



Water-Data Report 2011

02146110 MANCHESTER CREEK AT ROCK HILL, SC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 34°56'40", long 80°58'47" referenced to North American Datum of 1983, York County, SC, Hydrologic Unit 03050103, north of SC Hwy 122, on John Ross Parkway.

DRAINAGE AREA.--5.80 mi².

SURFACE-WATER RECORDS

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

GAGE.--Data collection platform. Datum of gage is 508.86 ft above NGVD of 1988 (from Global Positioning System).

REMARKS.--Records poor.

02146110 MANCHESTER 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 | 0.29 | 0.09 | 10 | 1.7 | 1.1 | 7.6 | 2.3 | 0.24 | 0.11 | 0.13 | 1.8 | 0.25 |
| 2 | 0.16 | 0.09 | 0.31 | 1.1 | 14 | 2.3 | 1.5 | 0.23 | 0.10 | 0.13 | 0.51 | 1.3 |
| 3 | 0.13 | 0.12 | 0.22 | 0.81 | 1.9 | 1.7 | 1.2 | 0.23 | 0.09 | 0.15 | 0.31 | 0.94 |
| 4 | 0.14 | 1.0 | 0.21 | 0.72 | 35 | 1.4 | 1.0 | 4.4 | 0.09 | 39 | 0.30 | 0.34 |
| 5 | 0.12 | 0.20 | 0.20 | 0.72 | 24 | 1.7 | 13 | 0.25 | 1.1 | 0.83 | 0.88 | 27 |
| 6 | 0.11 | 0.13 | 0.22 | 0.90 | 3.7 | 36 | 1.7 | 0.30 | 0.24 | 0.23 | 1.9 | 2.1 |
| 7 | 0.11 | 0.12 | 0.24 | 0.79 | 2.2 | 5.1 | 1.1 | 0.22 | 0.12 | 1.8 | 0.69 | 0.64 |
| 8 | 0.10 | 0.12 | 0.25 | 0.80 | 1.8 | 2.5 | 0.90 | 0.18 | 0.10 | 0.45 | 0.37 | e0.50 |
| 9 | 0.11 | 0.12 | e0.25 | 0.77 | 1.5 | 19 | 49 | 0.16 | 0.31 | 0.36 | 0.37 | e0.40 |
| 10 | 0.11 | 0.12 | e0.26 | 0.95 | 1.5 | 15 | 9.2 | 0.15 | 0.12 | 0.33 | 0.28 | e0.41 |
| 11 | 0.11 | 0.12 | 0.26 | 2.1 | 1.4 | 3.7 | 1.9 | 79 | 36 | 0.36 | 0.35 | e0.34 |
| 12 | 0.11 | 0.11 | 1.6 | 1.6 | 1.3 | 2.4 | 1.1 | 0.50 | 6.3 | 0.33 | 2.0 | e0.31 |
| 13 | 0.13 | 0.12 | e0.40 | 1.3 | 1.3 | 1.9 | 0.85 | 0.27 | 0.28 | e169 | e160 | 0.29 |
| 14 | 0.10 | 0.12 | e0.32 | e1.2 | 1.3 | 1.8 | 0.74 | 0.24 | 0.22 | 2.3 | 5.3 | 0.28 |
| 15 | 0.09 | 0.12 | e0.31 | 1.2 | 1.2 | 2.5 | 0.62 | 0.17 | e0.21 | 0.80 | 1.3 | 0.25 |
| 16 | 0.09 | 0.14 | 0.36 | 1.3 | 1.2 | 2.4 | 3.6 | 0.82 | 0.29 | 0.48 | 0.67 | 0.23 |
| 17 | 0.09 | 0.15 | 0.35 | 1.6 | 1.3 | 1.6 | 0.77 | 16 | 0.11 | 0.24 | 0.49 | 0.25 |
| 18 | 0.09 | 0.15 | e0.35 | 2.8 | 1.3 | 1.4 | 0.56 | 0.51 | 0.10 | 0.17 | 0.39 | 0.28 |
| 19 | 0.09 | 0.14 | e0.39 | 1.5 | 1.2 | 1.3 | 0.48 | 0.28 | 0.11 | 0.18 | 0.39 | 0.29 |
| 20 | 0.16 | 0.16 | e0.37 | 1.3 | 1.2 | 1.2 | 0.44 | 0.17 | 0.10 | 0.19 | 0.32 | 0.27 |
| 21 | 0.14 | 0.15 | 0.40 | 1.2 | 1.2 | 1.2 | 0.42 | 0.16 | 7.2 | 0.17 | 0.31 | 0.81 |
| 22 | 0.09 | 0.15 | 0.40 | 1.1 | 1.8 | 1.1 | 0.78 | 0.12 | 1.2 | 0.14 | 0.30 | 2.2 |
| 23 | 0.09 | 0.17 | 0.39 | 1.1 | 1.1 | 1.1 | 0.48 | 0.10 | 0.15 | 0.13 | 0.34 | 68 |
| 24 | 0.09 | 0.23 | 0.47 | 1.1 | 1.1 | 1.0 | 0.38 | 0.10 | 0.13 | 17 | 0.31 | 3.0 |
| 25 | 1.3 | 0.16 | 0.56 | 1.1 | 1.5 | 0.89 | 0.35 | 0.09 | 0.10 | 20 | 0.27 | 13 |
| 26 | 0.28 | 0.41 | 1.6 | 2.8 | 1.2 | 15 | 0.32 | 0.08 | 0.09 | 2.6 | 0.26 | 2.0 |
| 27 | 0.16 | 0.20 | 0.74 | 1.4 | 1.1 | 17 | 0.30 | 21 | 0.08 | 0.61 | 0.25 | 51 |
| 28 | 0.47 | 0.13 | 0.58 | 1.2 | 25 | 5.3 | 0.88 | 0.80 | 14 | 0.39 | 0.24 | 21 |
| 29 | 0.12 | 0.14 | 0.59 | 1.2 | --- | 2.1 | 0.29 | 0.17 | 1.9 | 0.34 | 0.48 | 1.3 |
| 30 | 0.10 | 0.18 | 0.58 | 1.1 | --- | 29 | 0.25 | 0.13 | 0.17 | 0.30 | 0.27 | 0.97 |
| 31 | 0.10 | --- | 0.57 | 1.1 | --- | 4.6 | --- | 0.12 | --- | 30 | 0.25 | --- |
| Total | 5.38 | 5.36 | 23.75 | 39.56 | 133.4 | 190.79 | 96.41 | 127.19 | 71.12 | 289.14 | 181.90 | 199.95 |
| Mean | 0.17 | 0.18 | 0.77 | 1.28 | 4.76 | 6.15 | 3.21 | 4.10 | 2.37 | 9.33 | 5.87 | 6.67 |
| Max | 1.3 | 1.0 | 10 | 2.8 | 35 | 36 | 49 | 79 | 36 | 169 | 160 | 68 |
| Min | 0.09 | 0.09 | 0.20 | 0.72 | 1.1 | 0.89 | 0.25 | 0.08 | 0.08 | 0.13 | 0.24 | 0.23 |
| Med | 0.11 | 0.14 | 0.37 | 1.2 | 1.3 | 2.3 | 0.82 | 0.23 | 0.14 | 0.36 | 0.37 | 0.57 |
| In. | 0.03 | 0.03 | 0.15 | 0.25 | 0.86 | 1.22 | 0.62 | 0.82 | 0.46 | 1.85 | 1.17 | 1.28 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2007 - 2011, BY WATER YEAR (WY)

