

RIVER AND WEATHER CONDITIONS

Prepared for the Pittsburgh Waterways Association Meeting 12/12/2018

National Weather Service Forecast Office, Pittsburgh PA

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

WEATHER RECAP

November was a relatively cold month, with the average temperature almost 6 degrees below normal. This put Pittsburgh at the 8th coldest November on record. The weather pattern remained active, as there were only 8 dry days in the entire month. Precipitation was again above normal in an already anomalous year. We are now the 2nd wettest year on record with 53.54 inches. The year of Hurricane Francis and Ivan, 2004, is still number one at 57.41 inches.

OUTLOOK

Rest of this week of the 10th: High pressure will maintain mostly dry conditions through the week outside of light snow tonight. System will approach for the weekend bringing rain to the upper Ohio Valley. Precipitation ~ 1.00 inch. Temperatures will moderate to near normal. Highs in the 40's, lows in the 30's.

Outlook for week of Dec 17th: Fast moving system may bring light snow to the region Monday with high pressure building until later in the week. Temperatures will be near or slightly above average for the week with minimal precipitation. Precipitation under 0.50 inches.

Outlook for week of Dec 24th: Cold temperatures will start to make a comeback. Precipitation will remain near normal.

Outlook for January: Cold resumes. Temperatures likely below normal. Anticipating at least a normal ice season. River (and lake) temperatures are already running below normal.

Outlook for February: Temperatures near normal with above average precipitation.

HIGH WATER POTENTIAL

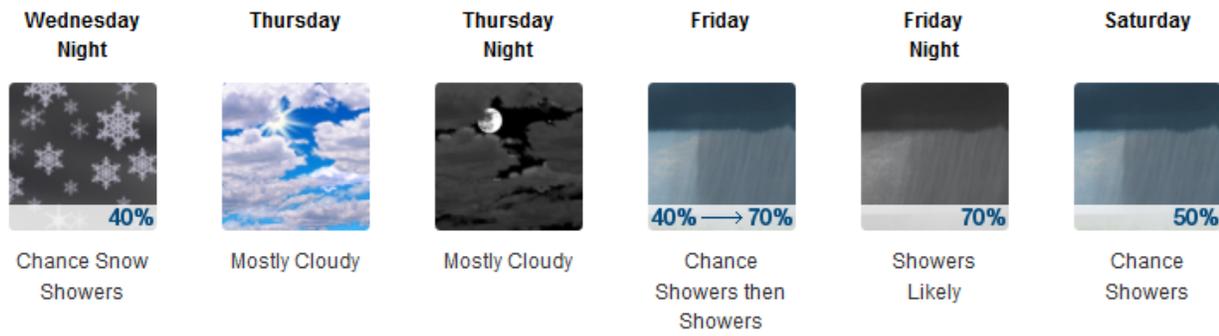
Streamflows are starting to return to normal given the dry conditions over the last week and a half, though values on the Allegheny are closer to 150% of normal. That being said, high water potential remains elevated. In general, 1.50 of rain is needed in 6-12 hours for rises near bank full.

Location	November 2018 Precipitation	Departure (Inches)
Pittsburgh	4.57	+1.34

Location	Nov Average Temperature	Departure Degrees	Extreme High	Extreme Low
Pittsburgh	37.3	-5.6	66 on Nov 1 & 2	21 on Nov 11 & 22

	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

Pittsburgh Forecast:



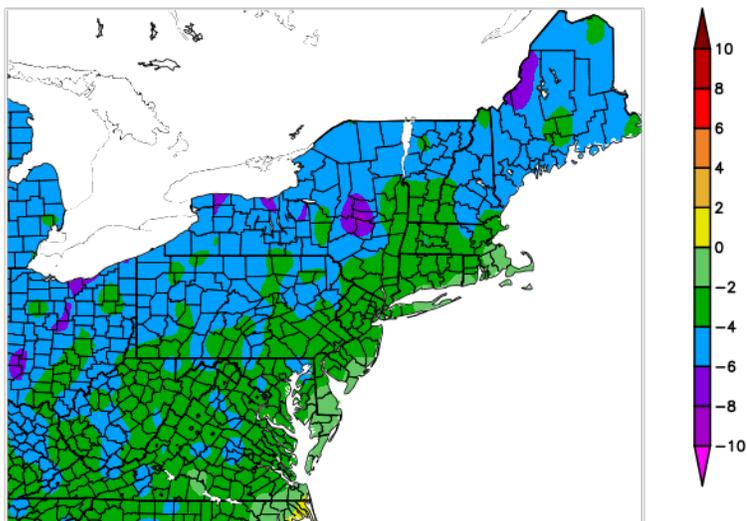
8-14 Day Outlook... "Warm-up"; above average temperatures and normal precipitation.

