

### Delaware River Flow and Storage Data -December 2016



DAY	Delaware at Montague		Lehigh River			Delaware at Trenton		Schuylkill River			Salt Front	New York City	
	Flow (cfs)		Flow (cfs)		Min DO (mg/l)	Flow (cfs)		Flow (cfs)		Max Temp (C)		Delaware River Basin Storage	
	8:00 AM	Mean	Lehighton	Bethlehem	Glendon	8:00 AM	Mean	Pottstown	Philadelphia	Vincent Dam	RM	(BG)	Capacity
12/1/2016	4,610	6,080	1,000	2,750		8,070	7,590	2,090	4,910		90	110.1	40.7%
12/2/2016	9,810	9,000	1,140	2,370		9,880	10,700	2,090	2,890		89	112.8	41.6%
12/3/2016	6,510	6,200	710	1,780		14,100	13,600	1,630	2,180		88	114.6	42.3%
12/4/2016	4,870	4,690	634	1,350		10,800	10,400	1,310	1,720		88	115.8	42.8%
12/5/2016	3,930	3,840	506	1,240		8,480	8,290	1,180	1,480		87	116.8	43.1%
12/6/2016	3,400	3,380	508	1,170		7,200	7,110	1,210	1,540		86	117.5	43.4%
12/7/2016	3,230	3,210	481	1,400		6,960	6,980	1,780	3,120		85	118.3	43.7%
12/8/2016	3,180	3,220	538	1,320		6,910	6,790	1,720	2,560		83	118.9	43.9%
12/9/2016	3,230	3,160	540	1,240		6,370	6,320	1,490	2,040		82	119.3	44.0%
12/10/2016	2,850	2,770	484	1,160		6,150	6,110	1,180	1,690		81	119.4	44.1%
12/11/2016	2,490	2,410	462	1,060		5,850	5,750	1,070	1,380		80	119.4	44.1%
12/12/2016	2,300	2,260	395	1,180		5,470	5,530	1,360	1,760		80	119.4	44.1%
12/13/2016	2,190	2,190	382	1,140		5,680	5,560	1,490	2,320		79	119.5	44.1%
12/14/2016	2,300	2,280	559	1,130		5,270	5,140	1,330	1,930		78	119.7	44.2%
12/15/2016	2,130	2,150	474	1,100		4,790	4,850	1,100	1,620		77	119.7	44.2%
12/16/2016	3,120	2,500	275	762		5,030	4,830	929	1,260		77	119.5	44.1%
12/17/2016	1,910	1,760	Ice	785		2,860	3,230	876	1,370		77	119.4	44.1%
12/18/2016	1,580	1,800	433	937		3,850	3,750	1,070	1,560		76	119.6	44.2%
12/19/2016	6,900	7,940	573	1,190		4,060	4,040	1,200	2,010		76	123.8	45.7%
12/20/2016	8,840	7,850	693	1,110		3,850	5,740	1,200	1,750		76	126.0	46.5%
12/21/2016	5,960	5,450	701	1,190		9,990	9,770	978	1,490		76	127.5	47.1%
12/22/2016	4,740	4,640	665	1,280		7,870	7,920	964	1,350		75	129.0	47.6%
12/23/2016	4,690	4,390	507	1,140		7,390	7,340	951	1,270		75	130.2	48.1%
12/24/2016	3,790	3,720	475	1,090		6,910	7,090	973	1,380		75	131.0	48.4%
12/25/2016	3,400	3,440	481	1,140		6,910	6,800	1,080	1,630		75	131.7	48.6%
12/26/2016	3,510	3,480	479	1,050		6,280	6,180	985	1,520		75	132.4	48.9%
12/27/2016	3,490	3,390	478	1,020		5,930	5,930	923	1,360		74	133.0	49.1%
12/28/2016	3,470	3,850	542	1,070		5,850	5,880	1,050	1,300		74	133.9	49.4%
12/29/2016	4,290	4,210	668	1,200		5,800	5,990	1,080	1,430		74	134.6	49.7%
12/30/2016	3,790	3,750	653	1,300		7,430	7,310	1,110	1,530		74	135.2	49.9%
12/31/2016	3,400	3,430	571	1,180		6,960	6,870	979	1,480		73	135.7	50.1%

