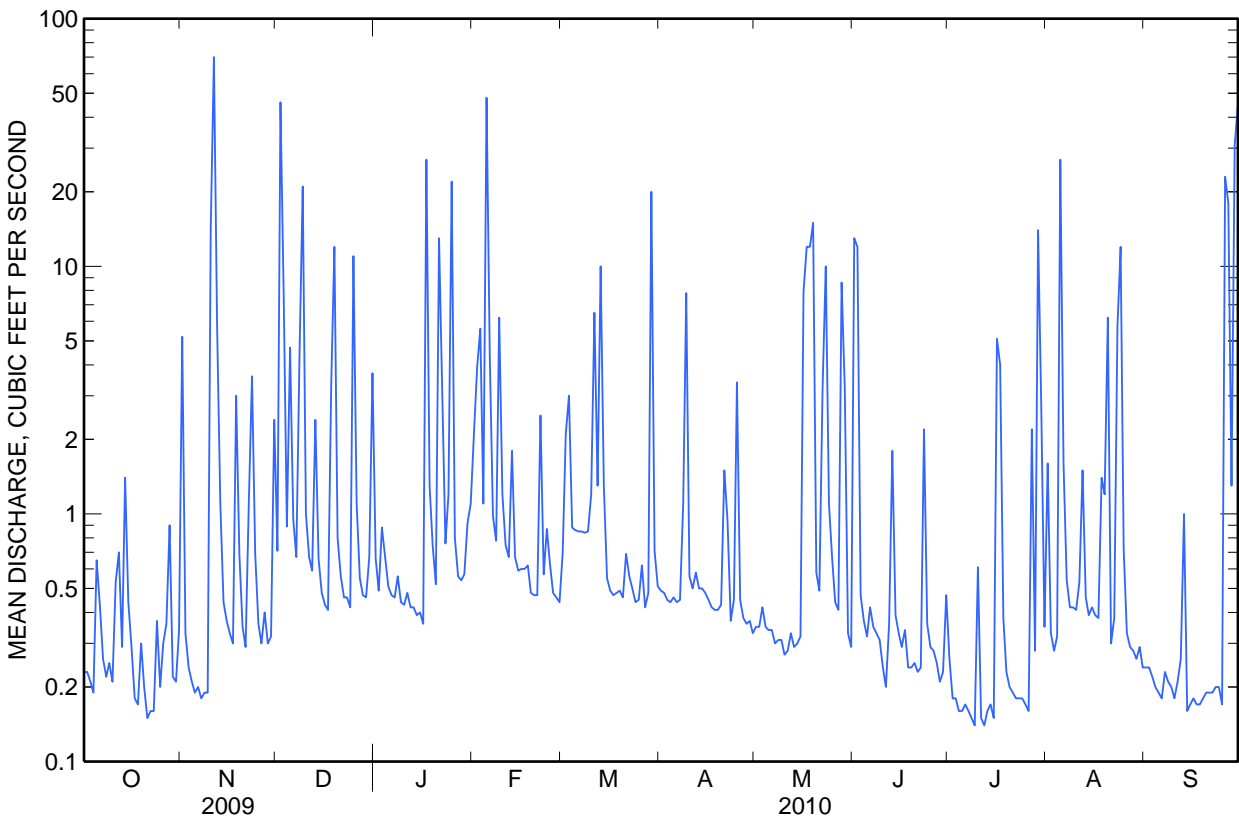
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	1.81	1.88	1.99	2.18	2.01	2.59	1.68	1.45	2.50	2.30	2.64	3.35
<b>Max</b>	4.95	5.48	4.18	6.08	5.45	6.58	3.18	2.61	7.99	5.89	8.11	17.8
<b>(WY)</b>	(2003)	(2007)	(2010)	(1998)	(1998)	(1998)	(2008)	(2010)	(2006)	(2003)	(2003)	(1999)
<b>Min</b>	0.35	0.34	0.45	0.48	0.92	0.50	0.66	0.49	0.71	1.05	0.71	0.61
<b>(WY)</b>	(2010)	(2008)	(2005)	(2008)	(2009)	(2006)	(2002)	(2000)	(1999)	(2009)	(1997)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1997 - 2010	
<b>Annual total</b>	843.94		850.99			
<b>Annual mean</b>	2.31		2.33		2.20	
<b>Highest annual mean</b>					3.66	2003
<b>Lowest annual mean</b>					1.33	2005
<b>Highest daily mean</b>	85	Jun 16	70	Nov 11	194	Jun 14, 2006
<b>Lowest daily mean</b>	0.14	Sep 6	0.14	Jul 9	0.00	Oct 6, 1998
<b>Annual seven-day minimum</b>	0.19	Oct 17	0.16	Jul 3	0.01	Apr 30, 2000
<b>Maximum peak flow</b>			728	Jul 29	2,590	Jul 24, 1997
<b>Maximum peak stage</b>			6.84	Jul 29	9.23	Jul 24, 1997
<b>Instantaneous low flow</b>			0.10	Nov 5	<sup>a</sup> 0.00	Oct 6, 1998
<b>Annual runoff (cfsm)</b>	1.98		1.99		1.88	
<b>Annual runoff (inches)</b>	26.83		27.06		25.52	
<b>10 percent exceeds</b>	5.1		5.1		4.2	
<b>50 percent exceeds</b>	0.43		0.45		0.54	
<b>90 percent exceeds</b>	0.22		0.19		0.22	

