

RIVER AND WEATHER CONDITIONS

Prepared for Waterways Association Meeting 11/08/2017
National Weather Service Forecast Office, Pittsburgh PA

For the latest river and weather forecasts--<http://www.weather.gov/pittsburgh>

WEATHER RECAP

October was actually slightly wetter than normal with the help of several systems through the entire month, including the remnants of Nate. The beginning of October started out very warm, and for a few weeks it looked like we would crack the top 10 warmest Octobers on record. However, cooler temperatures during the latter half of the month resulted in a mean departure of +5.3 degrees, which was barely enough to make it into the top 20 warmest Octobers.

OUTLOOK

Week of Nov 6: Week starting out with high flows on all rivers and tributaries. Some light rain then dry through the start of the weekend. Less than 0.50 inch of additional rain. Temperatures will remain below normal, and will be cold for the weekend. Some rain and snow showers possible Sun.

Outlook for week of Nov 13: Dry to start with temperature rebounding to near or above normal. Precipitation around an inch.

Outlook for week of Nov 20: Slightly above normal temperature. Precipitation ~1 inch

Outlook December: Above average temperatures, with an active pattern. Near normal rainfall/snowfall.

Outlook January: Closer to normal temperatures and above average precipitation.

HIGH WATER POTENTIAL









High flows to start out the period will return to near normal. A minimum of 1.50 inch basin wide rainfall in 6 to 12 hours is needed to bring rivers to bank full. Total precipitation through the first week of December should average about 2 inches which is near normal.

<i>Location</i>	<i>Oct 2017 Precipitation</i>	<i>Departure (Inches)</i>
<i>Pittsburgh</i>	4.11	+1.82

<i>Location</i>	<i>Oct Average Temperature</i>	<i>Departure Degrees</i>	<i>Extreme High</i>	<i>Extreme Low</i>
<i>Pittsburgh</i>	58.0	+5.3	82 Oct 07	31 Oct 31

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average monthly precipitation	2.7	2.39	2.95	3.11	3.95	4.3	3.83	3.48	3.11	2.29	3.23	2.85	38.19
Average High Temperature	35.7	39.3	49.2	61.7	70.8	79.1	82.5	81.4	74.3	62.6	51.2	39.4	60.7
Average Low Temperature	21.1	23	30	40.2	49.3	58.4	62.8	61.5	54	42.9	34.7	25.3	42
Average monthly snowfall	11.8	10.3	7.6	1.5	0	0	0	0	0	0.4	2	8.3	41.9

WEATHER FORECAST

Tuesday	Tuesday Night	Wednesday	Wednesday Night	Thursday	Thursday Night	Friday	Friday Night
							
Chance Rain	Mostly Cloudy	Mostly Sunny	Partly Cloudy	Mostly Sunny	Partly Cloudy	Mostly Sunny	Partly Cloudy
High: 45 °F	Low: 34 °F	High: 50 °F	Low: 34 °F	High: 50 °F	Low: 30 °F	High: 38 °F	Low: 24 °F

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

30 Day Outlook... Above normal temperatures for December, near normal precipitation.

Jan-Feb-Mar Outlook... Temperatures settle closer to normal values for January but start to warm again in February. Near to above normal temperatures on average. Above normal precipitation.

Mar-Apr-May Outlook... Above normal temperatures and above normal precip.

May-Jun-Jul Outlook... Above normal temperatures and normal precipitation

Average Yearly rainfall Pittsburgh: 38.19 inches **So far in 2017:** 38.31(+5.58)

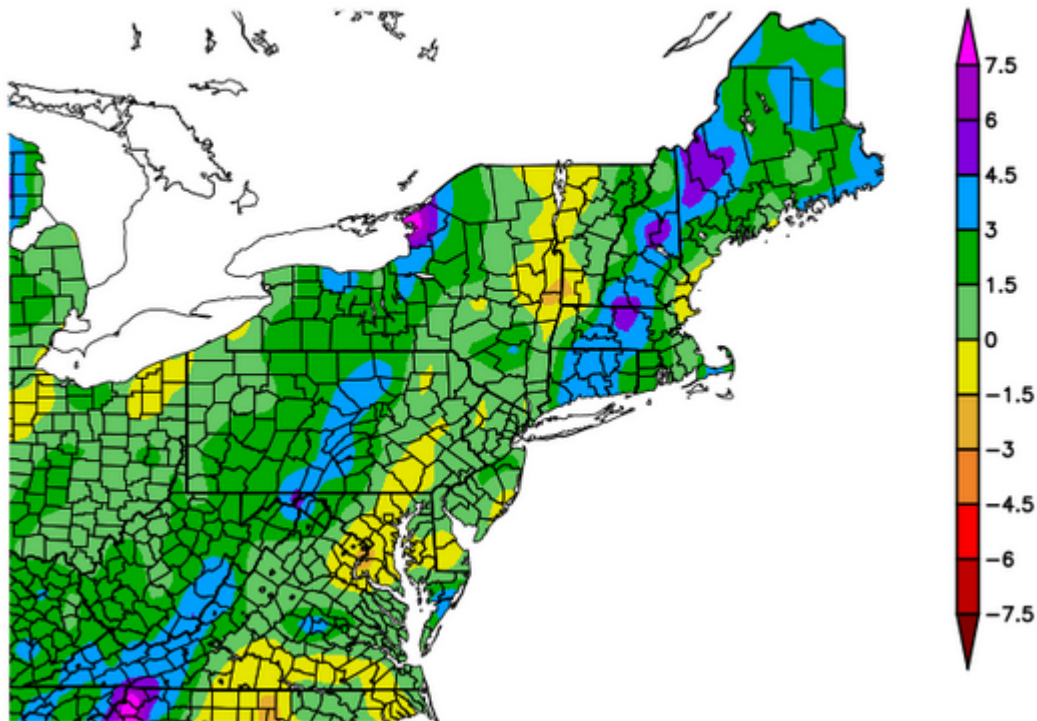
Totals for: 2016: 35.01; 2015:40.56 2014: 36.84 2013: 36.65 inches; 2012: 41.74 inches; 2011: 44.24 inches

