

Delaware River Flow and Storage Data -March 2014 Summary



DAY	Delaware at Montague		Lehigh River			Delaware at Trenton		Schuylkill River			Salt Front	New York City	
	Flow (cfs)		Flow (cfs)		DO (mg/l)	Flow (cfs)		Flow (cfs)		Temp (C)		RM	Delaware River Basin Storage
	8:00 AM	Mean	Lehighton	Bethlehem	Glendon	8:00 AM	Mean	Pottstown	Philadelphia	Vincent Dam	(BG)		Capacity
3/1/2014	Ice	Ice	660	1,540		Ice	Ice	1,800	2,860		75	229.5	84.7%
3/2/2014	Ice	Ice	691	1,700		8,060	8,020	1,800	2,820		75	228.8	84.5%
3/3/2014	Ice	Ice	631	1,520		7,470	7,580	1,710	2,760		75	228.1	84.2%
3/4/2014	Ice	Ice	683	1,300		7,560	7,040	1,490	2,390		74	227.2	83.9%
3/5/2014	Ice	Ice	639	1,570		6,570	7,010	1,490	2,250		74	226.2	83.5%
3/6/2014	Ice	Ice	583	1,320		6,800	6,820	1,430	2,250		74	225.2	83.1%
3/7/2014	Ice	Ice	590	1,350		5,820	6,120	1,390	2,110		74	223.9	82.7%
3/8/2014	Ice	Ice	595	1,370		5,860	6,170	1,460	2,120		74	222.7	82.2%
3/9/2014	Ice	Ice	603	1,600		6,610	7,050	1,830	3,160		74	222.0	82.0%
3/10/2014	Ice	Ice	615	1,810		8,580	8,570	2,270	4,590		74	221.3	81.7%
3/11/2014	Ice	Ice	686	2,420		9,780	10,200	2,980	5,350		75	220.5	81.4%
3/12/2014	Ice	Ice	963	4,370		13,500	14,600	5,200	7,310		75	220.2	81.3%
3/13/2014	Ice	Ice	1,160	5,740		20,400	20,400	7,960	13,200		75	220.7	81.5%
3/14/2014	Ice	Ice	1,080	3,900		18,700	18,100	6,250	8,850		74	220.7	81.5%
3/15/2014	Ice	Ice	1,470	3,560		16,900	16,400	4,810	6,500		74	220.6	81.4%
3/16/2014	Ice	Ice	1,580	3,980		16,100	16,200	4,740	6,270		74	220.7	81.5%
3/17/2014	Ice	Ice	1,420	3,380		15,300	15,100	4,020	5,490		73	220.7	81.5%
3/18/2014	4,130	4,320	1,010	2,740		13,600	13,400	3,400	4,640		73	220.6	81.4%
3/19/2014	3,850	3,960	979	2,550		11,800	11,800	3,000	4,160		72	220.3	81.3%
3/20/2014	4,250	4,650	999	2,930		15,400	14,700	3,450	6,300		72	220.3	81.3%
3/21/2014	6,040	6,160	1,020	2,930		15,100	15,200	3,050	4,960		72	220.5	81.4%
3/22/2014	6,270	6,320	1,300	2,950		15,800	15,800	2,750	4,170		71	220.6	81.5%
3/23/2014	7,020	6,950	1,420	3,090		15,800	16,000	2,600	3,800		71	220.7	81.5%
3/24/2014	6,290	6,300	1,370	2,960		16,200	16,200	2,450	3,520		71	220.8	81.5%
3/25/2014	5,250	5,270	1,140	2,670		14,900	14,700	2,240	3,310		70	220.6	81.5%
3/26/2014	4,540	4,720	1,170	2,380		13,200	12,900	2,160	3,080		70	220.9	81.6%
3/27/2014	4,130	4,310	1,100	2,240		11,700	11,600	1,980	2,890		70	220.8	81.5%
3/28/2014	3,710	3,810	1,090	2,130		10,800	10,700	1,890	2,730		70	220.6	81.5%
3/29/2014	4,220	4,820	1,430	2,410		10,400	10,700	1,910	3,200		70	221.5	81.8%
3/30/2014	11,400	15,800	2,780	5,200		23,300	24,400	4,520	13,300		70	225.3	83.2%
3/31/2014	27,300	25,700	3,260	6,560		41,700	43,700	6,380	15,300		70	231.9	85.6%

Observed Average	7,364	1,120	2,780			13,573	3,045	5,021					
Mean monthly	8,820	1,768	3,835			18,220	2,838	4,596			70		
% of Normal	83.5%	63.3%	72.5%			74.5%	107.3%	109.2%					

TODAY'S RESERVOIR OBSERVATIONS: 3/31/2014														
Lower Delaware Basin:			New York City 24-hr, as of 8 am:					NYC Daily Storage (BG)=					231.9	85.6%
	Vol. (BG)	Capacity		Precip (inches)	Usable (BG)	Storage (%)	Draft (MG)	Directed Rel (MG)				NYC Daily Storage Median (BG)=	259.5	95.8%
*Blue Marsh	5.00	112.9%		0.00	26.3	75.1%	0	0			BG Below Daily Storage Median =	27.7	-10.66%	
Beltzville	14.30	103.0%		0.00	121.0	86.4%	205	0			BG Above Drought Watch =	58.3		
Directed Releases from Basin Reservoirs (cfs):				0.00	0.00	88.4%	303	0			BG Above Drought Warning =	78.3		
Blue Marsh	0	Merrill Creek	0	Cannonville	0.00	84.6	88.4%	303	0		BG Above Drought =	98.3		
Beltzville	0	Wallenpaupack	0	Rondout	0.00	46.0	92.6%	403	0		BG Below One Year Ago =	7.0		

*Percent capacity is based upon winter pool storage. As of 3/31 report, Blue Marsh reservoir is starting to refill to summer pool capacity of 5.75 BG.

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 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 based on the 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).
 - Reporting of the minimum dissolved oxygen for the Lehigh River at Glendon and the maximum temperature at the Schuylkill River at Vincent Dam will be discontinued at the end of September 2013. Reporting will begin again in June 2014.
 - 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.
 - Flow measurements at the Delaware River at Trenton marked "Ice" are affected by the icy conditions in the river. Adjustment of data for ice effects will be available after a detailed analysis by the USGS.