

RIVER AND WEATHER CONDITIONS

Prepared for Waterways Association Meeting 8/14/2013
National Weather Service Forecast Office, Pittsburgh PA
For the latest river and weather forecasts--<http://www.weather.gov/pittsburgh>

WEATHER RECAP

July temperatures were close to normal and precipitation was above normal over the hydrologic service area. While the month's temperatures were near normal, most would say disagree and argue that it was a colder than normal month, as average highs were below normal, while average lows were above normal. The wettest areas during July were over the Muskingum and lower Monongahela River basins.

<i>Location</i>	<i>Jul 2013 Precipitation</i>	<i>Departure (Inches)</i>
Pittsburgh	6.16	+2.33

<i>Location</i>	<i>Jul Average Temperature</i>	<i>Departure degrees</i>	<i>Extreme High</i>	<i>Extreme Low</i>
Pittsburgh	73.4	+0.8	91(Jul18,19)	53(Jul 30)

RIVER CONDITIONS RECAP

Rain was frequent through the month of July with river flows and velocities above normal for July. Rises of over 4 feet occurred on the Monongahela River July 10. Rises of over 3 feet occurred on the Allegheny River July 2 and 3. The Cheat River had sharp rises July 24. Widespread flash flooding occurred this month in the Hydrologic Service Area with 44 flash flood warnings issued during the month. A widespread heavy rain event occurred July 10, when 33 flash flood warnings were issued. Significant flash flooding occurred in the southern portion of the City of Pittsburgh and throughout the southern part of Allegheny county PA. Flash flooding also occurred the same day in the New Castle area of Lawrence county PA. Minor river flooding occurred in the Muskingum River basin on July 11 and 12. For the first time in the last couple of years nearly all reservoirs in the district are at or very close to max summer pool levels and monthly stream flow were much above normal.

HIGH WATER POTENTIAL

Flows on the Allegheny are 80% of normal, the Monongahela 100%, and the Ohio 80% of normal. A minimum 2.50 inches basin wide rainfall in 6 to 12 hours is needed to bring rivers to bank full. High water potential is near normal.

Above normal rainfall and below normal temperatures are expected through much of August. The focus area for heaviest rains in August is expected to be south of Pittsburgh. The expected rainfall through Aug 25 is between 1.50 and 2.00 inches over the Allegheny River Basin and 2.00 to 3.00 inches over the Monongahela basin.

WEATHER FORECAST

WEDNESDAY	WEDNESDAY NIGHT	THURSDAY	THURSDAY NIGHT	FRIDAY	FRIDAY NIGHT	SATURDAY
						
Mostly Sunny High: 71 °F	Mostly Clear Low: 51 °F	Sunny High: 76 °F	Mostly Clear Low: 55 °F	Sunny High: 80 °F	Partly Cloudy Low: 59 °F	Mostly Sunny High: 81 °F

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

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

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

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

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

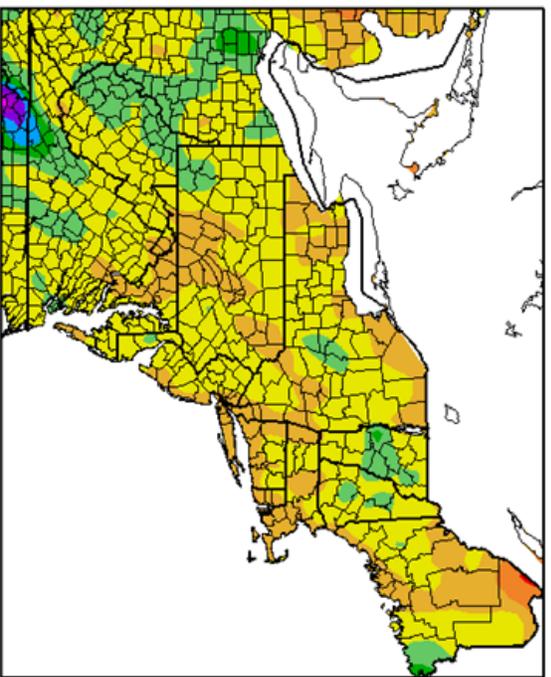
Average Yearly rainfall Pittsburgh: 38.19 inches **So far in 2013:** 24.50 inches (Departure -0.15)

