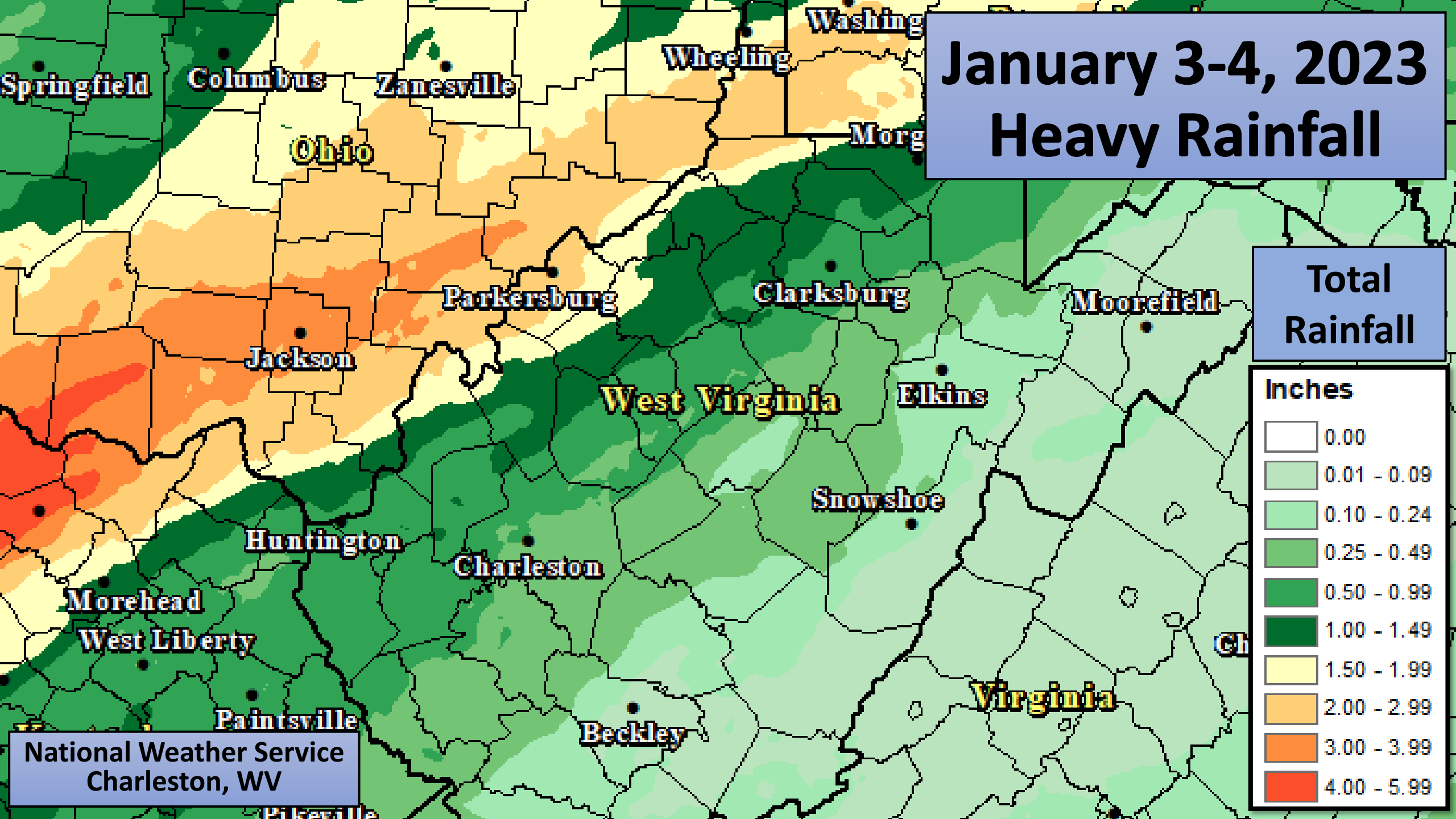
