



Water-Data Report 2007

01482500 SALEM RIVER AT WOODSTOWN, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°38'38", long 75°19'49" referenced to North American Datum of 1983, Woodstown Borough, Salem County, NJ, Hydrologic Unit 02040206, on right end of Memorial Lake Dam at Woodstown, 0.3 mi upstream from Chestnut Run and 0.3 mi downstream from Salem County railroad bridge.

DRAINAGE AREA.--14.6 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March to September 1940, December 1941 to January 1984, June to December 1989, October 2002 to current year. Operated as crest-stage gage 1985-95. Prior to 1952, published as "Salem Creek at Woodstown".

REVISED RECORDS.--WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 29.49 ft above NGVD of 1929.

REMARKS.--Records good, except for estimated daily discharges and daily discharges below 5 ft³/s, which are fair. Occasional regulation from lake gate operations or other activities upstream. Satellite gage-height telemetry at station. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 8	1630	392	11.93
Jan 8	0845	550	12.04
Apr 15	1615	*1,300	*12.62

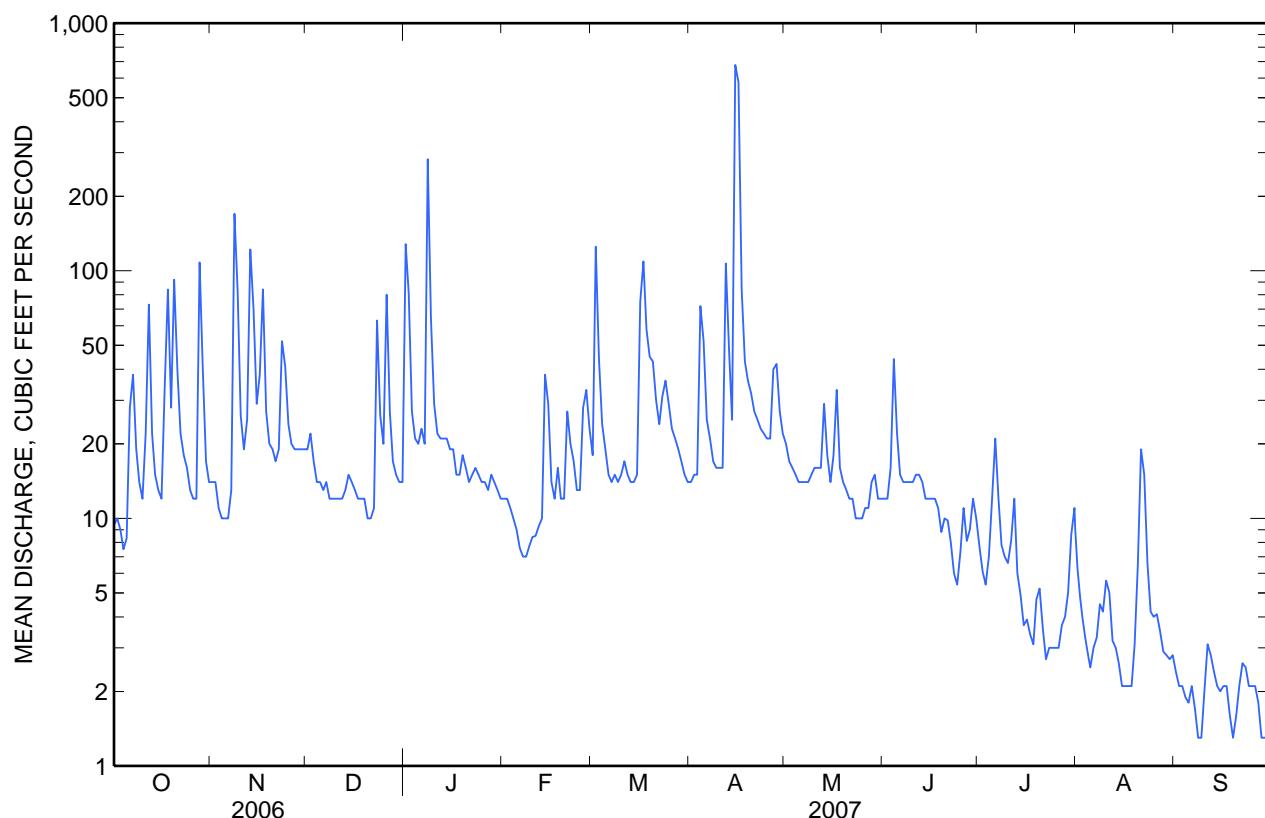
01482500 SALEM RIVER AT WOODSTOWN, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2006	Water Year 2007	Water Years 1940 - 2007		
Annual total	7,110.5	8,358.0			
Annual mean	19.5	22.9	19.7		
Highest annual mean			30.8		
Lowest annual mean			5.71		
Highest daily mean	445	Jul 6	Apr 15	4,460	Sep 1, 1940
Lowest daily mean	2.1	Jun 17	1.3 Many days	0.00	Jul 21, 1949
Annual seven-day minimum	2.1	Aug 9	1.7 Sep 24	0.20	Jul 24, 1954
Maximum peak flow			1,300 Apr 15	^a 22,000	Sep 1, 1940
Maximum peak stage			12.62 Apr 15	^b 17.98	Sep 1, 1940
Instantaneous low flow			1.3 Many days	^c 0.00	Many days
Annual runoff (cfsm)	1.33	1.57		1.35	
Annual runoff (inches)	18.12	21.30		18.29	
10 percent exceeds	38	40		35	
50 percent exceeds	12	14		12	
90 percent exceeds	4.1	2.8		4.4	

