



Water-Data Report 2011

021459367 BIG DUTCHMAN CREEK AT ROCK HILL, SC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 34°59'12.51", long 81°00'30.02" referenced to North American Datum of 1983, York County, SC, Hydrologic Unit 03050103, at the City of Rock Hill, on the downstream side of the bridge, County Road 115 (Mt. Gallant Road).

DRAINAGE AREA.--16.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 2006 to current year.

GAGE.--Data collection platform. Elevation of gage is 512 ft above NGVD of 1929 (from topographic map).

REMARKS.--Records fair except for estimated daily discharges, which are poor.

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021459367 BIG DUTCHMAN CREEK AT ROCK HILL, SC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.2	1.7	35	6.5	2.0	28	15	2.7	3.2	2.1	17	0.90
2	1.1	1.7	2.2	7.1	29	5.8	9.6	2.7	2.9	1.7	2.5	1.4
3	0.99	1.8	1.5	2.8	3.9	4.2	7.7	2.6	2.7	1.8	1.6	1.4
4	1.0	6.8	1.4	2.0	63	3.5	6.5	16	2.4	e65	1.5	0.66
5	1.3	2.1	1.4	1.9	63	4.2	41	3.1	13	16	23	e54
6	1.3	1.4	1.6	2.2	11	63	10	3.2	5.8	3.2	21	6.1
7	1.3	1.2	1.4	1.9	6.2	18	7.2	2.7	2.5	e55	6.2	0.93
8	1.2	1.3	e1.4	1.8	5.0	8.6	6.3	2.4	2.1	15	2.2	0.72
9	1.2	1.3	e1.4	e1.4	3.8	35	e74	2.4	2.1	5.6	2.2	0.68
10	1.2	1.4	1.4	e2.3	3.7	52	39	2.4	9.3	3.2	1.5	0.61
11	1.2	1.3	1.4	4.7	3.2	14	13	e129	33	2.5	1.3	0.59
12	1.3	1.2	6.0	3.5	3.1	8.3	7.8	6.2	15	2.1	e41	0.64
13	1.3	1.2	2.1	e3.1	3.0	6.5	6.0	4.4	3.5	e198	e169	0.67
14	0.95	1.3	e1.4	e2.7	2.9	5.3	5.1	7.7	2.3	27	32	0.54
15	1.0	1.4	e1.2	e2.3	2.8	6.7	4.6	17	3.2	6.3	5.2	0.52
16	0.97	1.7	1.4	2.4	2.7	7.3	23	25	5.0	4.7	3.1	0.58
17	1.1	8.1	1.5	2.4	2.7	4.6	6.7	98	2.1	3.9	2.4	0.67
18	1.1	1.8	1.6	3.8	2.7	4.1	4.6	21	2.4	3.2	1.8	0.75
19	1.2	1.5	1.7	2.4	2.6	3.9	4.1	8.4	2.6	2.9	1.6	0.80
20	1.8	1.5	1.4	2.1	2.5	3.6	4.1	5.7	2.0	2.8	1.5	0.80
21	1.4	1.5	1.4	2.0	2.7	3.5	3.8	4.7	14	2.5	1.4	5.2
22	1.2	1.5	1.4	2.0	2.8	3.5	6.1	4.0	21	2.1	1.3	5.7
23	1.2	1.5	1.4	2.8	2.4	3.4	4.1	3.5	2.8	1.8	1.2	e105
24	1.2	2.0	1.3	1.8	2.4	3.3	3.4	3.0	2.2	7.0	1.1	13
25	5.5	1.7	1.5	2.2	3.2	3.1	3.0	2.7	1.9	20	1.1	e112
26	3.0	3.0	4.5	5.5	2.4	32	2.9	2.4	1.8	9.0	1.0	12
27	1.6	1.8	2.1	2.7	2.4	48	3.1	e100	1.8	2.6	1.0	e38
28	2.5	1.4	e1.7	2.1	e50	22	10	20	e35	1.9	1.0	23
29	1.2	1.7	1.6	1.9	---	10	3.0	6.1	20	1.7	1.0	2.3
30	1.2	2.2	1.6	2.2	---	79	2.8	4.3	2.5	1.6	1.2	1.6
31	1.6	---	1.7	2.1	---	26	---	3.6	---	36	0.92	---
Total	46.31	60.0	88.6	86.6	287.1	520.4	337.5	516.9	220.1	508.2	349.82	391.76
Mean	1.49	2.00	2.86	2.79	10.3	16.8	11.2	16.7	7.34	16.4	11.3	13.1
Max	5.5	8.1	35	7.1	63	79	74	129	35	198	169	112
Min	0.95	1.2	1.2	1.4	2.0	3.1	2.8	2.4	1.8	1.6	0.92	0.52
Cfsm	0.09	0.12	0.17	0.17	0.61	0.99	0.67	0.99	0.43	0.97	0.67	0.77
In.	0.10	0.13	0.20	0.19	0.63	1.15	0.74	1.14	0.48	1.12	0.77	0.86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2006 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3.78	17.3	21.2	18.4	19.2	25.0	10.0	8.81	7.93	7.86	6.09	5.60
Max	7.29	41.9	54.5	40.6	41.2	41.5	12.7	16.7	15.8	16.4	13.0	13.1
(WY)	(2007)	(2007)	(2010)	(2010)	(2010)	(2009)	(2007)	(2011)	(2009)	(2011)	(2008)	(2011)
Min	1.49	2.00	2.86	2.79	10.3	16.8	6.53	3.11	1.93	4.01	0.42	0.55
(WY)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2010)	(2007)	(2008)	(2008)	(2007)	(2007)

021459367 BIG DUTCHMAN CREEK AT ROCK HILL, SC—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011	Water Years 2006 - 2011	
Annual total	4,404.53	3,413.29		
Annual mean	12.1	9.35	12.6	
Highest annual mean			19.1	2010
Lowest annual mean			7.52	2008
Highest daily mean	e543 Feb 5	e198 Jul 13	e545 Nov 22, 2006	
Lowest daily mean	0.30 Sep 25	0.52 Sep 15	e0.06 Aug 12, 2008	
Annual seven-day minimum	0.33 Sep 19	0.59 Sep 10	0.08 Sep 6, 2007	
Maximum peak flow		Unknown Jul 13	Unknown Jul 13, 2011	
Maximum peak stage		12.72 Jul 13	12.72 Jul 13, 2011	
Annual runoff (cfsm)	0.714	0.553	0.744	
Annual runoff (inches)	9.70	7.51	10.11	
10 percent exceeds	22	23	26	
50 percent exceeds	3.7	2.6	3.5	
90 percent exceeds	1.1	1.2	0.53	

e Estimated.