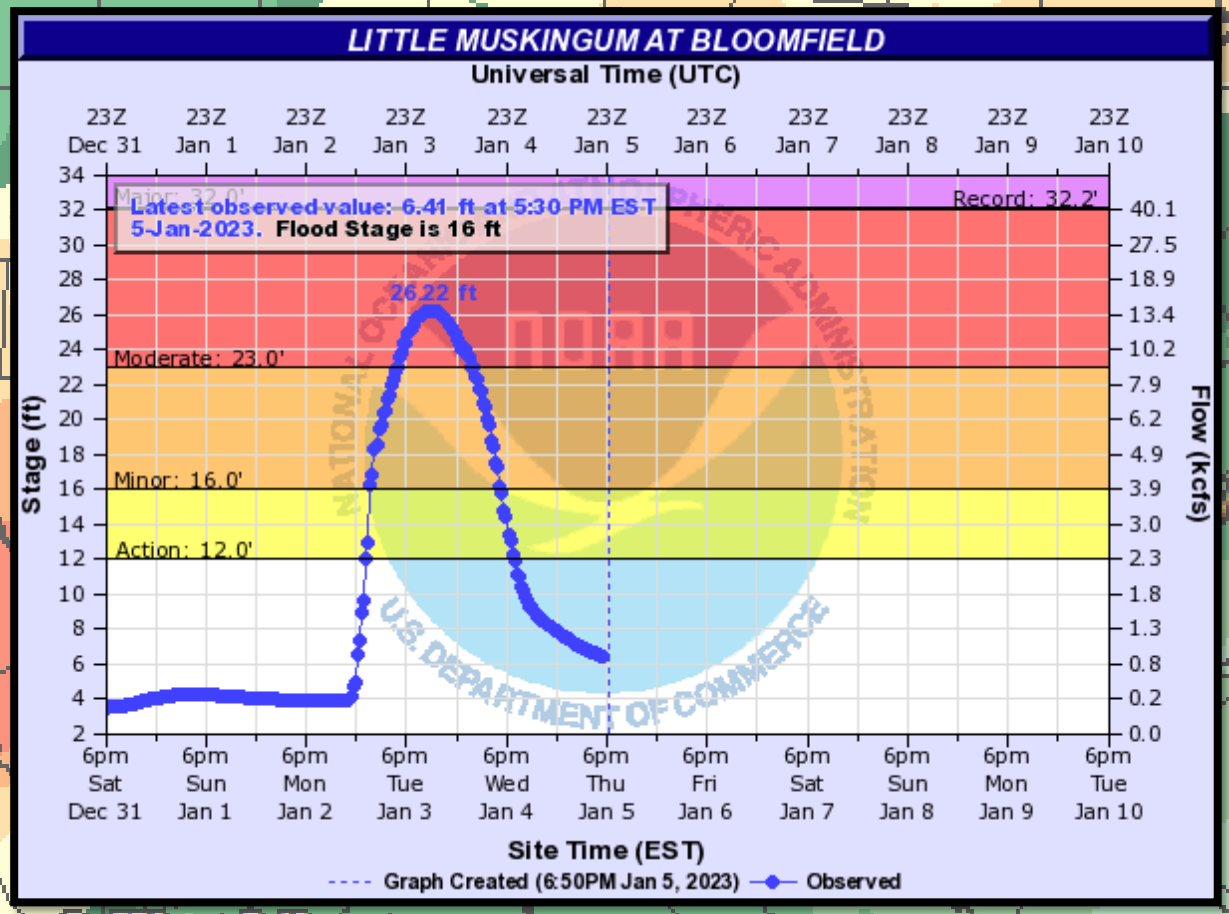