2012: 41.74 inches

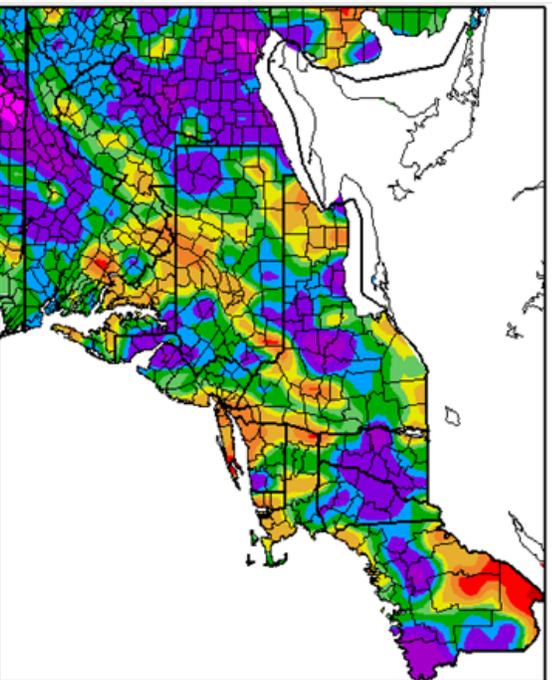
2011: 44.24 inches

2010: 37.85 inches

Precipitation (in)
7/1/2013 – 7/31/2013



Percent of Normal Precipitation (%)
7/1/2013 – 7/31/2013



COE Flood Storage Used

FLOOD STORAGE USED

District-wide	2.2%
Allegheny Basin	1.7%
Monongahela Basin	1.0%
Beaver Basin	6.8%

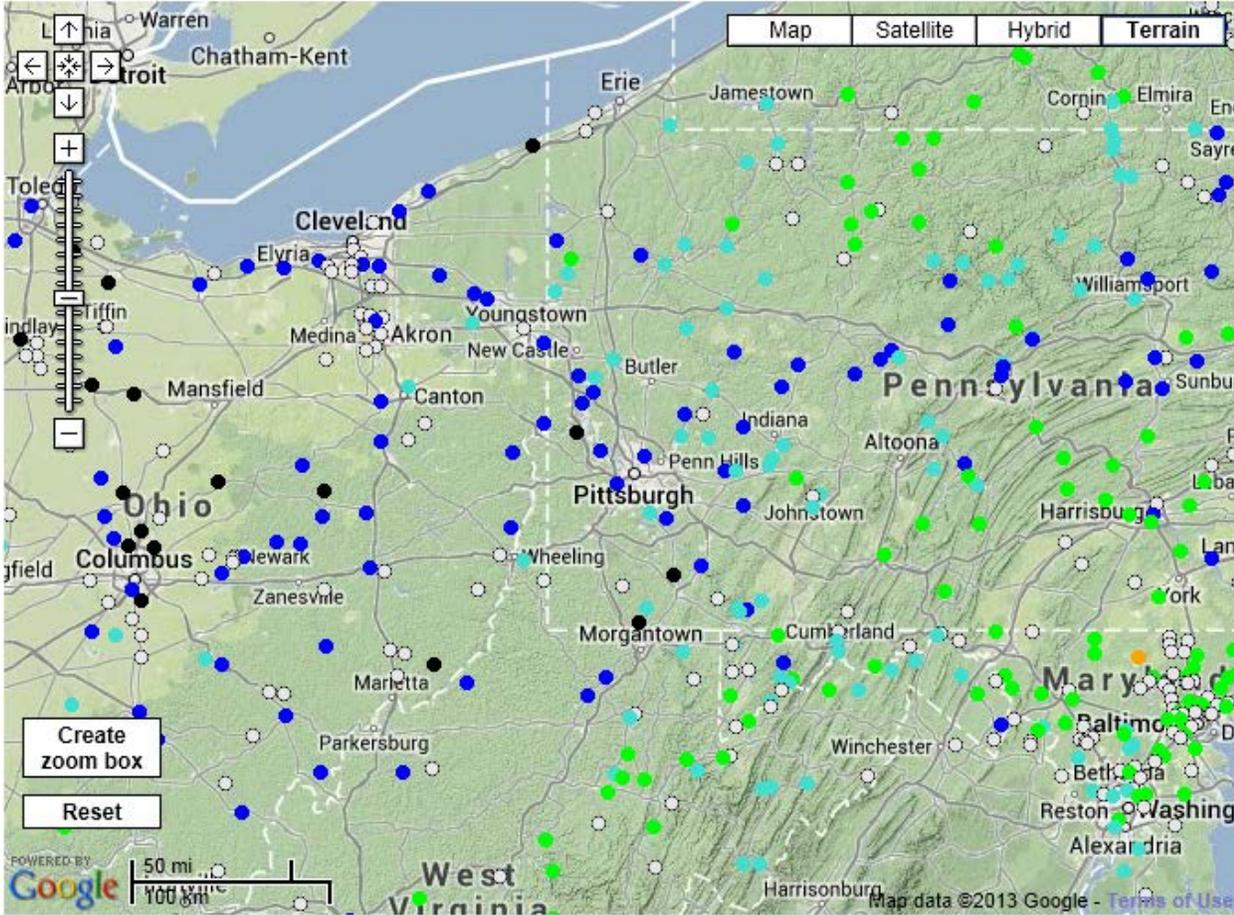
Aug 1, 2013

July 1, 2013

RESERVOIR	FLOOD STORAGE CAPACITY USED
Allegheny	1%
Tionesta	2%
Union City	0%
Woodcock	1%
East Branch	11%
Mahoning	1%
Crooked Creek	2%
Conemaugh	1%
Loyalhanna	3%
Stonewall Jackson	0%
Tygart	2%
Yough	0%
Michael J. Kirwan	6%
Berlin	29%
Lake Milton	14%
Mosquito	0%
Shenango	1%

RESERVOIR	FLOOD STORAGE CAPACITY USED
Allegheny	2%
Tionesta	8%
Union City	4%
Woodcock	14%
East Branch	8%
Mahoning	36%
Crooked Creek	8%
Conemaugh	2%
Loyalhanna	6%
Stonewall Jackson	0%
Tygart	4%
Yough	9%
Michael J. Kirwan	0%
Berlin	2%
Lake Milton	16%
Mosquito	19%
Shenango	4%

Monthly Streamflow Compared to Normal Aug 1, 2013



Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked