StreamStats Report

Region ID: PA
Clicked Point (Latitude, Longitude): 40.12486, -76.57411
NHD Stream GNIS Name of Click Point:
Time: 2026-03-05 10:06:53 -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	3.2204	degrees
BSLOPDRAW	Unadjusted basin slope, in degrees	3.4148	degrees

Parameter Code	Parameter Description	Value	Unit
BSLPDRPA20	Unadjusted basin slope, in degrees, from PA v1	5.6351	degrees
CARBON	Percentage of area of carbonate rock	49.32	percent
CENTROXA83	X coordinate of the centroid, in NAD_1983_Albers, meters	1629233.0555	meters
CENTROYA83	Basin centroid horizontal (y) location in NAD 1983 Albers	2068875.5346	meters
DRN	Drainage quality index from STATSGO	3.21	dimensionless
DRNAREA	Area that drains to a point on a stream	0.71	square miles
ELEV	Mean Basin Elevation	454.6	feet
ELEVMAX	Maximum basin elevation	537.1	feet
FOREST	Percentage of area covered by forest	5.6777	percent
GLACIATED	Percentage of basin area that was historically covered by glaciers	0	percent
IMPNLCD01	Percentage of impervious area determined from NLCD 2001 impervious dataset	19.2684	percent
LC01DEV	Percentage of land-use from NLCD 2001 classes 21-24	43.6146	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	52.847	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	22.7946	percent
LONG_OUT	Longitude of Basin Outlet	-76.5741223	decimal degrees
MAXTEMP	Mean annual maximum air temperature over basin area from PRISM 1971-2000 800-m grid	62.8	degrees F
OUTLETXA83	X coordinate of the outlet, in NAD_1983_Albers,meters	1629605	meters
OUTLETYA83	Y coordinate of the outlet, in NAD_1983_Albers, meters	2068105	meters
PRECIP	Mean Annual Precipitation	40.6	inches
ROCKDEP	Depth to rock	5.35	feet
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	1.52	percent
STRDEN	Stream Density -- total length of streams divided by drainage area	2.242	miles per square mile
STRMTOT	total length of all mapped streams (1:24,000-scale) in the basin	1.592	miles
URBAN	Percentage of basin with urban development	12.9178	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	49.32	percent	0	68.5
DRNAREA	Drainage Area	0.71	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	126	ft^3/s
20-percent AEP flood	229	ft^3/s
10-percent AEP flood	317	ft^3/s
4-percent AEP flood	447	ft^3/s
2-percent AEP flood	559	ft^3/s
1-percent AEP flood	683	ft^3/s
0.5-percent AEP flood	819	ft^3/s
0.2-percent AEP flood	1020	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	3.2204	degrees	1.7	6.4
DRNAREA	Drainage Area	0.71	square miles	4.78	1150
ROCKDEP	Depth to Rock	5.35	feet	4.13	5.21
URBAN	Percent Urban	12.9178	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	0.184	ft^3/s
30 Day 2 Year Low Flow	0.245	ft^3/s
7 Day 10 Year Low Flow	0.0788	ft^3/s
30 Day 10 Year Low Flow	0.109	ft^3/s
90 Day 10 Year Low Flow	0.192	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	0.71	square miles	2.26	1720
ELEV	Mean Basin Elevation	454.6	feet	130	2700
FOREST	Percent Forest	5.6777	percent	5.1	100
PRECIP	Mean Annual Precipitation	40.6	inches	33.1	50.4
URBAN	Percent Urban	12.9178	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	0.747	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	49.32	percent	0	99
DRNAREA	Drainage Area	0.71	square miles	2.26	1720
FOREST	Percent Forest	5.6777	percent	5.1	100
PRECIP	Mean Annual Precipitation	40.6	inches	33.1	50.4
URBAN	Percent Urban	12.9178	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	0.292	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	49.32	percent	0	99
DRNAREA	Drainage Area	0.71	square miles	2.26	1720
FOREST	Percent Forest	5.6777	percent	5.1	100
PRECIP	Mean Annual Precipitation	40.6	inches	33.1	50.4
URBAN	Percent Urban	12.9178	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	0.296	ft^3/s
Base Flow 25 Year Recurrence Interval	0.252	ft^3/s
Base Flow 50 Year Recurrence Interval	0.228	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_Noncarbonate_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 Carbonate 2018 5066]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	49.32	percent		
DRNAREA	Drainage Area	0.71	square miles	18.9	213

Bankfull Statistics Parameters [Appalachian Highlands D Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.71	square miles	0.07722	940.1535

Bankfull Statistics Parameters [Piedmont P Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.71	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	0.71	square miles	0.07722	59927.7393

Bankfull Statistics Disclaimers [Statewide Bankfull Carbonate 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 Carbonate 2018 5066]

Statistic	Value	Unit
Bankfull Area	1.65	ft^2
Bankfull Streamflow	3.26	ft^3/s
Bankfull Width	4.09	ft
Bankfull Depth	0.425	ft

Bankfull Statistics Flow Report [Appalachian Highlands D Bieger 2015]

Statistic	Value	Unit
Bieger_D_channel_width	13.2	ft
Bieger_D_channel_depth	1.02	ft
Bieger_D_channel_cross_sectional_area	13.5	ft^2

Bankfull Statistics Flow Report [Piedmont P Bieger 2015]

Statistic	Value	Unit
Bieger_P_channel_width	12	ft
Bieger_P_channel_depth	1.03	ft
Bieger_P_channel_cross_sectional_area	12.1	ft^2

Bankfull Statistics Flow Report [USA Bieger 2015]

Statistic	Value	Unit
Bieger_USA_channel_width	11	ft
Bieger_USA_channel_depth	1.12	ft
Bieger_USA_channel_cross_sectional_area	14.2	ft^2

Bankfull Statistics Flow Report [Area-Averaged]

Statistic	Value	Unit
Bankfull Area	1.65	ft^2

Statistic	Value	Unit
Bankfull Streamflow	3.26	ft^3/s
Bankfull Width	4.09	ft
Bankfull Depth	0.425	ft
Bieger_D_channel_width	13.2	ft
Bieger_D_channel_depth	1.02	ft
Bieger_D_channel_cross_sectional_area	13.5	ft^2
Bieger_P_channel_width	12	ft
Bieger_P_channel_depth	1.03	ft
Bieger_P_channel_cross_sectional_area	12.1	ft^2
Bieger_USA_channel_width	11	ft
Bieger_USA_channel_depth	1.12	ft
Bieger_USA_channel_cross_sectional_area	14.2	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=PDFCove

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	0.71	square miles	0.1	10000

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

Statistic	Value	Unit
Maximum Flood Crippen Bue Regional	2970	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.

GNIS ID	GNIS Name	Distance from Clicked Point (ft)	Feature Type	Selected Stream Name
		42.69	Intermittent	✓

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.

HUC 8	Name
02050306	Lower Susquehanna

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)

Application Version: 4.31.1
SSHydro Services Version: 1.1.1
SSDelineate Services Version: 1.0.1
NSS Services Version: 2.2.1

GageStats Services Version: 1.2.1

Pourpoint Services Version: 1.2.0

Batch Processor Version: 1.6.1