January 3-4, 2023
Heavy Rainfall
Total Rainfall
Inches
0.00
0.01 - 0.09
0.10 - 0.24
0.25 - 0.49
0.50 - 0.99
1.00 - 1.49
1.50 - 1.99
2.00 - 2.99
3.00 - 3.99
4.00 - 5.99
Springfield
Columbus
Zanesville
Wheeling
Ohio
Parkersburg
Clarksburg
Moorefield
Jackson
West Virginia
Elkins
Snowshoe
Huntington
Charleston
Morehead
West Liberty
Paintsville
Beckley
Virginia
National Weather Service
Charleston, WV

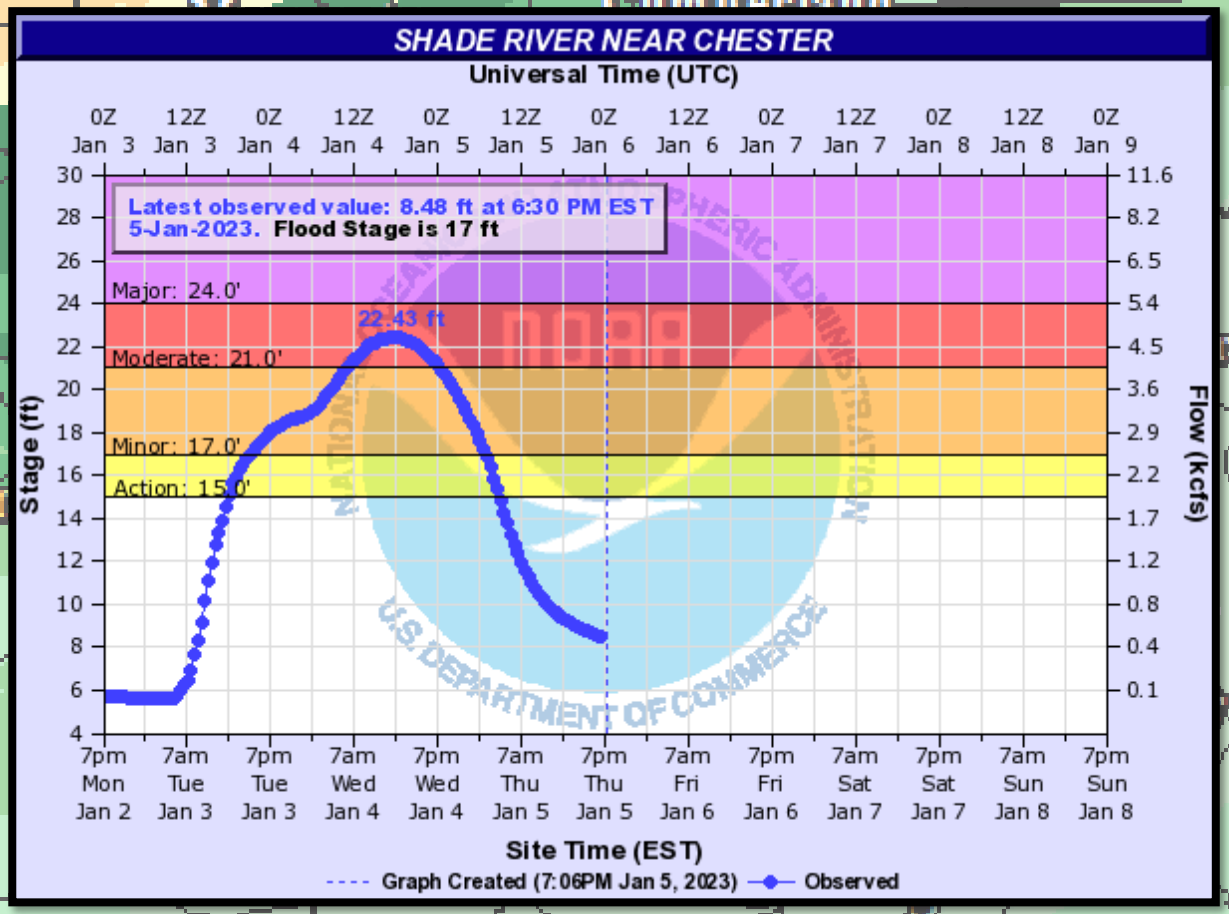
Event Summary

A developing disturbance located across the southern plains on the evening of January 2nd would slowly shift eastward towards the region, with an associated warm front already having lifted north of the area. Rainfall, moderate to heavy at times, would begin to overspread portions of the region during the early morning hours on January 3rd, as warm and moist air continued to push northwards in advance of a cold front located well to the west. The main rainfall axis would primarily stay along and north of the Ohio River through the morning hours of January 3rd, with even a few strong thunderstorms developing. Given these repetitive rounds of heavier rain, rainfall totals across southeast Ohio and in areas just south of the Ohio River quickly began to add up, with widespread amounts of 1-3” by noon on January 3rd. This resulted in numerous flooded and closed roadways across the area.

