



MONTHLY WATER INVENTORY REPORT FOR OHIO

February 2012

<http://www.ohiodnr.gov/tabid/4191/Default.aspx>

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Water Inventory Unit

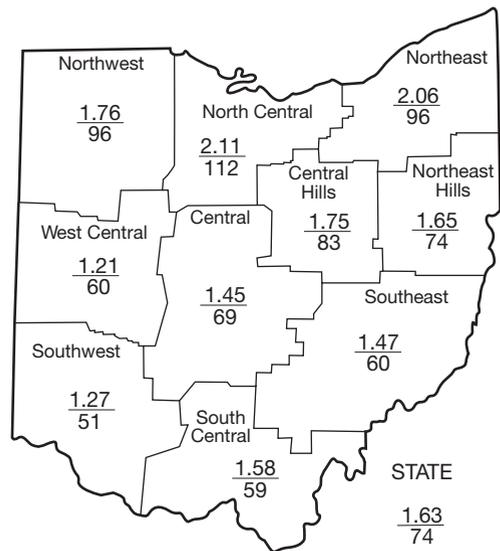
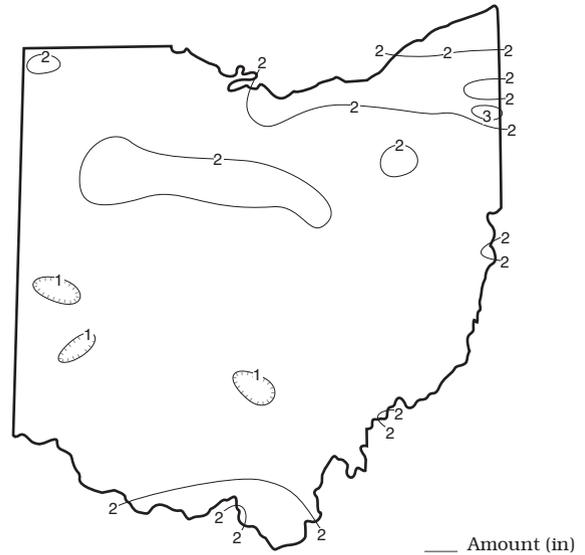
PRECIPITATION during February was below normal across most of the state; only the North Central Region had above normal precipitation. The average for the state was 1.63 inches, 0.57 inch below normal. Regional averages ranged from 2.11 inches, 0.23 inch above normal, for the North Central Region to 1.21 inches, 0.82 inch below normal, for the West Central Region. Youngstown/Warren Regional Airport (Trumbull County) reported the greatest amount of February precipitation, 3.21 inches. Dayton MCD (Montgomery County) reported the least amount, 0.80 inch.

Precipitation during February fell as both rain and snow. Snowfall for the month was below normal throughout most of the state. There were several days with precipitation but only a few reporting more than 0.25 inch. February began with light showers statewide with south-central Ohio reporting the greatest amount of 0.5 inch. Precipitation fell on and off during February 10-17 with much of this precipitation falling as snow across northern Ohio. Total precipitation (liquid, melted) during this period was between 0.50 and 1.0 inch throughout most of the state, but areas in western Ohio reported around 0.25 inch. Showers crossed the state again during February 21-25 with northern and extreme south-central Ohio receiving another 0.5-1.0 inch of precipitation, but less than 0.25 inch elsewhere. The most significant precipitation for the month began late on February 28 in western Ohio and spread across the state on February 29. Showers and thunderstorms produced 1-2 inches of precipitation south of a line from Cincinnati to Marietta, and in northeastern Ohio. Generally, 0.5-1.0 inch fell elsewhere, but some areas in western Ohio received less than 0.5 inch.

Precipitation for the 2012 water year is above normal statewide. The state average is 19.37 inches, 5.98 inches above normal. Regional averages range from 22.11 inches, 7.52 inches above normal, for the Southwest Region to 17.83 inches, 3.40 inches above normal, for the South Central Region.

Precipitation for the first two months of the 2012 calendar year is above normal across much of the state, but below normal in areas of south-central, southeastern and west-central Ohio. The state average is 5.10 inches, 0.34 inch above normal. Regional averages range from 6.01 inches, 1.31 inches above normal, for the Northeast Region to 4.40 inches, 0.04 inch below normal, for the West Central Region.

