



# MONTHLY WATER INVENTORY REPORT FOR OHIO

February 2008

<http://www.dnr.state.oh.us/water/pubs/newsltrs/mwirmain.htm>

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**PRECIPITATION** during February was noticeably above normal statewide. The state average was 5.01 inches, 2.75 inches above normal. This was the 7th wettest February during the past 126 years for the state as a whole. Regional averages ranged from 5.68 inches, 3.79 inches above normal, for the North Central Region to 4.36 inches, 2.21 inches and 1.52 inches above normal for the Central and South Central regions, respectively. For the period of record, this was the wettest February for the North Central, Northeast, West Central and Central Hills regions; the 2nd wettest for the Northwest and Northeast Hills regions; and the 4th wettest for the Central Region. Several stations in northern Ohio received record or near-record amounts of precipitation for the month. Huntsville (Logan County) reported the greatest amount of February precipitation, 8.85 inches. Maysville Locks and Dam (Brown County) reported the least amount, 2.44 inches.

Precipitation during February fell as rain, snow and a wintry mix. Many locations reported measurable precipitation on more than half of the days in February, but only a few days had significant amounts of precipitation. The greatest amount of precipitation fell during February 5-6. A strong storm system crossed the state, producing damaging winds and flooding. Most of the state received 1.5-3.0 inches of rain with some areas in northwestern and west-central Ohio reporting more than 4 inches of rain. Although flooding was reported from many areas of the state, the worst flooding was in northwestern and west-central Ohio. A mix of rain and snow fell throughout the state on February 12. The southeastern half of the state received from 0.5 inch to as much as 1.5 inches of precipitation, tapering to around 0.25 inch in northwestern Ohio. Precipitation on February 17 fell as rain with 0.25-0.75 inch reported across the state. Measurable precipitation fell on several of the remaining days of the month. Most of this precipitation fell as snow in northern Ohio and as rain and snow in southern Ohio. Snowfall for February was above normal. Youngstown Municipal Airport (Trumbull County) reported 32 inches of snow for the month, a February record and more than 20 inches above normal.

Precipitation for the 2008 water year is above normal statewide. The state average is 18.60 inches, 5.56 inches above normal. Regional averages range from 21.46 inches, 7.59 inches above normal, for the Northeast Region to 17.14 inches, 4.56 inches above normal, for the Central Region.

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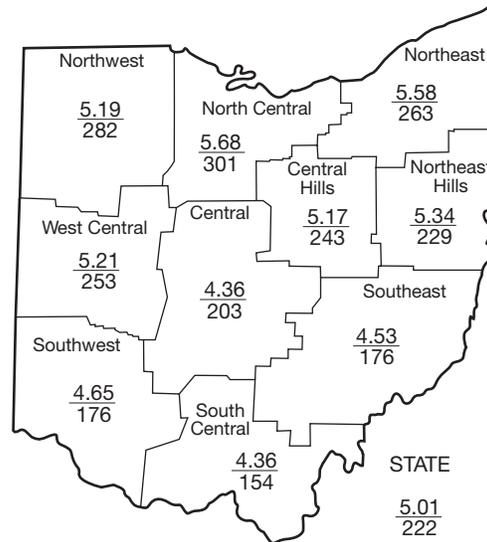
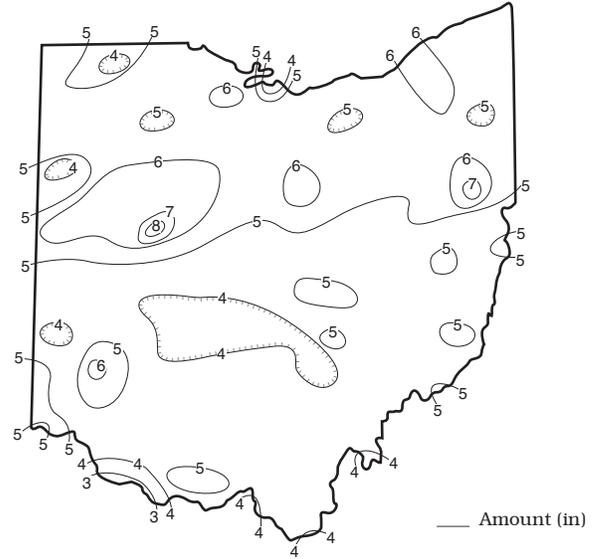
## PRECIPITATION