<sup>a</sup> See Remarks.



## 0208735012 ROCKY BRANCH BELOW PULLEN DRIVE AT RALEIGH, NC—Continued

## CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--December 2007 to current year.

INSTRUMENTATION.--Tipping-bucket raingage. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record.

**PRECIPITATION, TOTAL, INCHES**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY SUM VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.56	0.00	0.00	---	0.00	0.00	0.00	1.36	0.00	0.24	0.00
2	0.00	0.00	2.15	0.00	---	0.27	0.00	0.00	0.30	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	---	0.22	0.00	0.07	0.00	0.00	0.00	0.00
4	0.00	0.00	0.01	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.16	0.00	0.36	0.00	1.89	0.00	0.00	0.00	0.00	0.00	1.80	0.00
6	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.00
7	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
8	0.00	0.00	0.47	0.04	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.83	0.00	0.38	0.00	0.59	0.00	0.00	0.00	0.00	0.00
10	0.00	1.19	0.00	0.00	0.01	0.13	0.00	0.00	0.00	0.09	0.00	0.00
11	0.11	3.26	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.01	0.03
12	0.16	0.27	0.00	0.00	---	0.07	0.00	0.00	0.00	0.00	0.11	0.00
13	0.00	0.06	0.25	0.00	---	0.62	0.00	0.00	0.23	0.01	0.00	0.00
14	0.26	0.00	0.01	0.00	0.06	0.09	0.00	0.00	0.00	0.01	0.00	0.00
15	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.68	0.00	0.62	0.00	0.00
17	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.88	0.00	0.47	0.00	0.00
18	0.00	0.30	0.42	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.13	0.00
19	0.00	0.05	0.50	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.08	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00
21	0.00	0.00	0.00	0.90	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00
22	0.00	0.15	0.00	0.01	0.27	0.02	0.00	0.36	0.00	0.00	0.00	0.00
23	0.00	0.33	0.00	0.00	0.00	0.02	0.00	0.57	0.28	0.00	0.98	0.00
24	0.08	0.00	0.00	0.10	0.08	0.00	0.06	0.05	0.00	0.00	0.96	0.00
25	0.00	0.00	0.68	1.06	0.01	0.00	0.54	0.01	0.00	0.00	0.02	0.00
26	0.07	0.01	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	---
27	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	---
28	0.17	0.00	0.00	0.00	0.00	0.03	0.00	0.89	0.00	0.00	0.00	0.07
29	0.00	0.00	0.00	---	---	1.23	0.03	0.16	0.03	1.11	0.00	1.71
30	0.00	0.22	0.06	---	---	0.01	0.00	0.00	0.06	0.01	0.00	1.51
31	0.04	---	0.33	---	---	0.00	---	0.00	---	0.03	0.02	---
<b>Total</b>	1.21	6.41	6.08	---	---	3.44	1.54	5.33	2.39	2.72	5.16	---

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