PRECIPITATION FEBRUARY



PRECIPITATION

Region	DEPARTURE FROM NORMAL (IN.) Base period 1961-2010					Palmer Drought Severity Index*
	This Month	Past				
		3 Mos.	6 Mos.	12 Mos.	24 Mos.	
Northwest	-0.07	+1.63	+10.54	+16.56	+17.50	+5.1
North Central	+0.23	+2.34	+10.14	+18.70	+21.73	+6.6
Northeast	-0.08	+2.88	+9.69	+20.40	+22.03	+5.2
West Central	-0.82	+2.21	+10.92	+16.01	+16.48	+4.2
Central	-0.64	+2.72	+8.45	+16.39	+15.64	+3.0
Central Hills	-0.36	+2.69	+8.41	+14.24	+13.94	+3.8
Northeast Hills	-0.59	+1.07	+6.39	+14.44	+14.26	+2.1
Southwest	-1.23	+3.24	+11.30	+18.60	+15.81	+3.2
South Central	-1.10	-1.26	+5.90	+16.37	+19.38	+3.0
Southeast	-0.99	+0.29	+6.71	+14.54	+13.76	+3.3
State	-0.57	+1.77	+8.83	+16.61	+17.05	+3.3

*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

MEAN STREAM DISCHARGE

This Month

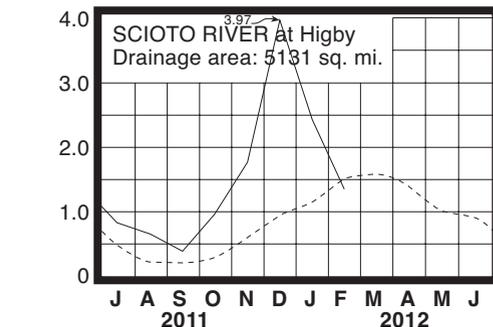
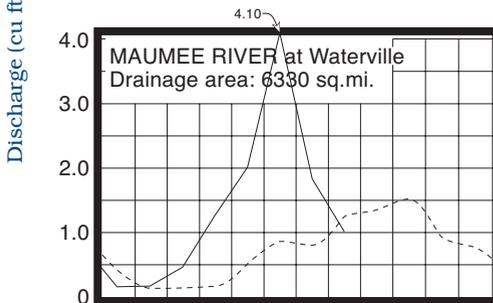
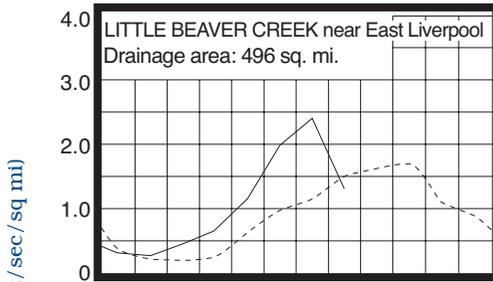
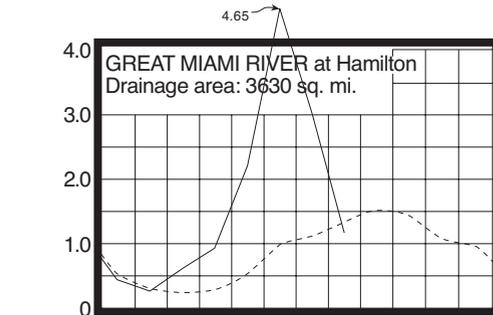
River and Location	Drainage Area (Sq. Mi.)	Mean Discharge (CFS)	% of Normal	% of Normal Past		
				3 Mos.	6 Mos.	12 Mos.
Grand River near Painesville	685	1,064	60	126	163	180
Great Miami River at Hamilton	3,630	4,241	88	220	227	234
Huron River at Milan	371	443	86	160	207	242
Killbuck Creek at Killbuck	464	637	93	189	191	183
Little Beaver Creek near East Liverpool	496	652	88	132	133	147
Maumee River at Waterville	6,330	6,387	81	190	218	202
Muskingum River at McConnelsville	7,422	11,630	92	157	157	155
Scioto River near Prospect	567	534	104	212	291	281
Scioto River at Higby	5,131	6,905	89	194	202	217
Stillwater River at Pleasant Hill	503	336	54	173	173	190

STREAMFLOW during February was below normal across most of the state. Flows during February were significantly lower than the excessive flows observed during January.

Streamflow at the beginning of the month was well above normal statewide. Most areas had their greatest flows for the month at the start of February. Generally, flows declined throughout most of the month with slight, temporary increases noted following precipitation, mainly around February 18 and again around February 25. Flows increased statewide on the last day of the month in response to widespread precipitation. Lowest flows for the month occurred just before this precipitation across most of the state. Greatest flows were observed in northeastern Ohio basins on the last day of the month. Flows at the end of

February were increasing and were above normal in northeastern Ohio, but below normal across the remainder of the state.

