

RIVER AND WEATHER CONDITIONS

Prepared for Waterways Association Meeting 2/10/2016
National Weather Service Forecast Office, Pittsburgh PA

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

WEATHER RECAP

After a very warm December, January turned much more seasonable with several arctic outbreaks and brought us a colder than normal month, with less precipitation than normal, and mostly in the form of snow. Snow fall was above normal.

OUTLOOK

Rest of week of Feb 8: Arctic air Wednesday Feb 11 – Feb 14 Highs in teens. Lows Zero to 10. Sat and Sunday nights very cold.

Outlook for week of Feb 15: Arctic air retreats to more normal temperatures. Snow: Mon Feb 15 and Wed Feb 17. By Weekend of Feb 20th, a stronger system should bring rain before ending as snow.

Outlook for week of Feb 22: Normal February temperatures with a chance of rain/snow

Outlook March: First week of March expected colder than normal with some Arctic air. For the rest of March colder than normal weather expected to continue, while some brief periods of moderation.

Winter/Spring Outlook Going against the Ground Hog day forecast as we expect winter to linger into the spring.

We are in a pattern very similar pattern to El Nino of 2009-10 & 1963-64 and 1957-58. Each had similar El Niño's

Winter Outlook for Pittsburgh:

- Very cold in February with some larger snowstorms
- Continue the cold/snow into March with late spring
- After a weakening El Nino, many times results in a June/July that are hotter and drier than normal

River Ice Outlook

River ice is gone except for the Allegheny upstream of Lock 6. . Friday through this weekend it will be bitterly cold with favorable conditions for some thickening and reformation on Allegheny upstream of Natrona. River temperatures have warmed over the past week. River temperature summary: Lower Allegheny 36-37 degrees. Upper Ohio 37-38. Monongahela and Beaver 39-40 degrees. Given as late as we are into the winter season, it is going to be difficult to form ice other than on the Allegheny for the rest of the winter season. Beaver and Youghiogheny are clear.

HIGH WATER POTENTIAL







High water potential is below normal. All of the snow pack in the headwaters and mountains has melted. A minimum of 1.50 inch basin wide rainfall in 6 to 12 hours is needed to bring rivers to bank full. Total liquid equivalent precipitation through the first week of March should average between 1.50 and 2.50 inches which is about normal.

| <i>Location</i> | <i>Jan 2015 Precipitation</i> | <i>Departure (Inches)</i> | <i>Jan Snowfall</i> | <i>Seasonal Snowfall</i> |
|-------------------|-----------------------------------|-------------------------------|-------------------------|------------------------------|
| <i>Pittsburgh</i> | 1.79 | -0.91 | 14.6 (+2.8) | 14.9(-7.6) |

| <i>Location</i> | <i>Jan Average Temperature</i> | <i>Departure Degrees</i> | <i>Extreme High</i> | <i>Extreme Low</i> |
|-------------------|------------------------------------|------------------------------|-------------------------|--------------------|
| <i>Pittsburgh</i> | 26.7 | -1.7 | 61 Jan 31 | 3 Jan 13 |

| | 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

| Wednesday | Wednesday Night | Thursday | Thursday Night | Friday | Friday Night |
|--|---|---|---|--|---|
|  |  |  |  |  |  |
| 60% | 60% | 50% → 20% | | 30% | 40% |
| Snow Showers Likely | Snow Showers Likely | Chance Snow Showers then Slight Chance Snow Showers | Mostly Cloudy | Partly Sunny then Chance Snow Showers | Chance Snow Showers |
| High: 28 °F | Low: 12 °F | High: 20 °F | Low: 9 °F | High: 25 °F | Low: 10 °F |

