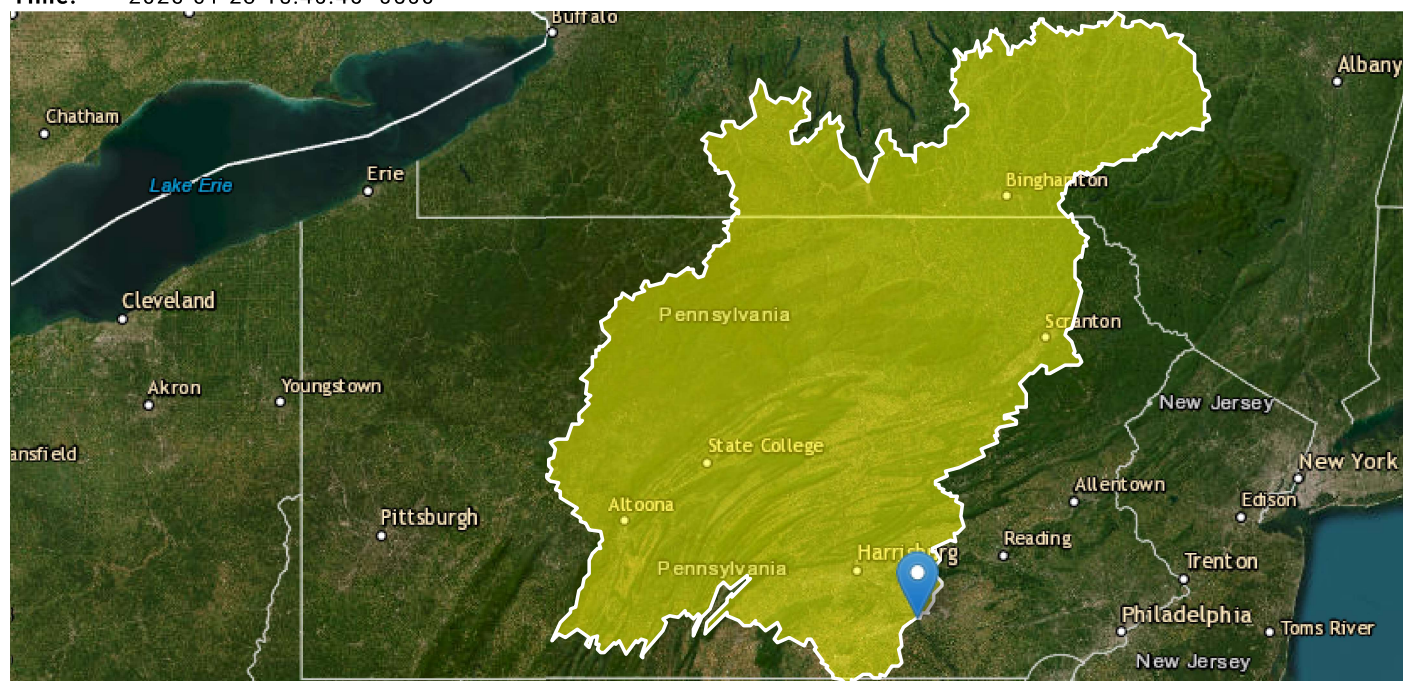


StreamStats Report

Region ID: PA

Clicked Point (Latitude, Longitude): 40.02017, -76.50233

Time: 2026-01-23 15:40:46 -0500



StreamStats Update

Starting with version 4.30.0, the StreamStats application uses services that were redeveloped with open-source software components. Users may observe minor variations in computed results when compared to those from previous versions. These differences are expected and do not reflect errors in the underlying data or analytical methods. Users are advised to consider these potential variations when interpreting or comparing results generated across different versions of StreamStats. Please email streamstats@usgs.gov with any questions or concerns. A full list of changes can be found at <https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release> (<https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>).

 Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	8.1352	degrees
BSLOPDRAW	Unadjusted basin slope, in degrees	8.3583	degrees
BSLPDRPA20	Unadjusted basin slope, in degrees, from PA v1	8.6041	degrees
CARBON	Percentage of area of carbonate rock	6.69	percent

Parameter Code	Parameter Description	Value	Unit
CENTROXA83	X coordinate of the centroid, in NAD_1983_Albers, meters	87669.8634	meters
CENTROYA83	Basin centroid horizontal (y) location in NAD 1983 Albers	258947.4654	meters
DRN	Drainage quality index from STATSGO	3.29	dimensionless
DRNAREA	Area that drains to a point on a stream	26032	square miles
ELEV	Mean Basin Elevation	1328.3	feet
ELEVMAX	Maximum basin elevation	3150.6	feet
FOREST	Percentage of area covered by forest	67.7565	percent
GLACIATED	Percentage of basin area that was historically covered by glaciers	45.3669	percent
IMPNLCD01	Percentage of impervious area determined from NLCD 2001 impervious dataset	1.4447	percent
LC01DEV	Percentage of land-use from NLCD 2001 classes 21-24	7.2541	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	7.8244	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	1.6259	percent
LONG_OUT	Longitude of Basin Outlet	-76.502302	decimal degrees
MAXTEMP	Mean annual maximum air temperature over basin area from PRISM 1971-2000 800-m grid	57.56	degrees F
OUTLETXA83	X coordinate of the outlet, in NAD_1983_Albers,meters	127849.5398	meters
OUTLETYA83	Y coordinate of the outlet, in NAD_1983_Albers, meters	114339.1289	meters
PRECIP	Mean Annual Precipitation	39.6	inches
ROCKDEP	Depth to rock	4.52	feet
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	2.25	percent
STRDEN	Stream Density -- total length of streams divided by drainage area	1.755	miles per square mile
STRMTOT	total length of all mapped streams (1:24,000-scale) in the basin	45693.4	miles
URBAN	Percentage of basin with urban development	2.8967	percent

➤ Peak-Flow Statistics

Peak-Flow Statistics Parameters [Peak Flow Region 4 SIR 2019 5094]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	6.69	percent	0	68.5
DRNAREA	Drainage Area	26032	square miles	1.2	512

Peak-Flow Statistics Disclaimers [Peak Flow Region 4 SIR 2019 5094]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [Peak Flow Region 4 SIR 2019 5094]

Statistic	Value	Unit
50-percent AEP flood	221000	ft ³ /s
20-percent AEP flood	300000	ft ³ /s
10-percent AEP flood	357000	ft ³ /s
4-percent AEP flood	437000	ft ³ /s
2-percent AEP flood	503000	ft ³ /s
1-percent AEP flood	574000	ft ³ /s
0.5-percent AEP flood	652000	ft ³ /s
0.2-percent AEP flood	764000	ft ³ /s

Peak-Flow Statistics Citations

Roland, M.A., and Stuckey, M.H., 2019, Development of regression equations for the estimation of flood flows at ungaged streams in Pennsylvania: U.S. Geological Survey Scientific Investigations Report 2019-5094, 36 p. (<https://doi.org/10.3133/sir20195094>)

➤ Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
BSLOPD	Mean Basin Slope degrees	8.1352	degrees	1.7	6.4
DRNAREA	Drainage Area	26032	square miles	4.78	1150
ROCKDEP	Depth to Rock	4.52	feet	4.13	5.21
URBAN	Percent Urban	2.8967	percent	0	89

Low-Flow Statistics Disclaimers [Low Flow Region 1]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 1]

Statistic	Value	Unit
7 Day 2 Year Low Flow	9480	ft ³ /s
30 Day 2 Year Low Flow	10500	ft ³ /s
7 Day 10 Year Low Flow	7440	ft ³ /s
30 Day 10 Year Low Flow	7810	ft ³ /s

Statistic	Value	Unit
90 Day 10 Year Low Flow	8310	ft ³ /s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)

➤ Annual Flow Statistics

Annual Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	26032	square miles	2.26	1720
ELEV	Mean Basin Elevation	1328.3	feet	130	2700
FOREST	Percent Forest	67.7565	percent	5.1	100
PRECIP	Mean Annual Precipitation	39.6	inches	33.1	50.4
URBAN	Percent Urban	2.8967	percent	0	89

