


HCDN: Streamflow Data Set, 1874 - 1988   
By J.R. Slack, Alan M. Lumb, and Jurate Maciunas Landwehr  
USGS Water-Resources Investigations Report 93-4076

# Station 01538000 WAPWALLOPEN CREEK NEAR WAPWALLOPEN, PA.

Description, qualifying comments, and acceptable water years.

Drainage area is 43.8 sq.mi. Datum is 752.41 ft.  
Located in hydrologic unit 02050107 at Latitude: 41:03:33N Longitude: 076:05:38W  
Station is in the state of PA (county code 079) and serviced by the PA office.  
Channel slope is 52.20 feet/mile  
Stream length is 22.11 miles  
Mean basin elevation is 1330.00 feet above National Geodetic Vertical Datum  
Percent of contributing drainage area covered by  
Storage: 1.00% Lakes: 0.00% Forests: 84.00% Glaciers: N.A.%  
Soil infiltration index is 3.51 inches  
Annual precipitation is 41.60 inches  
Precipitation intensity is 2.80 inches/24 hour (expected on the average once each two years)  
January minimum temperature is 18.00 degrees Fahrenheit

Daily and longer averages for 69 water years are acceptable (all years except partial years).  
A water year with acceptable data is indicated by an asterisk in the time line, which spans 1874 through 1988.

Water year										
1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1
8	8	8	9	9	9	9	9	9	9	9
9	9	9	9	0	1	2	3	4	5	6
7	8	9	0	1	2	3	4	5	6	7
7	8	9	0	1	2	3	4	5	6	7
4	5	6	7	8	9	0	1	2	3	4
0	1	2	3	4	5	6	7	8	9	0
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### The streamflow data

Daily values, monthly mean values, and yearly mean values  
of streamflow data are available in tabular form.  
Select the desired option from the list below.

- [a.](#) Table of daily data (239K text)
- [b.](#) Table of monthly data
- [c.](#) Table of annual data

The data tables do not have column heading for ease of reading into statistical programs.  
For a detailed description of the format of the data tables,  
select the corresponding file from the list below.

- [a.](#) Format of the daily data table
- [b.](#) Format of the monthly data table

[c.](#)    **Format of the yearly data table**

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*Return to [Region02](#)*

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## U.S. Geological Survey

# Hydro-Climatic Data Network (HCDN): Streamflow Data Set, 1874 - 1988

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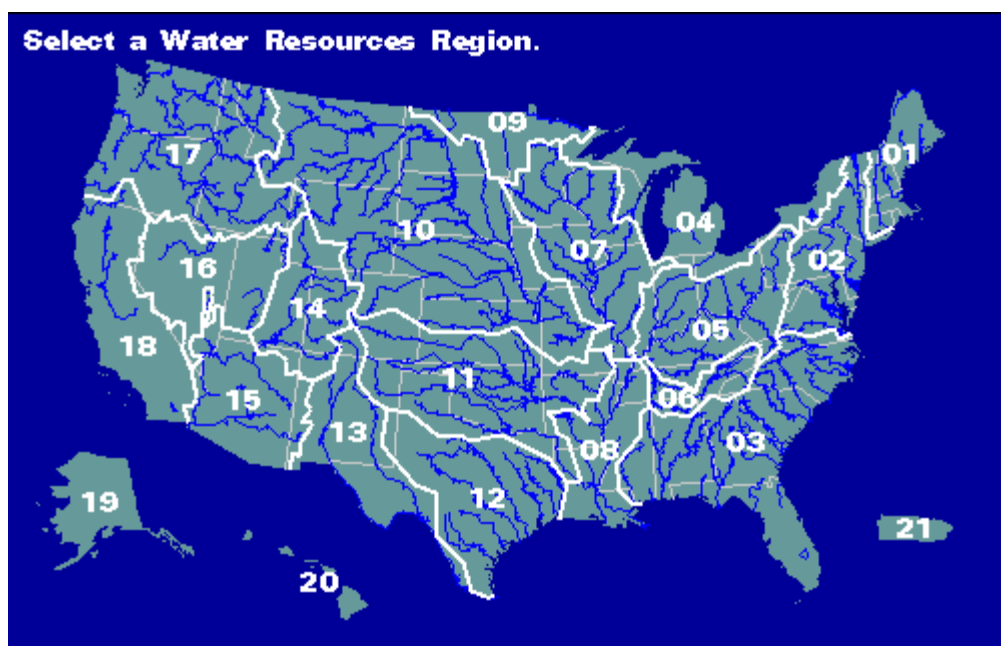
The potential consequences of climate change to continental water resources are of great concern in the management of those resources. Critically important to society is what effect fluctuations in the prevailing climate may have on hydrologic conditions, such as the occurrence and magnitude of floods or droughts and the seasonal distribution of water supplies within a region. Records of streamflow that are unaffected by artificial diversions, storage, or other works of man in or on the natural stream channels or in the watershed can provide an account of hydrologic responses to fluctuations in climate. By examining such records given known past meteorologic conditions, we can better understand hydrologic responses to those conditions and anticipate the effects of postulated changes in current climate regimes. Furthermore, patterns in streamflow records can indicate when a change in the prevailing climate regime may have occurred in the past, even in the absence of concurrent meteorologic records.