Observed Average	3,950	567	1,253			6,755	1,238	1,833			69		
Mean Monthly	5,050	1,878	3,228			12,925	2,427	3,612					
% of Normal	78.2%	30.2%	38.8%			52.3%	51.0%	50.8%					

TODAY'S RESERVOIR OBSERVATIONS: 12/31/2016													
*Lower Delaware Basin:		New York City 24-hr, as of 8 am:											
	Vol. (BG)	Capacity		Precip	Usable	Storage	Draft	Directed Rel	NYC Daily Storage (BG)=		135.7	50.1%	
Blue Marsh	4.46	100.5%		(inches)	(BG)	(%)	(MG)	(MG)	NYC Daily Storage Median (BG)=		224.7	83.0%	
Beltzville	9.86	73.1%		0.00	21.0	60.1%	0	0	BG Below Daily Storage Median =		89.1	-39.64%	
				Neversink	0.00				BG Above Drought Watch =		9.8		
Directed Releases from Basin Reservoirs (cfs):				Pepacton	0.00	81.4	58.0%	199	0	BG Above Drought Warning =		25.8	
Blue Marsh	0	Merrill Creek	0	Cannonsville	0.00	33.3	34.8%	280	0	BG Above Drought =		49.8	
Beltzville	0	Wallenpaupack	0	Rondout	0.00	46.4	93.5%	605	0	BG Below One Year Ago =		77.3	

\*Percent capacity in Blue Marsh Reservoir is based upon the normal WINTER POOL storage of 4.43 BG. Percent capacity for Beltzville Reservoir is based upon the year-round, normal pool storage of 13.49 BG. Directed Release from NYC Reservoirs is the amount of water needed to meet the Montague Flow Objective.

**DATA SOURCES:**  
 Storage data provided by New York City Department of Environmental Protection, Bureau of Water Supply. [http://www.nyc.gov/html/dep/html/drinking\\_water/maplevels\\_wide.shtml](http://www.nyc.gov/html/dep/html/drinking_water/maplevels_wide.shtml)  
 Flow data provided by U.S. Geological Survey <http://waterdata.usgs.gov/nwis/rt>  
 Chloride data for the salt front calculation provided by U.S. Geological Survey and Kimberly Clark Corporation.  
 Lower Basin reservoir storage data provided by Philadelphia District Corps of Engineers. See basin summaries at <http://www.nap-wc.usace.army.mil/nap/>  
 ALL DATA ARE PROVISIONAL

- NOTES:**
- The Salt Front is the estimated location of the 7-day average chloride concentration of 250 milligrams/liter (mg/L).
  - Releases from F.E. Walter are requested from the U.S. Army Corps of Engineers and are made from the reservoir's temporary drought storage.
  - Directed releases from Lake Wallenpaupack are estimated values supplied by PPL.
  - Lower Basin reservoir percentages are a percent of allocated storage, not total storage. More than 19.3 billion gallons of flood control is available in Beltzville and Blue Marsh reservoirs.  
 cfs=Cubic Feet per Second; DO= Dissolved Oxygen; MG= Million Gallons; BG=Billion Gallons
  - During cold weather, ice effects on stage and discharge determinations at some stream-gaging stations are likely. Flow values reported on this report may be significantly higher or lower than actual streamflow. Revisions will be made as needed when adjusted data becomes available.
  - The location of the salt front is estimated. The salt front river mile location will be updated as chloride data is received. DRBC does not track the salt front below river mile 54. The normal location of the salt front represents the median monthly calculated value based upon values from 1/1998 through 2/28/2013.
  - Normal flow values represent the median of monthly means for the period of record after construction completion of major reservoirs regulating their flow (NYC Reservoirs: Montague 1956-2011; FE Walter and Beltzville: Bethlehem and Trenton 1971-2011, Lehighton 1983-2011; Blue Marsh: Pottstown and Philadelphia 1980-2011).
  - Minimum dissolved oxygen for the Lehigh River at Glendon and the maximum temperature at the Schuylkill River at Vincent Dam will be reported for the period June through September.
  - NYC Storage Median based on beginning of month values reported to the Delaware River Master from June 1967 - May 2013.
  - Drought Watch, Warning and Drought are defined by Figure 1 of Article 2 in the Delaware River Basin Water Code 18 CFR Part 410.