Water-Data Report 2011

# 01589180 GWYNNS FALLS AT GLYNDON, MD

Upper Chesapeake Basin
Gunpowder-Patapsco Subbasin

LOCATION.--Lat 39°28'18.1", long 76°49'00.8" referenced to North American Datum of 1983, Baltimore County, MD, Hydrologic Unit 02060003, on left bank, 375 ft downstream from bridge on Chatsworth Avenue, 125 ft southeast of Wabash Avenue, in the town of Glyndon, and 0.9 mile northeast of Reisterstown.

DRAINAGE AREA.--0.32 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1998 to current year.

REVISED RECORDS.--WDR-US-2005: 1999-2004.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 660 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those above 30 $ft^3/s$, and those for estimated daily discharges (ice effect, equipment malfunction), which are poor. Occasional pumpage from unknown sources may affect discharges. U.S. Geological Survey satellite collection platform at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 $ft^3/s$ and (or) maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage height (ft) |
|---|---|---|---|
| Sep 7 | Unknown | *323 | *3.75 |
| Sep 7 | Unknown | 156 | 3.14 |

Minimum discharge, 0.00 $ft^3/s$, on many days.



Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 01589180, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/01589180.2011.pdf

**01589180 GWYNNS FALLS AT GLYNDON, MD—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 | 0.66 | 0.03 | 3.1 | 0.05 | 0.05 | 0.33 | 0.45 | 0.16 | 0.03 | 0.07 | 0.00 | 0.01 |
| 2 | 0.00 | 0.04 | 0.20 | 0.07 | 2.1 | 0.21 | 0.19 | 0.15 | 0.03 | 0.01 | 0.02 | 0.02 |
| 3 | 0.00 | 0.03 | 0.10 | 0.06 | 0.44 | 0.16 | 0.15 | 0.13 | 0.03 | 0.08 | 0.02 | 0.01 |
| 4 | 0.32 | 1.4 | 0.08 | 0.05 | 0.16 | 0.14 | 0.14 | 0.60 | 0.04 | 0.01 | 0.01 | 0.01 |
| 5 | 0.05 | 0.16 | 0.07 | e0.04 | 0.44 | 0.14 | 1.2 | 0.14 | 0.05 | 0.03 | 0.00 | 1.1 |
| 6 | 0.03 | 0.08 | 0.06 | e0.03 | 0.45 | 3.2 | 0.22 | 0.34 | 0.04 | 0.12 | 0.90 | 4.0 |
| 7 | 0.02 | 0.07 | 0.06 | e0.03 | 0.33 | 1.1 | 0.18 | 0.18 | 0.03 | 0.43 | 0.61 | e39 |
| 8 | 0.02 | 0.06 | e0.04 | e0.03 | 0.32 | 0.27 | 0.90 | 0.12 | 0.03 | 0.48 | 0.01 | 8.5 |
| 9 | 0.02 | 0.06 | e0.03 | e0.03 | 0.15 | 0.21 | 0.37 | 0.10 | 0.03 | 0.03 | 0.09 | 1.4 |
| 10 | 0.01 | 0.02 | e0.03 | e0.03 | e0.12 | 11 | 0.22 | 0.09 | 0.02 | 0.01 | 0.01 | 0.26 |
| 11 | 0.01 | 0.06 | e0.04 | e0.03 | 0.10 | 1.9 | 0.19 | 0.09 | 0.02 | 0.06 | 0.00 | 0.45 |
| 12 | 0.01 | 0.09 | 1.7 | e0.02 | 0.10 | 0.43 | 3.1 | 0.10 | 0.07 | 0.02 | 0.00 | 0.32 |
| 13 | 0.01 | 0.02 | 0.30 | e0.02 | 0.10 | 0.29 | 0.86 | 0.10 | 0.03 | 0.01 | 0.08 | 0.12 |
| 14 | 0.66 | 0.02 | 0.12 | e0.02 | 0.83 | 0.23 | 0.32 | 0.12 | 0.03 | 0.00 | 0.54 | 0.17 |
| 15 | 0.17 | 0.02 | 0.08 | e0.02 | 0.33 | 0.27 | 0.23 | 0.15 | 0.03 | 0.00 | 0.16 | 0.13 |
| 16 | 0.14 | 0.16 | 0.06 | e0.02 | 0.27 | 1.1 | 2.8 | 0.13 | 0.03 | 0.00 | 0.05 | 0.07 |
| 17 | 0.14 | 0.48 | 0.06 | e0.02 | 0.60 | 0.26 | 1.0 | 0.21 | 0.42 | 0.00 | 0.01 | 0.06 |
| 18 | 0.13 | 0.05 | 0.06 | e0.08 | 0.44 | 0.22 | 0.34 | 0.54 | 0.03 | 0.00 | 0.10 | 0.06 |
| 19 | 0.28 | 0.04 | 0.06 | 0.15 | 0.19 | 0.18 | 0.89 | 1.6 | 0.02 | 0.11 | 0.07 | 0.06 |
| 20 | 0.03 | 0.03 | 0.06 | 0.08 | 0.13 | 0.16 | 0.40 | 0.44 | 0.02 | 0.00 | 0.00 | 0.08 |
| 21 | 0.03 | 0.03 | 0.08 | e0.06 | 0.12 | 0.41 | 0.23 | 0.26 | 0.07 | 0.00 | 0.17 | 0.04 |
| 22 | 0.02 | 0.03 | 0.06 | e0.04 | 0.19 | 0.19 | 0.27 | 0.22 | 0.02 | 0.00 | 0.02 | 0.04 |
| 23 | 0.02 | 0.04 | 0.06 | e0.04 | 0.14 | 1.4 | 0.43 | 0.38 | 0.02 | 0.30 | 0.00 | 0.81 |
| 24 | 0.02 | 0.03 | 0.06 | e0.03 | 0.15 | 0.61 | 0.43 | 0.18 | 0.02 | 0.00 | 0.00 | 0.12 |
| 25 | 0.02 | 0.09 | 0.06 | e0.03 | 2.8 | 0.25 | 0.41 | 0.09 | 0.02 | 0.76 | 0.00 | 0.07 |
| 26 | 0.02 | 0.03 | 0.06 | 0.06 | 0.38 | 0.20 | 0.22 | 0.06 | 0.02 | 0.03 | 0.00 | 0.06 |
| 27 | 0.67 | 0.03 | 0.06 | e0.06 | 0.25 | 0.17 | 0.20 | 0.08 | 0.02 | 0.01 | 1.3 | 0.06 |
| 28 | 0.03 | 0.02 | 0.05 | e0.06 | 0.94 | 0.16 | 0.72 | 0.06 | 0.02 | 0.08 | 3.3 | 0.17 |
| 29 | 0.03 | 0.02 | 0.05 | e0.05 | --- | 0.15 | 0.20 | 0.05 | 0.01 | 0.14 | 0.04 | 0.09 |
| 30 | 0.03 | 0.10 | 0.05 | 0.05 | --- | 0.21 | 0.15 | 0.04 | 0.06 | 0.12 | 0.02 | 0.06 |
| 31 | 0.03 | --- | 0.05 | 0.05 | --- | 0.29 | --- | 0.04 | --- | 0.00 | 0.01 | --- |
| Total | 3.63 | 3.34 | 6.95 | 1.41 | 12.62 | 25.84 | 17.41 | 6.95 | 1.31 | 2.91 | 7.54 | 57.35 |
| Mean | 0.12 | 0.11 | 0.22 | 0.05 | 0.45 | 0.83 | 0.58 | 0.22 | 0.04 | 0.09 | 0.24 | 1.91 |
| Max | 0.67 | 1.4 | 3.1 | 0.15 | 2.8 | 11 | 3.1 | 1.6 | 0.42 | 0.76 | 3.3 | 39 |
| Min | 0.00 | 0.02 | 0.03 | 0.02 | 0.05 | 0.14 | 0.14 | 0.04 | 0.01 | 0.00 | 0.00 | 0.01 |
| Cfsm | 0.37 | 0.35 | 0.70 | 0.14 | 1.41 | 2.60 | 1.81 | 0.70 | 0.14 | 0.29 | 0.76 | 5.97 |
| In. | 0.42 | 0.39 | 0.81 | 0.16 | 1.47 | 3.00 | 2.02 | 0.81 | 0.15 | 0.34 | 0.88 | 6.67 |