Jan-Feb-March Outlook... Three month period will be slightly below normal as a result of colder than average temperatures in Jan and Feb. Temperatures closer to normal for the month of March. Precipitation is less defined but likely to be near normal for the period.

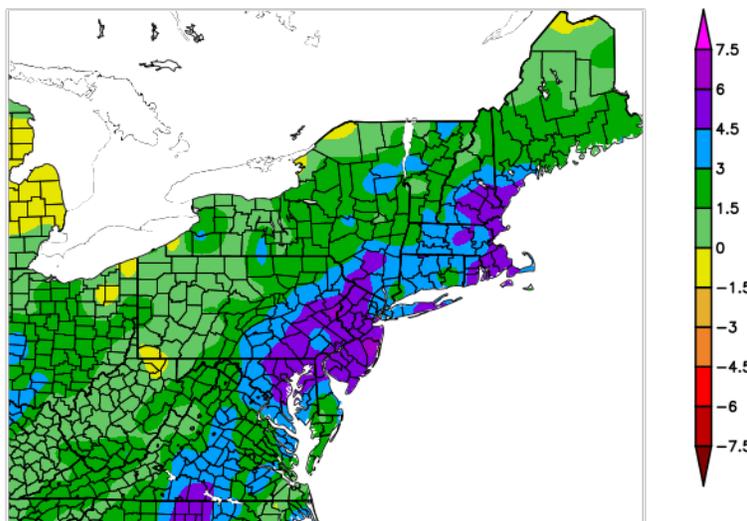
Spring Outlook (Mar-Apr-May): Will run near normal with near normal precipitation.

Average Yearly rainfall Pittsburgh: 38.19 inches **In 2017:** 42.15(+3.96) **So Far in 2018:** **53.54 (+17.32)**
 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. **2018-2019:** 4.4" (+1.2); 2017-18: 59.8" (+17.9); 2016-17: 32.0" (-9.2), 2015-16: 29.6" (-12.3) 2014-15: 47.2"; 2013-14: 63.4"; 2012-13: 57"; 2011-12: 37"; 2010-11: 57"; 2009-10: 77"