Fortunately, the heaviest axis of rainfall would begin to shift eastward into West Virginia during the afternoon hours, becoming more transient in nature as it went. This resulted in much lighter rainfall totals of generally under 1” for the rest of the Charleston forecast area, with no flooding issues noted elsewhere. A final round of rain would progress through the region on January 4th in advance of the cold front as it finally pushed through the region, resulting in up to an additional 0.50-0.75” of rain across some of the hardest hit portions of southeast Ohio from the day prior. Fortunately, these higher amounts were quite isolated, with no resulting additional water issues noted. Two-day rainfall totals of 2.0-3.5”+ were observed across the hardest hit locations within the axis of heaviest rainfall.

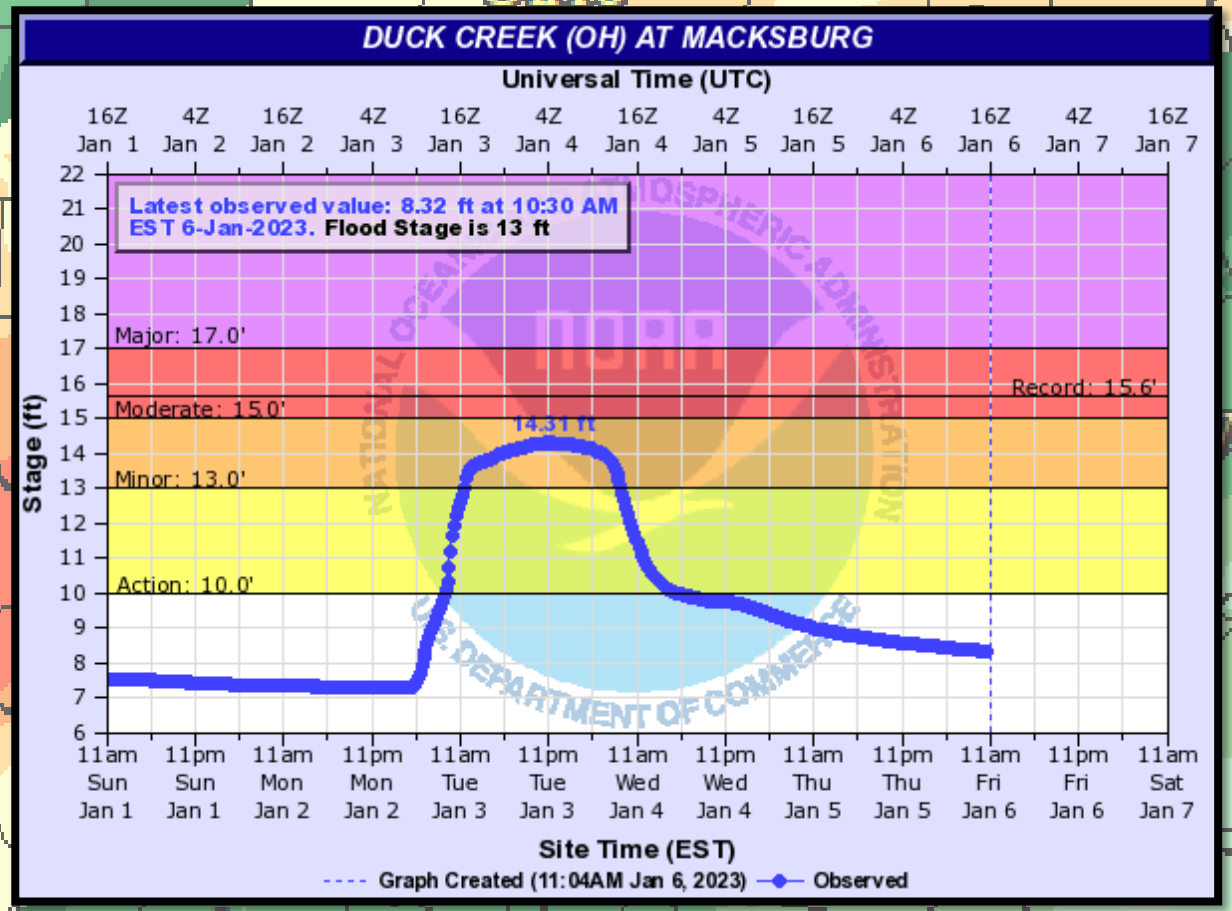
River and Creek Flooding

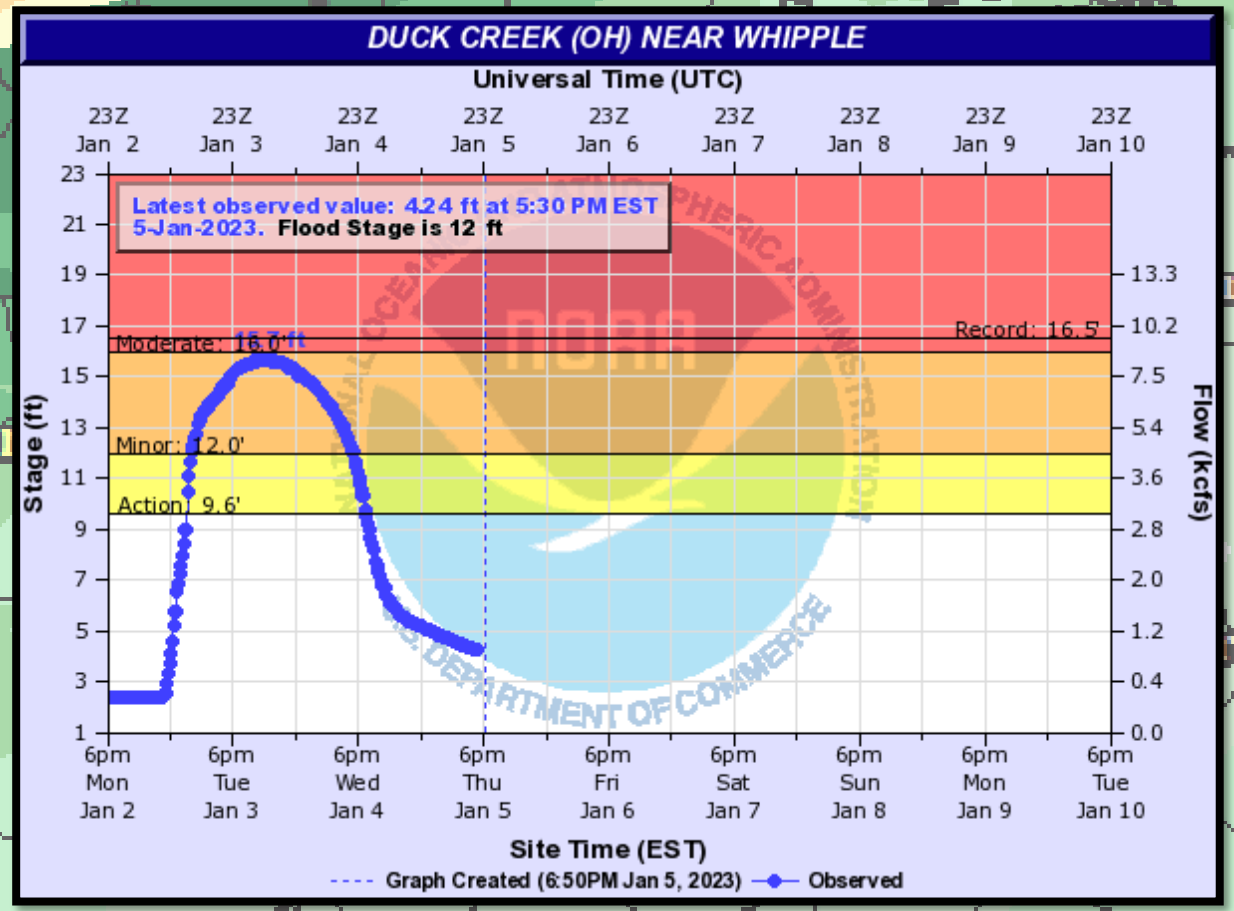




Runoff from the heavy rain across southeast Ohio would result in strong rises on some creeks and rivers, with a few rising into flood stage beginning on January 3rd. The Little Muskingum River at Bloomfield and the Shade River near Chester both rose into moderate flood stage. Both would exit flood stage by the early morning hours of January 5th.

River and Creek Flooding (Cont.)





The gauges on Duck Creek at Macksburg and near Whipple topped out just shy of moderate flood stage. Both would exit flood stage by the evening of January 4th.