^a From rating curve extended above 220 ft³/s on basis of slope-area measurement of peak flow at site 0.5 mi downstream.

^b From floodmark.

^c No flow short periods during many days just after waste gate was closed and water was below spillway.



01482500 SALEM RIVER AT WOODSTOWN, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1973 to current year.

REMARKS.--For samples collected Nov 28, Mar 6, May 16, and Aug 21, total nitrogen (00600) equals the sum of filtered ammonia-plus-organic nitrogen (00623), filtered nitrite-plus-nitrate nitrogen (00631), and total particulate nitrogen (49570). Cooperative Network Site Descriptor: Agricultural Land Use Indicator, NJ Department of Environmental Protection Watershed Management Area 17.

COOPERATION.--Physical measurements and samples for laboratory analyses on Nov 28, Mar 6, May 16, and Aug 21 were provided by personnel of the NJ Department of Environmental Protection. Determinations of carbonaceous biochemical oxygen demand; dissolved ammonia for samples collected on Nov 28, Mar 6, May 16, and Aug 21; dissolved orthophosphate; and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Turbidity		UV		Barometric		Disolved	pH, water,	Specific		Temper-	Temper-	Hard-
		Instan-	taneous	white light, deg ang	absorb- ance, 254 nm, wat flt	absorb- ance, 280 nm, wat flt	Baro- metric pres- sure, mm Hg			conduc- tance, wat unf µS/cm	Temp- erature, air, deg C			
		dis- charge, 90+/-30 corrctd	cfs (00061)	NTRU (63676)	/cm (50624)	/cm (61726)	(00025)	(00300)	(00400)	25 degC (00095)	(00020)	(00010)	(00900)	
Nov														
28...	1030	19	15	.231	.179	770	11.1	95	7.4	251	12.0	8.9	88	
Mar														
06...	1100	21	24	.185	.142	772	13.6	99	7.5	243	-5.0	2.2	75	
May														
16...	1000	14	22	.217	.166	756	8.3	95	7.4	253	23.0	21.8	87	
Jul														
09...	0940	7.0	36	--	--	758	7.6	97	8.8	254	28.0	28.1	--	
24...	0940	3.0	37	--	--	763	6.3	76	7.3	267	19.5	24.4	--	
Aug														
14...	0930	3.0	24	--	--	764	6.5	80	7.6	282	25.5	26.3	--	
21...	1000	21	24	.209	.159	764	7.4	82	7.2	280	17.1	20.7	99	
22...	0930	16	26	--	--	764	8.4	91	7.2	273	13.0	19.0	--	
Sep														
24...	0900	2.1	9.9	--	--	765	6.7	75	7.4	295	20.0	21.4	--	

01482500 SALEM RIVER AT WOODSTOWN, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 4

[Remark codes: <, less than; E, estimated.]

Date	Organic carbon, water, unfltrd	CBOD, water, unfltrd 5 day,	Chloro-phyll a, phyto-plank-ton, fluoro,	Pheo-phytin a, phyto-plank-ton,	Boron, Boron, water, unfltrd	Boron, water, recover -able,	Iron, water, unfltrd recover -able,
	mg/L (00680)	mg/L (80082)	µg/L (70953)	µg/L (62360)	µg/L (01020)	µg/L (01022)	µg/L (01045)
Nov							
28...	--	--	--	--	24	--	--
Mar							
06...	--	--	--	--	17	--	--
May							
16...	--	--	--	--	24	--	--
Jul							
09...	13.7	5.5	77.8	34.7	--	22	859
24...	12.2	E1.7	27.9	12.2	--	25	1,500
Aug							
14...	9.9	<1.0	13.2	4.8	--	26	1,070
21...	--	--	--	--	24	--	--
22...	8.2	E1.3	12.6	12.2	--	22	1,360
Sep							
24...	9.1	2.2	24.6	23.5	--	26	350