Departure from Normal Temperature (F)
 11/1/2018 – 11/30/2018



Departure from Normal Precipitation (in)
 11/1/2018 – 11/30/2018

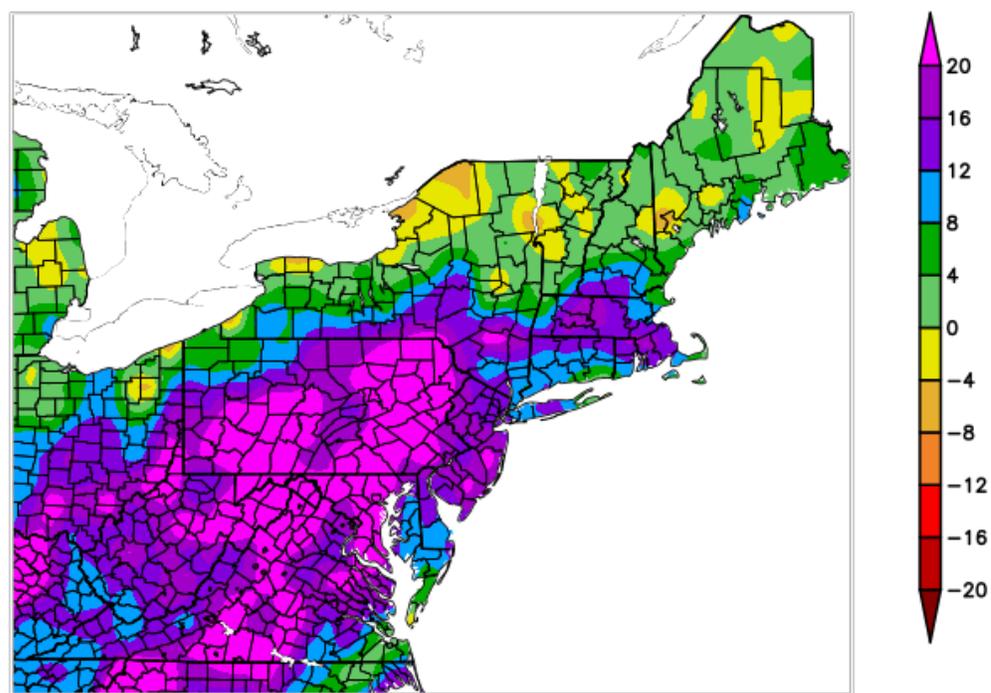


Generated 12/2/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers 12/2/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

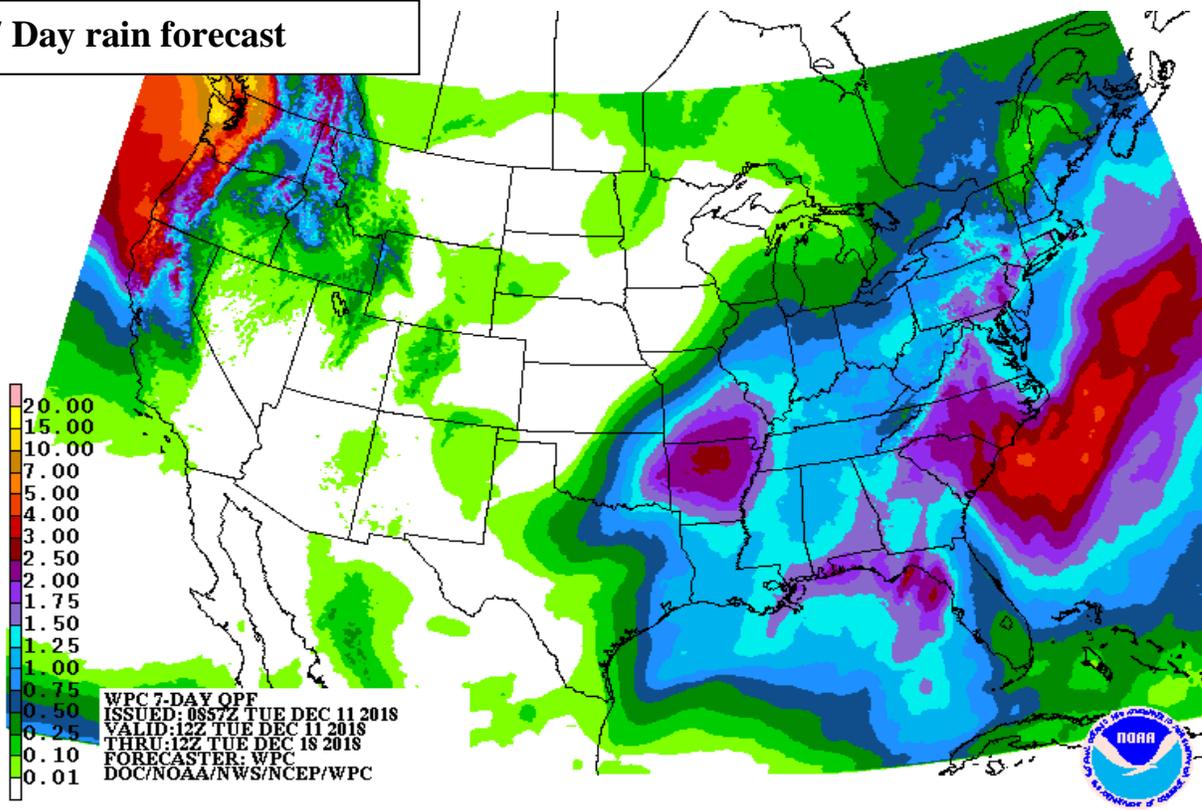
Departure from Normal Precipitation (in)
 1/1/2018 – 12/3/2018