MEAN STREAM DISCHARGE

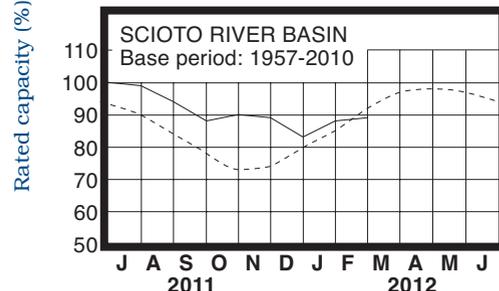
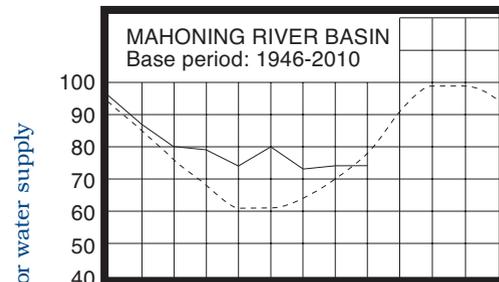


Base period for all streams: 1981-2010

RESERVOIR STORAGE for water supply during February was nearly unchanged from last month. Storage fell to slightly below normal in both the Mahoning and Scioto river basins.

Reservoir storage at the end of February in the Mahoning basin index reservoirs was 74 percent of rated capacity for water supply compared with the same for last month and 87 percent for February 2011. Month-end storage in the Scioto basin index reservoirs was 89 percent of rated capacity for water supply compared with 88 percent for last month and 103 percent for February 2011. Surface water supplies are currently in good shape throughout the state.

RESERVOIR STORAGE FOR WATER SUPPLY



Normal - - - - Current ———

GROUND-WATER LEVELS

Based on daily lowest level in feet below land-surface datum

GROUND WATER levels during February showed mixed responses. Water levels in most aquifers in the northern half of the state rose slightly during much of the month, but began to decline near month's end. Aquifers in southern Ohio were rather stable or declined slightly throughout the month. February is a month in which ground water levels usually rise seasonally in all aquifers. Net rises from last month's levels were less than usually observed with net declines recorded in many aquifers.

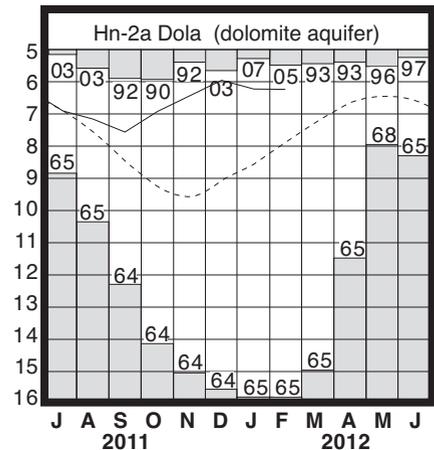
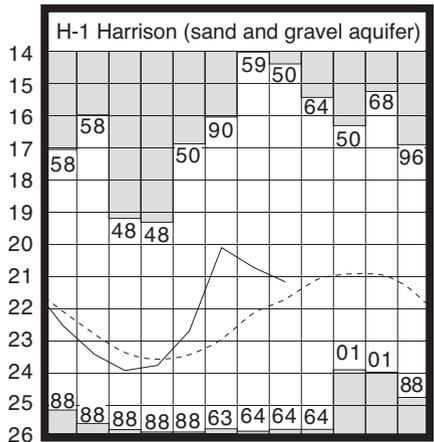
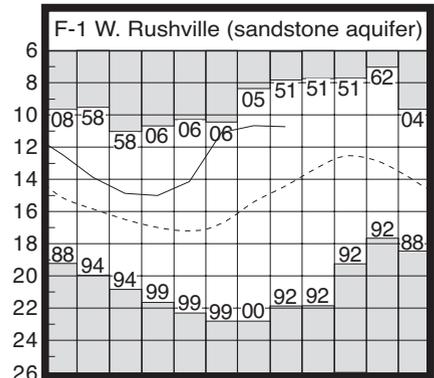
Ground water supplies are in good shape throughout Ohio. The current recharge season has been beneficial to the state's ground water supplies. However, recharge slowed during February due to the below normal precipitation. Ground water levels continue to be above normal throughout most of the state. Current levels are higher than they were at this time last year statewide, ranging between 1.5 and 3.0 feet above the February 2011 levels. With a return to near-normal precipitation and continuation of the recharge season during the next few months, ground water supplies should continue to be ample throughout the state.

