

RIVER AND WEATHER CONDITIONS

Prepared for Waterways Association Meeting 8/13/2014
 National Weather Service Forecast Office, Pittsburgh PA
 For the latest river and weather forecasts--<http://www.weather.gov/pittsburgh>

WEATHER RECAP

During July, 2014 the temperatures were much below normal and rainfall was above normal across Western Pennsylvania, Northern West Virginia and Western Maryland with slightly below normal rainfall across Eastern Ohio. In Pittsburgh the maximum temperature for the July was 88 and the minimum temperature was 50. The average July temperature was 70.5 degrees which is 2.1 degrees below the normal average of 72.6 and tied the record for the 13th coldest July of all time. The maximum temperature did not exceed 90 degrees this month or any time this season so far. A total of 5.19 inches of rain fell in July which is 1.36 inches above the normal 3.83. There were 13 days with greater than or equal to 0.01 inches of rain fell. 0.10 inches of rain or greater fell on 10 days. 0.50 inches or greater were observed on 4 days. There were 2 days with greater than or equal to 1.00 inches. The maximum 24 hour precipitation was 1.33 inches between July 26 and 27th. The average daily rainfall for July was 0.17 inches. There were 188 cooling degree days in July which is 53 below the normal amount of 241 days.

During the month, nearly 7 inches of rain fell in the headwaters of the Allegheny River as well as portions of the Cheat River headwaters. On July 13th slow moving thunderstorms caused roadway and stream flooding in the Pittsburgh Metropolitan area. On July 27th thunderstorms with heavy rains caused localized flooding in Mercer and Venango counties of Pennsylvania and around the Morgantown WV area. On August 12 most of the region received 1 to 2 inches of rain but in the Muskingum river basin several locations received > 4 inches of rain.

Location	Jul 2014 Precipitation	Departure (Inches)	Since Jan 1
Pittsburgh	5.19	+1.36	24.65(+1.55)

Location	Jul Average Temperature	Departure degrees	Extreme High	Extreme Low
Pittsburgh	70.5	-2.1	88(Jul 1, 22)	50(Jul 5)

RIVER CONDITIONS

River flows and velocities remained well above normal for the Allegheny River with flows about 350% of normal and the Ohio River about 200% of normal for July and near normal flows and velocities on the Monongahela River where flows were 95% of normal for July.










HIGH WATER POTENTIAL

A minimum of 2.50 to 3.00 inches basin wide rainfall in 6 to 12 hours is needed to bring rivers to bank full. High water potential is below normal over the next 30 days.

OUTLOOK

Above normal rainfall and normal temperatures are expected through much of the rest of August. So far we have not reached 90 degrees at all in 2014. The Bermuda High has not formed over the Southeast US as in a normal summer meaning the storm track will remain active with occasional cold fronts bringing several days of thunderstorms followed by several days of dry weather. 3.00 to 4.00 inches of rain is expected through August 27 which is normal.

WEATHER FORECAST

TODAY	TONIGHT	WEDNESDAY	WEDNESDAY NIGHT	THURSDAY	THURSDAY NIGHT	FRIDAY	FRIDAY NIGHT	SATURDAY
								
60%	60%	30%						
Thunderstorms Likely High: 76 °F	Thunderstorms Likely Low: 62 °F	Chance Showers High: 74 °F	Partly Cloudy Low: 55 °F	Mostly Sunny High: 74 °F	Partly Cloudy Low: 52 °F	Mostly Sunny High: 75 °F	Mostly Clear Low: 52 °F	Mostly Sunny High: 78 °F

8-14 Day Outlook... Above normal temperatures and above normal precipitation.

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

Aug-Sep-Oct Outlook... Normal temperatures and normal precipitation

Oct-Nov-Dec Outlook... Above normal temperatures and normal precipitation

Dec-Jan-Feb Outlook... Normal temperatures and normal precipitation

Average Yearly rainfall Pittsburgh: 38.19 inches **So far in 2014:** 24.65 (+1.55)

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

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	3%	1239.5	1306.5	1327.5	1364.5	1328.94	3310
Tionesta	2%	1084.6			1169.6	1088.58	480
Union City	0%	1209.7			1277.7	1217.54	120
Woodcock	2%	1161.9	1164.9	1180.4	1208.4	1181.22	17
East Branch	6%	1554.8	1622.8	1649.8	1684.8	1636.39	185
Mahoning	1%	1074.2		1097.1	1161.1	1098.55	320
Crooked Creek	2%	837.4			917.4	842.49	150
Conemaugh	1%	899.2			974.2	901.59	560
Loyalhanna	3%	909.5			974.5	922.82	125
Stonewall Jackson	0%	1037.3	1067.5	1072.5	1081.3	1070.64	91
Tygart	1%	1009.5	1039.5	1093.5	1166.5	1094.91	590
Yough	0%	1343.4	1418.4	1438.4	1469.4	1432.09	600
Michael J. Kirwan	0%	950.6	980.6	985.1	992.6	984.93	27
Berlin	16%	979.3	1015.9	1024.0	1031.3	1020.60	335
Lake Milton	32%	929.4	939.4	947.4	950.4	948.42	385
Mosquito	0%	880.3	899.2	900.7	903.3	900.63	25
Shenango	1%	883.7	886.7	894.7	917.7	895.01	440

FLOOD STORAGE USED	
District-wide	2.3%
Allegheny Basin	2.2%
Monongahela Basin	0.9%
Beaver Basin	4.5%

2014 Atlantic hurricane: The season runs June 1- Nov 30. No activity in the Atlantic last 30 days and none is expected for the next week. Only one named Atlantic storm in June. No activity is expected over the next week. The Pacific had been active with two hurricanes (Iselle & Julio) impacting Hawaii. No activity currently in Pacific.

El Niño Outlook: Long range forecasts calls for a weak El Nino to develop this fall and then diminish by mid/late-winter. A weak El Nino likely means a normal to above normal snow fall for Pittsburgh.



Eight temperature records were broken for July in the Pittsburgh area:

- Record tied for the 13th coldest July on record for Pittsburgh. The previous record was July 1985.
- Record low for July 29 of 51 was set. The previous record was 52 from 1982.
- Record cold high temperature for July 29 of 69 was tied. The Previous record was set in 1981.
- Record cold mean temperature of 60 was also set for July 29. The previous record was 62 from 1981.
- Record low daily average temperature of 64 degrees was tied for July 28. The previous record was set in 1962.
- Record cold high temperature of 72 degrees was tied for July 28. The previous record was set in 1875.
- Record low temperature of 51 degrees was set for July 25. This ties the old record of 51 set in 1953.
- Record low temperature of 52 degrees was set July 17. This ties the old record of 52 set in 1970.