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

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

Apr-May-Jun Outlook... Below normal temperatures and normal precipitation

Jun-Jul-Aug Outlook... Above normal temperatures and below normal precipitation

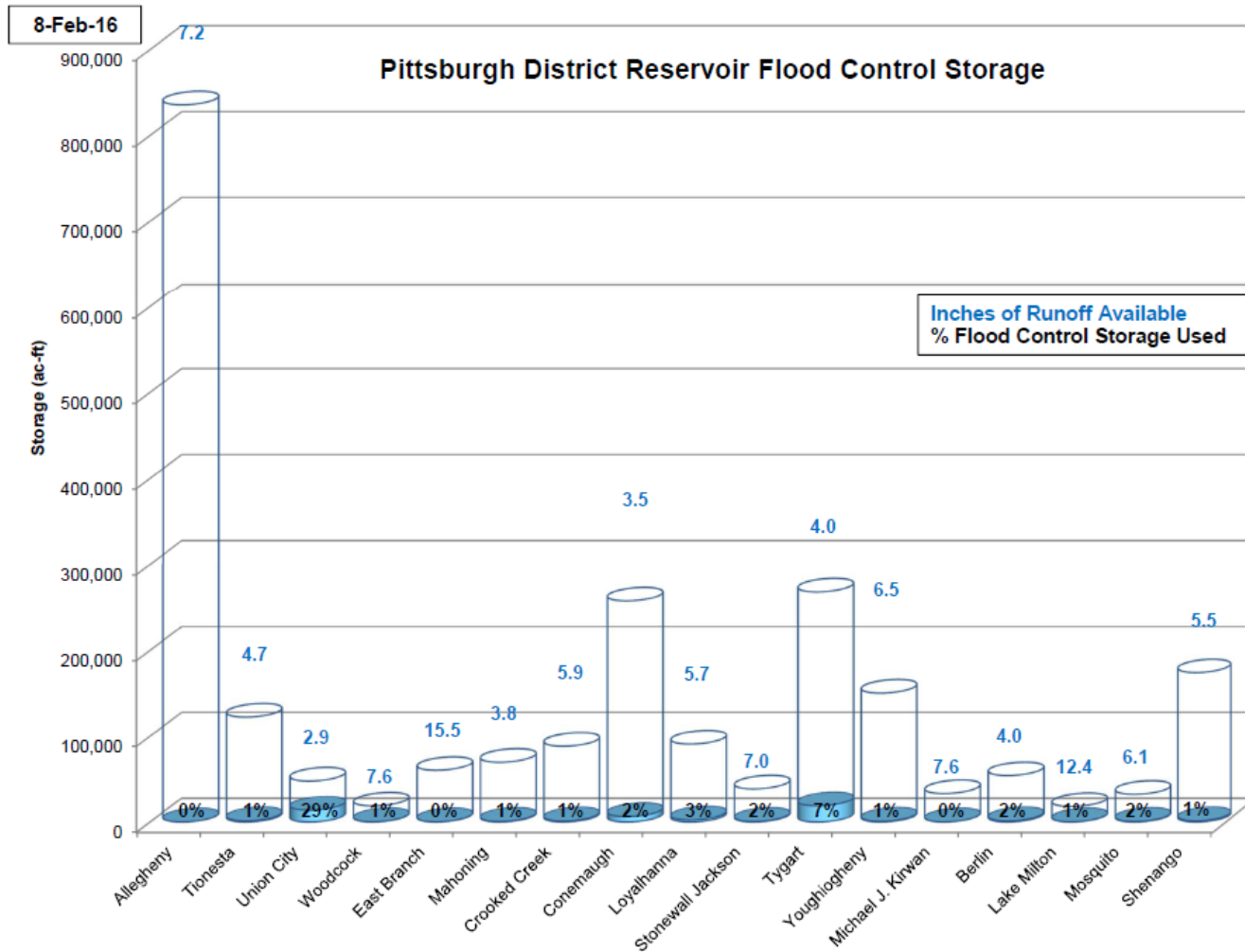
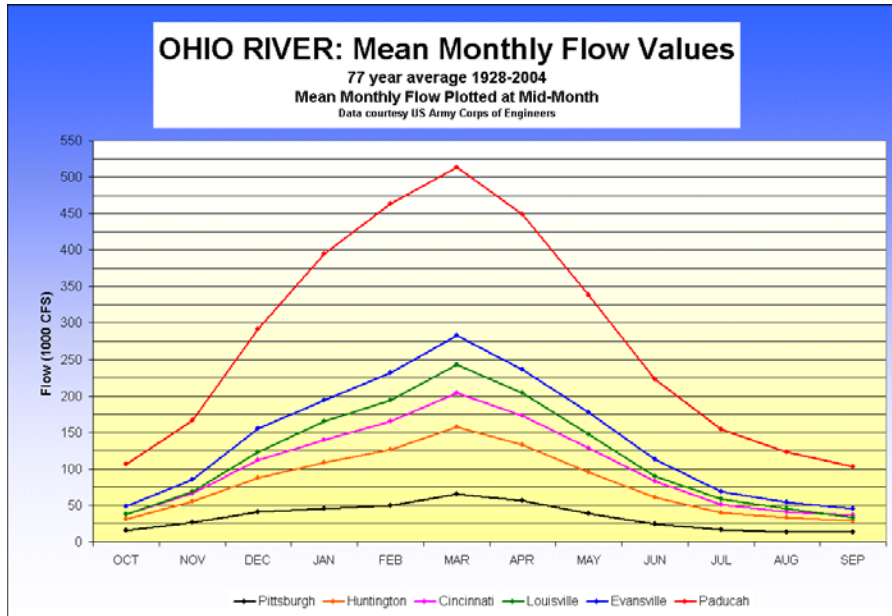
Aug-Sep-Oct Outlook... Above normal temperatures and normal precipitation

Average Yearly rainfall Pittsburgh: 38.19 inches **So far in 2016:** 2.39 (-1.09)

Totals for: 2015:40.56 2014: 36.84 2013: 36.65 inches; 2012: 41.74 inches; 2011: 44.24 inches; 2010: 37.85 inches

Average Yearly snowfall Pittsburgh: 41.9 inches **So far this 2015-16 season:** 15.5 inches (-10.3)

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



For real time River water temperatures: www.weather.gov/pbz/rivertemps