

## RIVER AND WEATHER CONDITIONS

Prepared for Waterways Association Meeting 12/10/2014  
 National Weather Service Forecast Office, Pittsburgh PA  
 For the latest river and weather forecasts--<http://www.weather.gov/pittsburgh>

### WEATHER RECAP

For the month of November 2014, temperatures were well below normal and precipitation was also well below normal. November's temperatures was in the running to be in the top 10 coldest November's but a warm up the last few days of November prevented the month to go into the record books. Precipitation ranged from between 40 to 60 percent of normal across the region. In Pittsburgh, the maximum temperature in November was 70. The minimum temperature was 14. The average temperature was 38.8 degrees which is 4.1 degrees below the normal average temperature of 42.9. The minimum temperature dropped below 32 degrees on 18 days. A total of 1.97 inches liquid equivalent precipitation fell during November, which is 1.26 inches below the normal amount of 3.23 inches. A total of 3.1 inches of snow fell during the month. The normal November snowfall is 2.0 inches. There were 778 heating degree days this month, which is 116 above the normal amount of 662 days.

The first week of December was a rainy week that brought widespread rainfall. As much as 2.5 inches of rain fell over a 3 day period in Monongahela River basin.

Location	Nov 2014 Precipitation	Departure (Inches)
Pittsburgh	1.97	-1.26

Location	Nov Average Temperature	Departure Degrees	Extreme High	Extreme Low
Pittsburgh	42.9	-4.1	70(Nov 11)	14(Nov 18,19)

### RIVER CONDITIONS

Early December rainfall caused significant increases in river flows and velocities. For early December the Allegheny River was 150% of normal, the Ohio River about 250% of normal, and the Monongahela River was 300% of normal.

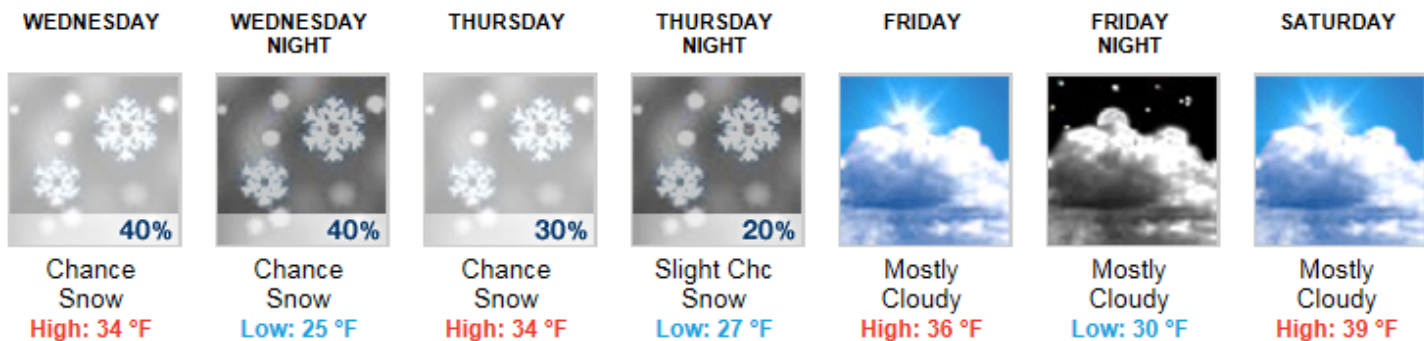
### HIGH WATER POTENTIAL

Between 1.50 and 2.00 inches basin wide rainfall in 6 to 12 hours is needed to bring rivers to bank full. High water potential is normal over the next 30 days.

### OUTLOOK

Another week and a half of overall normal conditions with a few short lived warm periods of a day or two. Then it is expected to return to colder than normal weather. The winter is still expected to be colder than normal and above normal snowfall.

### WEATHER FORECAST



**8-14 Day Outlook...** Above normal temperatures and below normal precipitation.

**30 Day Outlook...** Near normal temperatures and precipitation.

**Dec-Jan-Feb Outlook...** Below normal temperatures and normal precipitation

**Feb-Mar-Apr Outlook...** Below normal temperatures and normal precipitation

**Apr-May-Jun Outlook...** Normal temperatures and normal precipitation

**Average Yearly rainfall Pittsburgh:** 38.19 inches **So far in 2014:** 36.05 (-1.17)

Totals for: 2013: 36.65 inches; 2012: 41.74 inches; 2011: 44.24 inches; 2010: 37.85 inches

## Average Yearly snowfall Pittsburgh: 41.9 inches

2013-14: 63.4 inches

2012-13: 57 inches

2011-12: 37 inches

2010-11: 57 inches

2009-10: 77 inches

**DAILY RESERVOIR SUMMARY FOR: 8-Dec-14**

RESERVOIR	FLOOD STORAGE CAPACITY USED	POOL ELEVATIONS (NAVD88)				ACTUAL FOR TODAY	
		MINIMUM POOL	WINTER MAX POOL	SUMMER MAX POOL	FULL POOL	7AM POOL ELEV	7AM OUTFLOW CFS
Allegheny	0%	1239.5	1306.5	1327.5	1364.5	1307.88	4900
Tionesta	3%	1084.6			1169.6	1091.91	1190
Union City	4%	1209.7			1277.7	1233.56	780
Woodcock	0%	1161.9	1164.9	1180.4	1208.4	1170.60	110
East Branch	0%	1554.8	1622.8	1649.8	1684.8	1622.01	60
Mahoning	10%	1074.2		1097.1	1161.1	1104.30	620
Crooked Creek	8%	837.4			917.4	853.48	500
Conemaugh	6%	899.2			974.2	912.92	3330
Loyalhanna	5%	909.5			974.5	926.55	1400
Stonewall Jackson	19%	1037.3	1067.5	1072.5	1081.3	1071.04	550
Tygart	26%	1009.5	1039.5	1093.5	1166.5	1091.96	8240
Yough	0%	1343.4	1418.4	1438.4	1469.4	1413.63	500
Michael J. Kirwan	4%	950.6	980.6	985.1	992.6	981.03	160
Berlin	7%	979.3	1015.9	1024.0	1031.3	1017.45	310
Lake Milton	0%	929.4	939.4	947.4	950.4	940.41	315
Mosquito	4%	880.3	899.2	900.7	903.3	899.44	180
Shenango	3%	883.7	886.7	894.7	917.7	890.90	1450

### FLOOD STORAGE USED

District-wide	5.8%
Allegheny Basin	3.0%
Monongahela Basin	16.3%
Beaver Basin	3.9%

### November weather and how it relates to February's weather:

November temperatures were much below normal and very similar to November 1976. Looking back in history for Pennsylvania, 18 of the past 25 coldest November's in PA resulted in a very cold February that lingered into March. If this relationship holds true this year, that could mean that this February could be one of the top 10 coldest February's.

**El Niño Outlook** Tropical Pacific Ocean surface temperatures have warmed slightly (0.5 C) this past month, mostly over the central Pacific. This can be classified as a borderline weak El Niño. A weak El Niño likely means a normal to above normal snow fall for Pittsburgh.