Average Yearly snowfall Pittsburgh: 41.9 inches 2016-17 Season: 32.0(-9.2), 2015-16: 29.6 inches (-12.3)

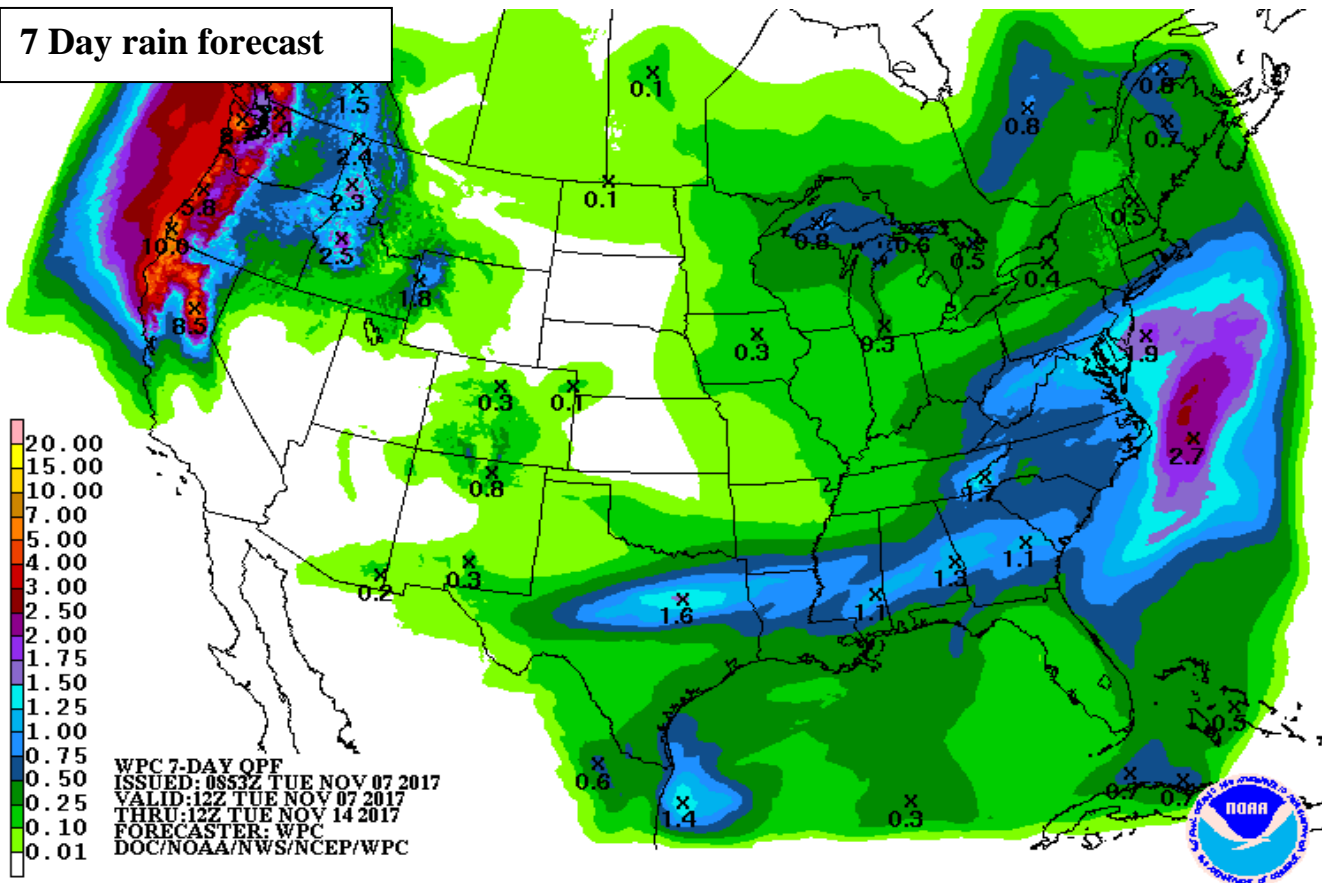
2014-15: 47.2 in 2013-14: 63.4 in; 2012-13: 57 in; 2011-12: 37 in; 2010-11: 57 in; 2009-10: 77 in

Departure from Normal Precipitation (in)

10/1/2017 - 10/31/2017



7 Day rain forecast



Last year we originally anticipated a weak La Nina would develop. While the signal was there, it did not last and the season was classified as neutral. This year, we are once again anticipating a La Nina. This usually leads to a large ridge of high pressure over Alaska, with a trough over the central U.S – though the Jet stream remains to the north.

The implication this year, as is already noted in some of the long term guidance, is that while we will start with some temperature swings in December, the average temperature will be above normal through the entire winter season. However, it will be an active pattern with many systems quickly diving out of Canada, which could mean more snow, even if it doesn't stick around all too long.

- Preliminary outlook calls for colder temperatures over the northern Plains, while we remain right around normal to slightly above normal. It will be much warmer in the South.
- Precipitation (and snow) is expected to be above normal in a large chunk of the North and in the Northwest US.
- Our initial thinking is that winter will be cooler than the last two winters, but likely not the extremes of the two winters before that (our River Ice winters). If we don't make ice in January, we are not likely to have much as February will be warm.
- More lake effect snows vs last 2 winters.