Annual Flow Statistics Disclaimers [Statewide Mean and Base Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Annual Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Mean Annual Flow	38100	ft ³ /s

Annual Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)

➤ General Flow Statistics

General Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	6.69	percent	0	99
DRNAREA	Drainage Area	26032	square miles	2.26	1720
FOREST	Percent Forest	67.7565	percent	5.1	100
PRECIP	Mean Annual Precipitation	39.6	inches	33.1	50.4
URBAN	Percent Urban	2.8967	percent	0	89

General Flow Statistics Disclaimers [Statewide Mean and Base Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

General Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Harmonic Mean Streamflow adjusted for proportion of zero flow days	12800	ft ³ /s

General Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)

➤ Base Flow Statistics

Base Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	6.69	percent	0	99
DRNAREA	Drainage Area	26032	square miles	2.26	1720
FOREST	Percent Forest	67.7565	percent	5.1	100
PRECIP	Mean Annual Precipitation	39.6	inches	33.1	50.4
URBAN	Percent Urban	2.8967	percent	0	89

Base Flow Statistics Disclaimers [Statewide Mean and Base Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Base Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Base Flow 10 Year Recurrence Interval	13500	ft ³ /s
Base Flow 25 Year Recurrence Interval	11900	ft ³ /s
Base Flow 50 Year Recurrence Interval	11000	ft ³ /s

Base Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)

➤ Bankfull Statistics

Statewide_Bankfull_Carbonate_2018_5066 equations are not appropriate for this location and have been removed from the final report. This region does not meet the following criteria: (CARBON>30).

Bankfull Statistics Parameters [Statewide Bankfull Noncarbonate 2018 5066]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	6.69	percent		
DRNAREA	Drainage Area	26032	square miles	2.62	207

Bankfull Statistics Parameters [Appalachian Highlands D Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	26032	square miles	0.07722	940.1535

Bankfull Statistics Parameters [6.0 Percent (60.1 square miles) Blue Ridge P Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	26032	square miles	5.459454	125.999874

Bankfull Statistics Parameters [94.0 Percent (959 square miles) Piedmont P Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	26032	square miles	0.289575	939.99906

Bankfull Statistics Parameters [USA Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	26032	square miles	0.07722	59927.7393

Bankfull Statistics Disclaimers [Statewide Bankfull Noncarbonate 2018 5066]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [Statewide Bankfull Noncarbonate 2018 5066]

Statistic	Value	Unit
Bankfull Area	39600	ft^2
Bankfull Streamflow	277000	ft^3/s
Bankfull Width	1520	ft
Bankfull Depth	23.8	ft

Bankfull Statistics Disclaimers [Appalachian Highlands D Bieger 2015]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [Appalachian Highlands D Bieger 2015]

Statistic	Value	Unit
Bieger_D_channel_width	1030	ft
Bieger_D_channel_depth	20.7	ft
Bieger_D_channel_cross_sectional_area	22100	ft ²

Bankfull Statistics Disclaimers [6.0 Percent (60.1 square miles) Blue Ridge P Bieger 2015]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [6.0 Percent (60.1 square miles) Blue Ridge P Bieger 2015]

Statistic	Value	Unit
Bieger_P_channel_width	945	ft
Bieger_P_channel_depth	25.8	ft
Bieger_P_channel_cross_sectional_area	25300	ft ²

Bankfull Statistics Disclaimers [94.0 Percent (959 square miles) Piedmont P Bieger 2015]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [94.0 Percent (959 square miles) Piedmont P Bieger 2015]

Statistic	Value	Unit
Bieger_P_channel_width	889	ft
Bieger_P_channel_depth	26.8	ft
Bieger_P_channel_cross_sectional_area	32000	ft ²

Bankfull Statistics Flow Report [USA Bieger 2015]

Statistic	Value	Unit
Bieger_USA_channel_width	444	ft
Bieger_USA_channel_depth	10.5	ft
Bieger_USA_channel_cross_sectional_area	4140	ft ²