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Mean | 0.71 | 2.75 | 6.82 | 6.84 | 6.13 | 7.55 | 3.83 | 3.00 | 2.83 | 3.90 | 3.48 | 2.50 |
| Max | 1.32 | 9.30 | 18.9 | 18.6 | 10.8 | 13.5 | 4.91 | 4.76 | 5.76 | 9.33 | 9.41 | 6.66 |
| (WY) | (2009) | (2010) | (2010) | (2010) | (2010) | (2009) | (2007) | (2010) | (2009) | (2011) | (2008) | (2011) |
| Min | 0.10 | 0.09 | 0.77 | 1.28 | 3.85 | 5.04 | 2.36 | 1.00 | 1.12 | 1.45 | 0.31 | 0.14 |
| (WY) | (2008) | (2008) | (2011) | (2011) | (2009) | (2008) | (2010) | (2008) | (2008) | (2007) | (2007) | (2007) |

02146110 MANCHESTER CREEK AT ROCK HILL, SC—Continued**SUMMARY STATISTICS**

| | Calendar Year 2010 | Water Year 2011 | Water Years 2007 - 2011 | |
|---------------------------------|---------------------------|------------------------|--------------------------------|---|
| Annual total | 1,576.87 | 1,363.95 | | |
| Annual mean | 4.32 | 3.74 | 4.31 | |
| Highest annual mean | | | 6.70 | 2010 |
| Lowest annual mean | | | 2.69 | 2008 |
| Highest daily mean | e279 | Jan 25 | e279 | Jan 25, 2010 |
| Lowest daily mean | 0.06 | Sep 16 | 0.08 | May 26 ^a Oct 14, 2007 ^b |
| Annual seven-day minimum | 0.06 | Sep 15 | 0.10 | Oct 13 Oct 12, 2007 |
| Maximum peak flow | | | 854 Jul 13 | Unknown Jan 25, 2010 |
| Maximum peak stage | | | 10.46 Jul 13 | 11.03 Jan 25, 2010 |
| Annual runoff (inches) | 10.11 | 8.75 | | 10.10 |
| 10 percent exceeds | 7.9 | 4.8 | | 7.9 |
| 50 percent exceeds | 1.2 | 0.42 | | 0.96 |
| 90 percent exceeds | 0.11 | 0.11 | | 0.11 |

^e Estimated.^a Also occurred Jun. 27.^b Also occurred Oct. 15-18, 22, 23, 2007, Sep. 18, 2009.