



Water-Data Report 2011

**01459500 TOHICKON CREEK NEAR PIPERSVILLE, PA**

Upper Delaware Basin  
Middle Delaware-Musconetcong Subbasin

LOCATION.--Lat 40°26'01", long 75°07'01" referenced to North American Datum of 1927, Bucks County, PA, Hydrologic Unit 02040105, on right bank at site of Traugers bridge, 1.5 mi northeast of Pipersville, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--97.4 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--July 1935 to current year.

REVISED RECORDS.--WDR PA-75-1: 1974.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 258.96 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the Pennsylvania Department of Environmental Protection.

REMARKS.--Records good, except those for the period Jan 5 to Feb 17, which are fair, those below 10 ft<sup>3</sup>/s, and those for estimated daily discharges, which are poor. Flow regulated since December 1973 by Nockamixon Reservoir about 6.2 mi upstream. Several measurements of water temperature were made during the year.

## 01459500 TOHICKON CREEK NEAR PIPERSVILLE, PA—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**  
[e, estimated]

<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>1</b>	3,110	28	839	29	49	589	94	231	46	24	10	134
<b>2</b>	1,890	25	1,320	39	101	363	145	162	41	21	8.6	86
<b>3</b>	402	24	476	62	194	234	131	128	32	19	7.7	63
<b>4</b>	178	132	246	67	e180	168	103	195	27	24	9.8	49
<b>5</b>	154	426	154	60	191	140	113	266	24	25	8.2	54
<b>6</b>	205	503	106	e54	e210	618	179	180	23	22	8.2	1,110
<b>7</b>	157	318	80	e54	e220	2,550	156	130	21	20	12	4,940
<b>8</b>	96	31	62	e50	e280	912	134	101	20	23	12	4,280
<b>9</b>	64	24	50	e48	e210	393	286	83	19	121	17	1,450
<b>10</b>	46	20	41	42	e150	1,060	242	66	18	87	23	512
<b>11</b>	37	18	39	37	e120	3,150	174	55	18	55	17	285
<b>12</b>	49	17	232	45	e110	1,140	297	48	21	40	15	189
<b>13</b>	45	16	564	43	e100	439	976	44	21	31	13	131
<b>14</b>	46	16	339	41	132	264	604	41	22	25	120	96
<b>15</b>	113	16	183	45	311	181	315	51	27	21	275	77
<b>16</b>	96	17	110	41	276	351	664	328	27	19	217	65
<b>17</b>	65	59	78	39	400	388	2,030	292	45	16	130	50
<b>18</b>	49	91	60	69	1,040	263	782	453	41	14	77	42
<b>19</b>	49	90	51	e140	1,280	391	358	685	35	13	52	38
<b>20</b>	47	69	46	e150	575	306	260	596	31	11	40	34
<b>21</b>	44	54	44	e110	354	51	201	434	28	10	75	32
<b>22</b>	39	46	36	e85	251	56	141	257	26	9.2	358	35
<b>23</b>	33	42	40	e60	185	156	266	173	25	8.2	202	61
<b>24</b>	30	41	34	e50	151	503	519	139	28	7.4	103	416
<b>25</b>	27	36	30	e47	1,120	393	940	108	110	29	79	302
<b>26</b>	27	43	34	e45	1,160	248	479	83	78	27	97	176
<b>27</b>	31	45	66	e110	508	170	418	68	49	18	141	114
<b>28</b>	38	41	53	72	598	129	600	56	37	16	9,640	1,190
<b>29</b>	39	37	37	60	---	144	931	48	32	14	3,370	850
<b>30</b>	35	35	33	54	---	63	403	55	28	13	640	713
<b>31</b>	31	---	31	48	---	67	---	54	---	12	252	---
<b>Total</b>	7,272	2,360	5,514	1,896	10,456	15,880	12,941	5,610	1,000	794.8	16,029.5	17,574
<b>Mean</b>	235	78.7	178	61.2	373	512	431	181	33.3	25.6	517	586
<b>Max</b>	3,110	503	1,320	150	1,280	3,150	2,030	685	110	121	9,640	4,940
<b>Min</b>	27	16	30	29	49	51	94	41	18	7.4	7.7	32