Bankfull Statistics Flow Report [Area-Averaged]

Statistic	Value	Unit
Bankfull Area	39600	ft ²
Bankfull Streamflow	277000	ft ³ /s

Statistic	Value	Unit
Bankfull Width	1520	ft
Bankfull Depth	23.8	ft
Bieger_D_channel_width	1030	ft
Bieger_D_channel_depth	20.7	ft
Bieger_D_channel_cross_sectional_area	22100	ft^2
Bieger_P_channel_width	892	ft
Bieger_P_channel_depth	26.7	ft
Bieger_P_channel_cross_sectional_area	31600	ft^2
Bieger_USA_channel_width	444	ft
Bieger_USA_channel_depth	10.5	ft
Bieger_USA_channel_cross_sectional_area	4140	ft^2

Bankfull Statistics Citations

Clune, J.W., Chaplin, J.J., and White, K.E.,2018, Comparison of regression relations of bankfull discharge and channel geometry for the glaciated and nonglaciated settings of Pennsylvania and southern New York: U.S. Geological Survey Scientific Investigations Report 2018–5066, 20 p. (<https://doi.org/10.3133/sir20185066>)
Bieger, Katrin; Rathjens, Hendrik; Allen, Peter M.; and Arnold, Jeffrey G.,2015, Development and Evaluation of Bankfull Hydraulic Geometry Relationships for the Physiographic Regions of the United States, Publications from USDA-ARS / UNL Faculty, 17p. (https://digitalcommons.unl.edu/usdaarsfacpub/1515?utm_source=digitalcommons.unl.edu%2Fusdaarsfacpub%2F1515&utm_medium=PDF&utm_campaign=PDFCoverPage)

➤ Maximum Probable Flood Statistics

Maximum Probable Flood Statistics Parameters [Crippen Bue Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	26032	square miles	0.1	10000

Maximum Probable Flood Statistics Disclaimers [Crippen Bue Region 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Maximum Probable Flood Statistics Flow Report [Crippen Bue Region 4]

Statistic	Value	Unit
Maximum Flood Crippen Bue Regional	667000	ft^3/s

Maximum Probable Flood Statistics Citations

Crippen, J.R. and Bue, Conrad D.1977, Maximum Floodflows in the Conterminous United States, Geological Survey Water-Supply Paper 1887, 52p. (<https://pubs.usgs.gov/wsp/1887/report.pdf>)

➤ NHD Features of Delineated Basin

NHD Streams Intersecting Basin Delineation Boundary

This functionality attempts to find the stream name at the delineation point. The name of the nearest intersecting National Hydrography Dataset (NHD) stream is selected by default to appear in the report above. NHD streams do not correspond to the StreamStats stream grid and may not be accurate. If you would like a different stream to appear in the above section, please make a selection below.

Watershed Boundary Dataset (WBD) HUC 8 Intersecting Basin Delineation Boundary

This functionality attempts to find the intersecting HUC 8 of the delineated watershed. HUC boundaries do not correspond to the StreamStats data and may not be accurate.

No WBD HUC8s intersect the delineated basin.

NHD Hydrologic Features Citations

**U.S. Geological Survey, 2022, USGS TNM - National Hydrography Dataset, accessed July 21, 2022 at URL <https://hydro.nationalmap.gov/arcgis/rest/services/nhd/MapServer/6>.
(<https://hydro.nationalmap.gov/arcgis/rest/services/nhd/MapServer/6>) U.S. Geological Survey, 2022, USGS TNM - National Hydrography Dataset, accessed July 21, 2022 at URL <https://hydro.nationalmap.gov/arcgis/rest/services/wbd/MapServer/4>.
(<https://hydro.nationalmap.gov/arcgis/rest/services/wbd/MapServer/4>)**

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.30.0

SSHydro Services Version: 1.0.0

SSDelineate Services Version: 1.0.0

NSS Services Version: 2.2.1

GageStats Services Version: 1.2.1

Pourpoint Services Version: 1.2.0

Batch Processor Version: 1.6.0