Delaware River Flow and Storage Data -November 2015 Summary

Delaware River Basin Commission
DELAWARE • NEW JERSEY
PENNSYLVANIA • NEW YORK
UNITED STATES OF AMERICA

	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	
DAY	8:00 AM	Mean	Lehighton	Bethlehem	Glendon	8:00 AM	Mean	Pottstown	Philadelphia	Vincent Dam	RM	(BG)	Capacity
11/1/2015	5,190	5,040	1,220	2,490		13,700	13,300	2,150	2,880		80	175.4	64.8%
11/2/2015	4,140	4,090	1,220	2,280		10,700	10,400	1,700	2,320		79	176.0	65.0%
11/3/2015	3,580	3,540	1,290	2,380		9,060	8,920	1,390	1,960		78	176.4	65.1%
11/4/2015	3,120	3,140	957	2,000		8,430	8,200	1,220	1,670		77	176.6	65.2%
11/5/2015	2,830	2,860	675	1,600		7,240	7,110	1,040	1,500		75	176.7	65.2%
11/6/2015	2,600	2,660	631	1,380		6,460	6,330	985	1,370		74	176.8	65.3%
11/7/2015	2,450	2,450	537	1,280		5,850	6,000	962	1,300		74	176.8	65.3%
11/8/2015	2,280	2,260	518	1,180		5,510	5,710	902	1,240		75	176.8	65.3%
11/9/2015	2,130	2,140	505	1,130		5,150	5,140	850	1,190		75	176.7	65.3%
11/10/2015	2,100	2,170	498	1,130		4,790	4,770	853	1,210		75	176.6	65.2%
11/11/2015	2,340	3,510	669	1,510		4,680	4,890	1,030	1,390		75	177.4	65.5%
11/12/2015	12,200	11,100	638	1,480		5,470	5,730	1,120	1,550		75	179.8	66.4%
11/13/2015	8,200	8,260	841	1,510		14,500	12,800	968	1,460		75	181.1	66.9%
11/14/2015	7,180	6,900	900	1,550		12,100	11,900	848	1,310		75	182.3	67.3%
11/15/2015	5,620	5,470	872	1,530		10,900	10,600	764	1,150		75	183.2	67.6%
11/16/2015	4,740	4,650	832	1,470		9,270	9,100	738	1,030		75	183.9	67.9%
11/17/2015	4,610	4,250	635	1,320		8,180	8,050	700	993		75	184.4	68.1%
11/18/2015	4,460	3,930	532	1,160		7,290	7,280	684	969		75	184.8	68.2%
11/19/2015	3,900	3,800	691	1,250		6,820	6,930	718	1,380		74	185.1	68.4%
11/20/2015	4,510	5,080	1,140	2,210		9,170	9,250	1,160	2,440		74	187.1	69.1%
11/21/2015	9,530	8,250	999	2,000		11,000	10,800	1,320	2,140		74	188.6	69.6%
11/22/2015	6,080	5,910	955	1,870		14,000	12,900	1,090	1,700		74	189.5	70.0%
11/23/2015	5,110	5,110	939	1,770		11,000	10,800	1,030	1,470		74	190.5	70.3%
11/24/2015	5,050	4,940	989	1,740		9,600	9,440	999	1,350		74	191.2	70.6%
11/25/2015	4,540	4,270	950	1,680		9,220	8,990	946	1,280		73	191.6	70.7%
11/26/2015	4,190	3,840	710	1,520		8,690	8,410	867	1,220		73	192.1	70.9%
11/27/2015	3,310	3,270	674	1,350		7,680	7,560	822	1,120		73	192.4	71.0%
11/28/2015	3,100	3,080	650	1,320		6,780	6,740	782	1,090		73	192.8	71.2%
11/29/2015	2,970	2,940	632	1,260		6,460	6,400	764	1,090		73	193.0	71.3%
11/30/2015	2,810	2,890	616	1,220		6,100	6,070	744	991		73	193.2	71.3%
Observed Average		4,393	797	1,586			8,351	1,005	1,459		70		
Mean Monthly		4,555	1,293	2,375			10,038	1,707	2,363				
% of Normal		96.5%	61.7%	66.8%			83.2%	58.9%	61.7%				

TODAY'S RESERVOIR OBSERVATIONS: 11/30/2015

*Lower Delaware Basin:	Vol. (BG)	Capacity
Blue Marsh	4.45	100.4%
Beltzville	13.53	100.3%

Directed Releases from Basin Reservoirs (cfs):			
Blue Marsh	0	Merrill Creek	0
Beltzville	0	Wallenpaupack	0

New York City 24-hr, as of 8 am:	Precip	Usable	Storage	Draft	Directed Rel
	(inches)	(BG)	(%)	(MG)	(MG)
Neversink	0.00	33.1	94.7%	0	0
Pepacton	0.00	97.6	69.7%	301	0
Cannonsville	0.00	62.6	65.4%	0	0
Rondout	0.00	47.1	94.9%	406	0

NYC Daily Storage (BG)=	193.2	71.3%	
NYC Daily Storage Median (BG)=	197.8	73.0%	
BG Below Daily Storage Median =	4.5	-2.28%	
BG Above Drought Watch =	83.2		
BG Above Drought Warning =	103.2		
BG Above Drought =	123.2		
BG Above One Year Ago =	38.7		

*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
Flow data provided by U.S. Geological Survey http://waterdata.usgs.gov/nwis/rt
Chloride data for the salt front calcuation 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

1. 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.
2. 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.
3. 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).
4. 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.
5. NYC Storage Median based on beginning of month values reported to the Delaware River Master from June 1967 - May 2013.
6. Drought Watch, Warning and Drought are defined by Figure 1 of Article 2 in the Delaware River Basin Water Code 18 CFR Part 410.