A streamflow data set, which is specifically suitable for the study of surface-water conditions throughout the United States under fluctuations in the prevailing climatic conditions, has been developed. This data set, called the Hydro-Climatic Data Network, or HCDN, consists of streamflow records for 1,659 sites throughout United States and its Territories. Records cumulatively span the period 1874 through 1988, inclusive, and represent a total of 73,231 water years of information.

*Development of the HCDN Data Set:* Records for the HCDN were obtained through a comprehensive search of the extensive surface- water data holdings of the U.S. Geological Survey (USGS), which are contained in the USGS National Water Storage and Retrieval System (WATSTORE). All streamflow discharge records in WATSTORE through September 30, 1988, were examined for inclusion in the HCDN in accordance with strictly defined criteria of measurement accuracy and natural conditions. No reconstructed records of "natural flow" were permitted, nor was any record extended or had missing values "filled in" using computational algorithms. If the streamflow at a station was judged to be free of controls for only a part of the entire period of record that is available for the station, then only that part was included in the HCDN, but only if it was of sufficient length (generally 20 years) to warrant inclusion. In addition to the daily mean discharge values, complete station identification information and basin characteristics were retrieved from WATSTORE for inclusion in the HCDN. Statistical characteristics, including the monthly mean discharge, as well as the annual mean, minimum and maximum discharge values, were derived for the records in the HCDN data set. For a full description of the development and content of the Hydro-Climatic Data Network, please take a look at the [HCDN Report](#).

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The United States was divided and sub-divided into successively smaller hydrologic units. The first level of classification divides the U.S. into 21 water-resources regions. For a more comprehensive explanation of the hydrologic units refer to [HUCS.TXT](#). HCDN data for a specific region can be obtained by selecting the corresponding region on the map or from the list below.



The gray lines are state lines, the blue lines are major rivers, and the white lines are water-resources region boundary lines.

- [Region 01](#) New England
- [Region 02](#) Mid-Atlantic
- [Region 03](#) South Atlantic-Gulf
- [Region 04](#) Great Lakes
- [Region 05](#) Ohio
- [Region 06](#) Tennessee
- [Region 07](#) Upper Mississippi
- [Region 08](#) Lower Mississippi
- [Region 09](#) Souris-Red-Rainy
- [Region 10](#) Missouri
- [Region 11](#) Arkansas-White-Red
- [Region 12](#) Texas-Gulf
- [Region 13](#) Rio Grande
- [Region 14](#) Upper Colorado
- [Region 15](#) Lower Colorado
- [Region 16](#) Great Basin
- [Region 17](#) Pacific Northwest
- [Region 18](#) California
- [Region 19](#) Alaska
- [Region 20](#) Hawaii
- [Region 21](#) Caribbean

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[More Information](#) about the HCDN.

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The complete HCDN CD-ROM may accessed on-line via FTP at <http://pubs.water.usgs.gov/ofr92-129>.

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For comments and questions, contact <[hlins@usgs.gov](mailto:hlins@usgs.gov)>

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