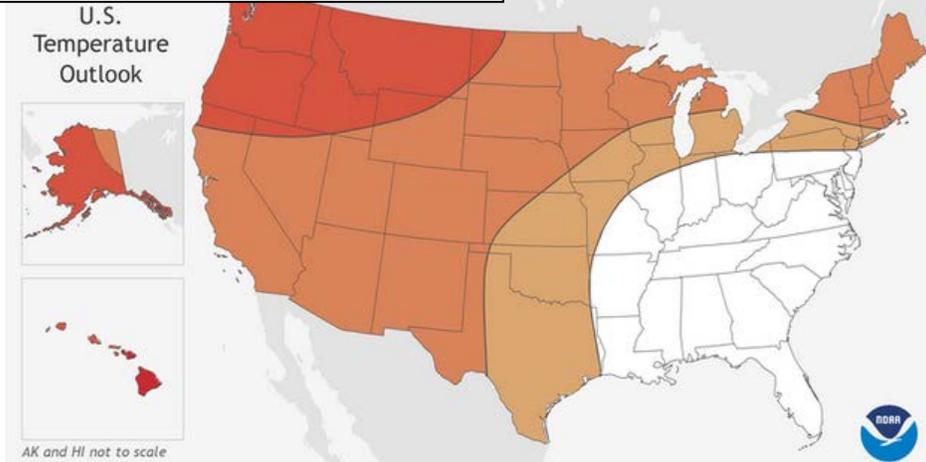
Generated 12/4/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

7 Day rain forecast



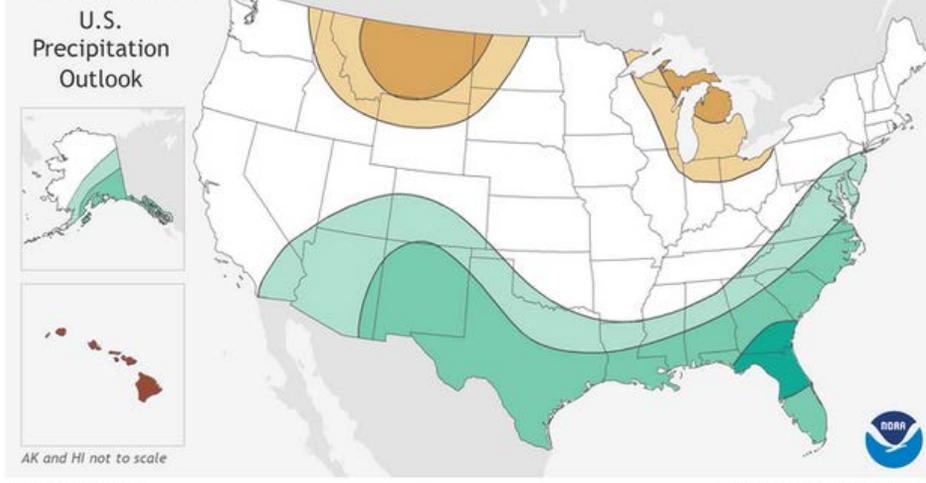
Winter Outlook (Def-Jan-Feb)



Modoki El Nino in place. Again, puts is in the likelihood of colder than normal temperatures and above average snowfall for the season, despite the uncertainty in the NOAA Seasonal Outlook.