LAKE ERIE level declined during February. The mean level was 572.08 feet (IGLD-1985), 0.03 foot lower than last month's mean level and 1.25 feet above normal. This month's mean level is 2.03 feet above the February 2011 level and 2.88 feet above Low Water Datum.

The U.S. Army Corps of Engineers (USACE) reports that precipitation in the Lake Erie basin during February averaged 1.70 inches, 0.39 inch below normal. For the entire Great Lakes basin, February precipitation averaged 1.38 inches, 0.40 inch below normal. In addition, the USACE reports that based on the current condition of the Great Lakes basin and anticipated weather conditions, the level of Lake Erie should remain above normal for the foreseeable future. Deviations from the anticipated weather patterns could result in the level of Lake Erie ranging from as much as 16 inches above normal to about 8 inches below the normal seasonal average.

Index Well	Location	Aquifer	Mean This Month	Departure From Normal	Change in feet from:	
					Last Month	Year Ago
F-1	W. Rushville, Fairfield Co.	Sandstone	10.71	+3.69	-0.07	+1.88
Fa-1	Jasper Mill, Fayette Co.	Limestone	7.55	-0.05	-0.11	+1.52
Fr-10	Columbus, Franklin Co.	Gravel	41.98	+1.47	+0.43	+2.75
H-1	Harrison, Hamilton Co.	Gravel	21.17	+0.53	-0.46	+2.12
Hn-2a	Dola, Hardin Co.	Dolomite	6.23	+1.76	-0.01	+2.50
Po-124	Freedom, Portage Co.	Sandstone	75.43	+1.34	+0.37	+2.18
Tu-1	Strasburg, Tuscarawas Co.	Gravel	11.49	+1.07	+0.19	+2.98

GROUND-WATER LEVELS

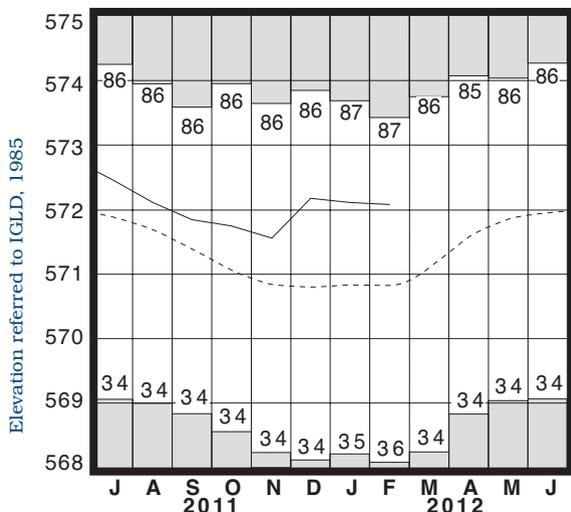


Water level (ft below land surface)

Base periods: F-1, 1947-2010; H-1 1951-2010.

Hn-2a, 1955-2010 ■ Record high and low, year of occurrence

LAKE ERIE LEVELS



Base period: 1918-2010

■ Record high and low, year of occurrence

Normal - - - - - Current ———

SUMMARY

Precipitation during February was below normal throughout most of the state with only the North Central Region having above normal precipitation. Streamflow was below normal across most of the state. Reservoir storage was nearly unchanged from last month, but fell to below normal in both the Mahoning and Scioto river basins. Ground water storage remained above normal throughout most of the state. Lake Erie level declined 0.03 foot and was 1.25 feet above the long-term February average.

NOTES AND COMMENTS

Severe Weather Awareness Week

Governor John Kasich has designated the week of March 25-31, 2012 as Spring Severe Weather Safety Awareness Week. The goal is to better educate people about the hazards of severe weather and to encourage people to have a plan in the event severe weather should occur. Each year the Ohio Committee for Severe Weather Awareness (OCSWA) sponsors two awareness weeks to draw attention to the need to prepare for severe weather. The OCSWA consists of representatives from the National Weather Service, American Red Cross, Emergency Management Association of Ohio, Ohio Citizens Corps, State Fire Marshal's office, Ohio Emergency Management Agency, Ohio Departments of Aging, Education, Health, Insurance, Natural Resources, and Transportation, the Ohio Insurance Institute and the Ohio News Network. A statewide tornado drill will be conducted on March 28 at 9:50 am. Communities and individuals should use this time to think about what course of action they would take in the event if severe weather was to affect them and their property.

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 Soil and Water Resources or visiting our website at: <http://www.dnr.state.oh.us/tabid/21817/Default.aspx>. Comments and suggestions regarding this report are always welcome.

ACKNOWLEDGMENTS

This report has been compiled from Division 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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