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2011, BY WATER YEAR (WY)**

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | 0.29 | 0.28 | 0.44 | 0.29 | 0.38 | 0.56 | 0.42 | 0.29 | 0.23 | 0.14 | 0.20 | 0.47 |
| Max | 0.95 | 0.97 | 1.08 | 0.54 | 0.64 | 0.98 | 0.65 | 0.75 | 1.04 | 0.44 | 0.74 | 1.91 |
| (WY) | (2006) | (2007) | (2004) | (1999) | (2008) | (2003) | (2005) | (2008) | (2003) | (2005) | (2009) | (2011) |
| Min | 0.02 | 0.05 | 0.03 | 0.05 | 0.07 | 0.11 | 0.19 | 0.07 | 0.03 | 0.02 | 0.01 | 0.00 |
| (WY) | (2002) | (2008) | (1999) | (2011) | (2002) | (2009) | (1999) | (1999) | (2010) | (2007) | (2008) | (2005) |

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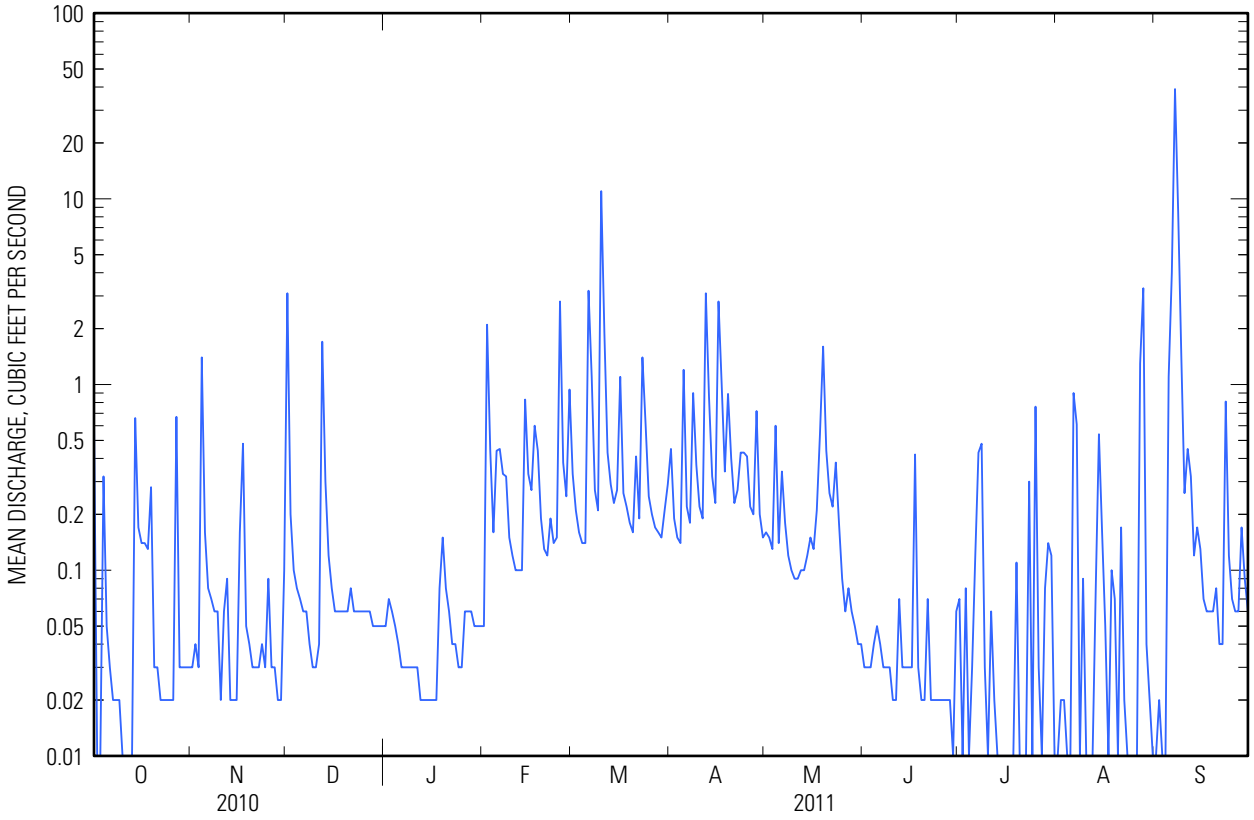
**SUMMARY STATISTICS**

| | Calendar Year 2010 | | Water Year 2011 | | Water Years 1999 - 2011 | |
|---|---|---|---|---|---|---|
| **Annual total** | 94.38 | | 147.26 | | | |
| **Annual mean** | 0.26 | | 0.40 | | 0.33 | |
| **Highest annual mean** | | | | | 0.59 | 2003 |
| **Lowest annual mean** | | | | | 0.13 | 2002 |
| **Highest daily mean** | 7.5 | Mar 13 | [e]39 | Sep 7 | [e]39 | Sep 7, 2011 |
| **Lowest daily mean** | 0.00 | Jul 2[a] | 0.00 | Oct 2[a] | 0.00 | Oct 1, 1998[b] |
| **Annual seven-day minimum** | 0.00 | Jul 2 | 0.00 | Jul 12 | 0.00 | Jul 3, 1999 |
| **Maximum peak flow** | | | [c]323 | Sep 7 | [c]323 | Sep 7, 2011 |
| **Maximum peak stage** | | | 3.75 | Sep 7 | 3.75 | Sep 7, 2011 |
| **Instantaneous low flow** | | | 0.00 | Oct 2[a] | 0.00 | Oct 1, 1998[b] |
| **Annual runoff (cfsm)** | 0.808 | | 1.26 | | 1.03 | |
| **Annual runoff (inches)** | 10.97 | | 17.12 | | 14.06 | |
| **10 percent exceeds** | 0.66 | | 0.61 | | 0.60 | |
| **50 percent exceeds** | 0.08 | | 0.07 | | 0.10 | |
| **90 percent exceeds** | 0.01 | | 0.01 | | 0.01 | |

[e] Estimated.
[a] Many days.
[b] No flow at times in 1999, 2001, 2002, 2005-08, 2010, 2011.
[c] From rating curve extended above 42 ft³/s.