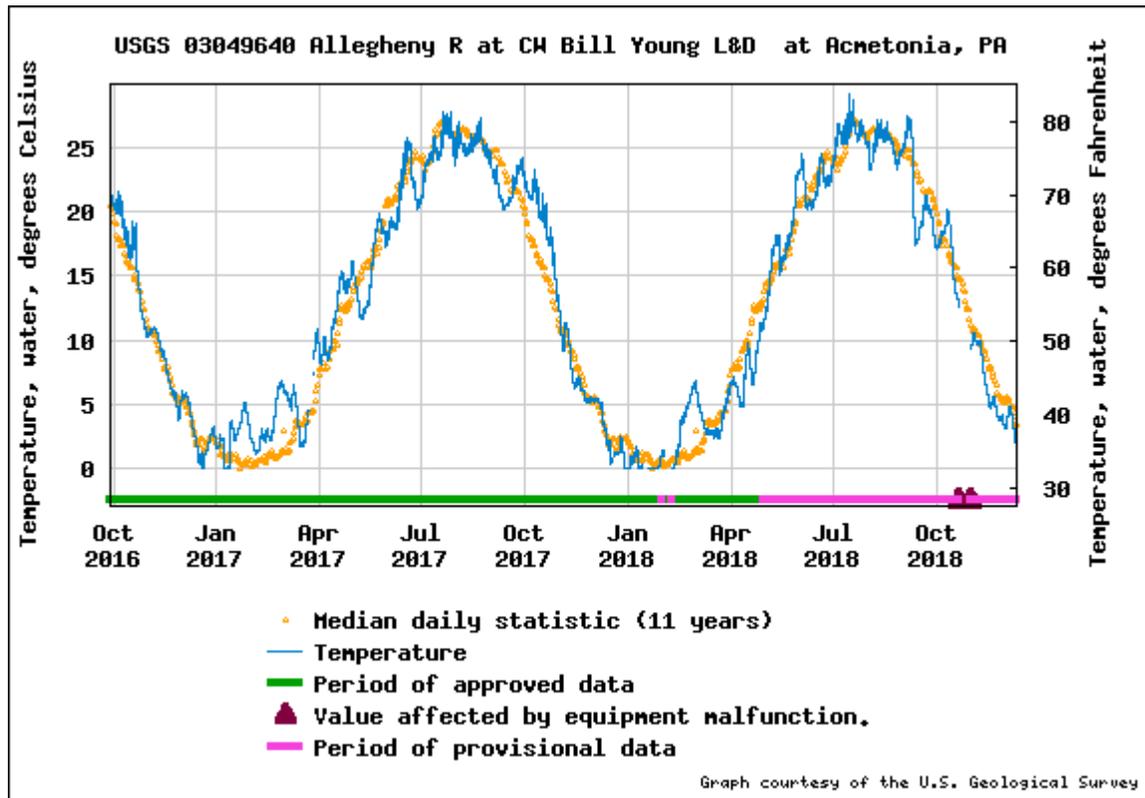
Temperature Outlook for Dec 2018 - Feb 2019 Issued 18 October 2018
 Probability (percent chance)
 cooler than normal equal chances warmer than normal
 80 70 60 50 40 33 33 40 50 60 70 80
 NWS Climate Prediction Center Map by NOAA Climate.gov

Probability of a white Christmas – 17%



Precipitation Outlook for Dec 2018 - Feb 2019 Issued 18 October 2018
 Probability (percent chance)
 drier than normal equal chances wetter than normal
 80 70 60 50 40 33 33 40 50 60 70 80
 NWS Climate Prediction Center Map by NOAA Climate.gov

River Ice:



Link to current water temperatures: <https://waterdata.usgs.gov/pa/nwis/current?type=temp>

New River Ice Reporting Site: <https://sites.google.com/site/pittsburghriverice>

Email for photos: nws.er.pbz.icereports@noaa.gov



Ice Report

*** Required**

Observer ID #
This is the unique ID number that you were assigned by the NWS (if available)

Your answer

Location of Observation *
Please enter the location of the observation. For example: 2mi S of New Kensington PA along Allegheny River (This is a required field)

Your answer

Date and time of observation *
Please use the drop-down menus below to fill out the date and time of your observation. (This is a required field)

MM DD YYYY

INSTRUCTIONS

1. Enter the ID number you were provided by the NWS (if available).
2. Click in the date you made the observation.
3. Choose the type of ice cover you observed. If you choose "Some", or "Solid/Intact", you will be taken to another menu.
4. Continue to answer questions until you see the "Submit" button.
5. You can add comments such as Ice types, etc., in the last text box.
6. Click "Submit" to send in your observation.
7. You're done! Thank you!

RIVER ICE REPORTS/PICTURES:

"A picture is worth a thousand words". We would appreciate river ice photos from you. With the proliferation of smart phones/social media send them to the National Weather Service one of the following ways:

1. E-mail river ice photos to: nws.er.pbz.icereports@noaa.gov
2. Post them to the National Weather Service Facebook page at: <http://www.facebook.com/NWSPittsburgh>