Region	DEPARTURE FROM NORMAL (IN.) Base period 1951-2000					Palmer Drought Severity Index*
	This Month	Past				
		3 Mos.	6 Mos.	12 Mos.	24 Mos.	
Northwest	+3.35	+5.50	+5.44	+9.26	17.30	+4.9
North Central	+3.79	+5.45	+5.67	+9.19	+19.29	+5.7
Northeast	+3.46	+6.05	+6.68	+6.92	+19.08	+4.8
West Central	+3.15	+5.07	+5.91	+7.06	+17.61	+2.7
Central	+2.21	+3.28	+4.40	+3.87	+13.45	+2.2
Central Hills	+3.04	+3.99	+5.19	+6.54	+13.18	+3.4
Northeast Hills	+3.01	+4.25	+4.64	+6.45	+12.59	+2.8
Southwest	+2.01	+3.15	+5.23	-1.17	+8.21	+2.3
South Central	+1.52	+4.19	+4.28	-2.51	+2.64	+2.2
Southeast	+1.96	+3.62	+3.07	+0.02	+4.34	+2.6
State	+2.75	+4.45	+5.05	+4.55	+12.74	+2.6

\*Above +4 = Extreme Moist Spell  
3.0 To 3.9 = Very Moist Spell  
2.0 To 2.9 = Unusual Moist Spell  
1.0 To 1.9 = Moist Spell  
0.5 To 0.9 = Incipient Moist Spell  
0.4 To -0.4 = Near Normal

-0.5 To -0.9 = Incipient Drought  
-1.0 To -1.9 = Mild Drought  
-2.0 To -2.9 = Moderate Drought  
-3.0 To -3.9 = Severe Drought  
Below -4.0 = Extreme Drought

## PRECIPITATION FEBRUARY



Average (in)  
Percent of normal

## MEAN STREAM DISCHARGE

This Month

River and Location	Drainage Area (Sq. Mi.)	Mean Discharge (CFS)	% of Normal	% of Normal Past		
				3 Mos.	6 Mos.	12 Mos.
Grand River near Painesville	685	3,238	191	161	139	130
Great Miami River at Hamilton	3,630	10,320	218	183	151	129
Huron River at Milan	371	1,641	334	223	205	181
Killbuck Creek at Killbuck	464	1,317	189	155	136	116
Little Beaver Creek near East Liverpool	496	1,609	186	167	141	114
Maumee River at Waterville	6,330	22,340	341	241	212	156
Muskingum River at McConnelsville	7,422	20,510	169	214	192	101
Scioto River near Prospect	567	2,108	323	235	212	161
Scioto River at Higby	5,131	13,220	171	147	124	108
Stillwater River at Pleasant Hill	503	1,467	234	214	179	143

**STREAMFLOW** during February was above normal statewide. Flows during the month were greater than those observed during January and were high enough to be considered excessive throughout the state. Preliminary data indicates that flows in the northern half of the state were at record or near-record February levels. The Huron River at Milan gauging station recorded its greatest flow for February; the Scioto River near Prospect gauging station recorded its second greatest flow for February; the Maumee River at Waterville and the Grand River near Painesville gauging stations recorded their fourth greatest flow for February.

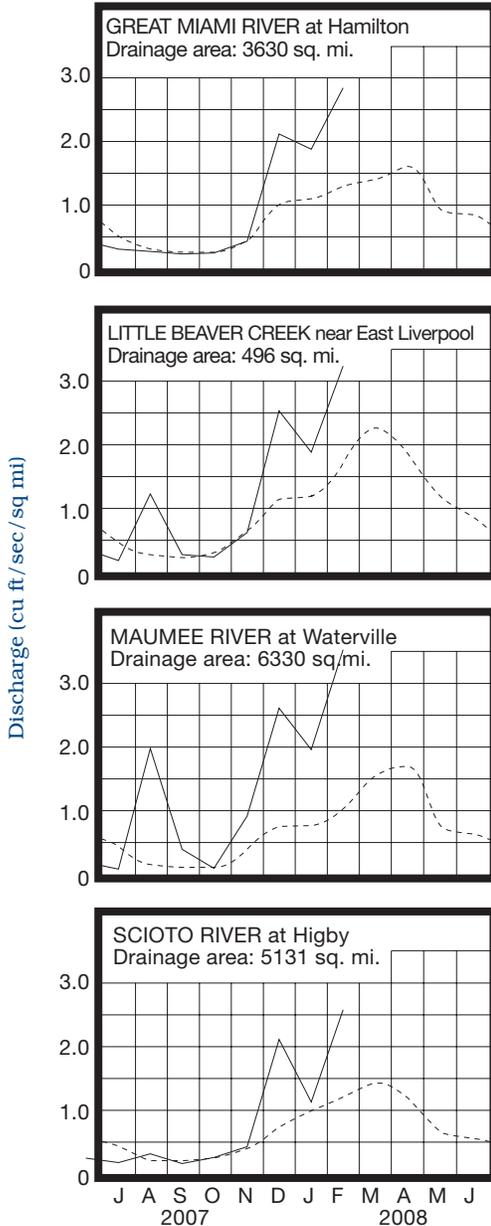
Flows at the beginning of the month were below normal across much of the state, but above normal in some northeastern Ohio basins. Most drainage basins recorded their lowest flows for February during the first 4

days of the month. Drainage basins in northeastern Ohio recorded their lowest flows near the end of the month. Flows increased rapidly following widespread precipitation that fell during February 5-6. Greatest flows for the month occurred during February 6-9 throughout most of the state. Significant flooding resulting from this storm impacted many of the same areas in northern Ohio that were severely affected from flooding during August 2007. Generally, flows declined from these peaks through February 16, increased during February 17-19, and then declined again throughout the remainder of the month. At the end of February, flows in a few basins remained above normal but had declined to below normal flows in most basins across Ohio.