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1973, BY WATER YEAR (WY) (PRIOR TO REGULATION)**

	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>Mean</b>	43.4	138	183	190	235	300	217	121	79.0	54.0	66.8	54.3
<b>Max</b>	367	601	464	501	572	795	612	430	413	288	515	513
(WY)	(1956)	(1973)	(1973)	(1949)	(1971)	(1936)	(1952)	(1948)	(1972)	(1938)	(1955)	(1960)
<b>Min</b>	1.46	3.51	11.5	37.8	42.5	133	35.2	15.9	4.64	1.68	1.12	1.21
(WY)	(1965)	(1965)	(1966)	(1966)	(1947)	(1949)	(1946)	(1955)	(1965)	(1957)	(1957)	(1957)

## 01459500 TOHICKON CREEK NEAR PIPERSVILLE, PA—Continued

## SUMMARY STATISTICS

	Water Years 1936 - 1973	
<b>Annual mean</b>	140	
<b>Highest annual mean</b>	240	1973
<b>Lowest annual mean</b>	45.8	1965
<b>Highest daily mean</b>	6,820	Sep 12 1960
<b>Lowest daily mean</b>	.10	Sep 24 1941 <sup>a</sup>
<b>Annual seven day minimum</b>	.47	Jul 24 1955
<b>Maximum peak flow</b>	b16,000	Aug 18 1955
<b>Maximum peak stage</b>	11.26	Aug 18 1955
<b>Instantaneous low flow</b>	.05	Sep 24 1941
<b>Annual runoff (cfsm)</b>	1.43	
<b>Annual runoff (inches)</b>	19.48	
<b>10 percent exceeds</b>	325	
<b>50 percent exceeds</b>	37	
<b>90 percent exceeds</b>	3.8	

<sup>a</sup> Also Sept. 29, Oct. 6, 1941.<sup>b</sup> From rating curve extended above 13,600 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 10.48 ft.

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	114	171	252	229	214	320	246	176	100	74.9	64.9	109
<b>Max</b>	528	553	813	916	497	867	707	579	514	602	517	586
(WY)	(1997)	(1976)	(1997)	(1979)	(2008)	(1994)	(1983)	(1984)	(2006)	(1984)	(2011)	(2011)
<b>Min</b>	5.87	5.12	3.61	16.4	28.3	43.1	36.9	29.1	5.73	2.11	3.92	3.00
(WY)	(1983)	(2002)	(1999)	(1977)	(1974)	(1976)	(1985)	(1999)	(1999)	(1999)	(2002)	(2005)

## SUMMARY STATISTICS

	Calendar Year 2010			Water Year 2011			Water Years 1974 - 2011		
<b>Annual total</b>	58,394.2			97,327.3					
<b>Annual mean</b>	160			267			172		
<b>Highest annual mean</b>							300		
<b>Lowest annual mean</b>							74.0		
<b>Highest daily mean</b>	3,550			Mar 14			9,640		
<b>Lowest daily mean</b>	3.0			Aug 21			7.4		
<b>Annual seven-day minimum</b>	3.3			Aug 28			9.2		
<b>Maximum peak flow</b>							12,600		
<b>Maximum peak stage</b>							Aug 28		
<b>10 percent exceeds</b>	445			581			a18,600		
<b>50 percent exceeds</b>	46			67			11.90		
<b>90 percent exceeds</b>	3.8			20			51		
							6.3		

<sup>a</sup> From rating curve extended above 13,600 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 10.48 ft.

**01459500 TOHICKON CREEK NEAR PIPERSVILLE, PA—Continued**