**RESERVOIR STORAGE** during February increased in both the Mahoning and Scioto river basins. At the end of the month, reservoir storage was above normal in both basins.

Reservoir storage at the end of February in the Mahoning basin index reservoirs was 83 percent of rated capacity for water supply compared with 77 percent for last month and 79 percent for February 2007. Month-end storage in the Scioto basin index reservoirs was 94 percent of rated capacity for water supply compared with 91 percent for last month and 95 percent for February 2007. Surface water supplies continue to be in good shape throughout Ohio.

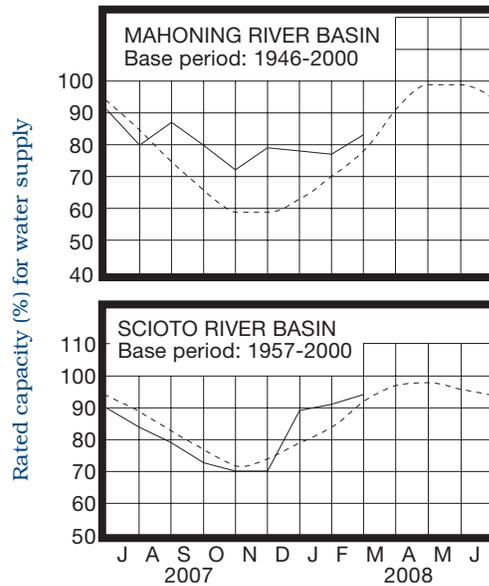
## MEAN STREAM DISCHARGE



Base period for all streams: 1971-2000

Normal - - - - Current ———

## RESERVOIR STORAGE FOR WATER SUPPLY





(Precipitation continued from front)

Precipitation for the 2008 calendar year is also above normal statewide. The state average is 7.34 inches, 2.51 inches above normal. Regional averages range from 8.62 inches, 3.98 inches above normal, for the Northeast Region to 6.09 inches, 1.39 inches above normal, for the Central Region.

### SUMMARY

Precipitation during February was noticeably above normal. Streamflow was above normal statewide and high enough to be considered excessive. Reservoir storage increased and was above normal statewide. Ground water levels rose seasonally throughout the state. Lake Erie mean level rose 0.52 foot and was 0.36 foot above the long-term February average.

### NOTES AND COMMENTS

#### Division Of Water Website

Be sure to regularly visit the Division of Water's website. It is an easy method to quickly find information and answers to many questions about Ohio's abundant water resources. New and updated information as well as additional products are being routinely added. The address is: [www.dnr.state.oh.us/water/](http://www.dnr.state.oh.us/water/).

The website includes information about the Division of Water's programs and policies, Ohio Revised Code references, contact information for all staff members, a list of publications many of which can be downloaded and printed, updates on current projects and many links to other websites of interest. Also included is information about the Ohio Water Education Program and Project Wet. On this website you can find current and back issues of this report that can be viewed and/or printed. So, if you need information related to Ohio's Canal Lands, Dam Safety, Floodplain Management, Ground Water, Water Inventory, Water Planning or educational programs, visit the Division of Water's website.

#### Editorial

The purpose of this report is to disseminate current hydrologic data in a timely and brief format. Observation points have been selected which are considered to be sufficiently representative of hydrologic conditions in the state to permit an evaluation of the current water-supply situation. These key observation stations offer the best available data on the basis of accuracy and length of record, minimal artificial effects on data, and availability of records. Data from these stations are collected by various agencies at the end of each month and processed immediately. Because of the time limitations involved, all data presented in this report must be considered preliminary and may be subject to revision before publication in regular form by the agencies involved. The remarks in this report include the writer's opinion of the cause and significance of the phenomena reported. The author is indebted to the various agencies and individuals who make this data available.

More complete and detailed information regarding water resources can be obtained by contacting the Division of Water or visiting our website at: [www.dnr.state.oh.us/water/](http://www.dnr.state.oh.us/water/). Comments and suggestions regarding this report are always welcome.

### ACKNOWLEDGMENTS

This report has been compiled from Division of Water data and from information supplied by the following:

#### Precipitation data:

*U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service; The Miami Conservancy District; U.S. Army Corps of Engineers, Muskingum Area.*

#### Streamflow and reservoir storage data:

*U.S. Geological Survey, Water Resources Division.*

#### Lake Erie level data:

*U.S. Army Corps of Engineers, Detroit District.*

#### Palmer Drought Severity Index:

*U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service.*



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