



MONTHLY WATER INVENTORY REPORT FOR OHIO

January 2007

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

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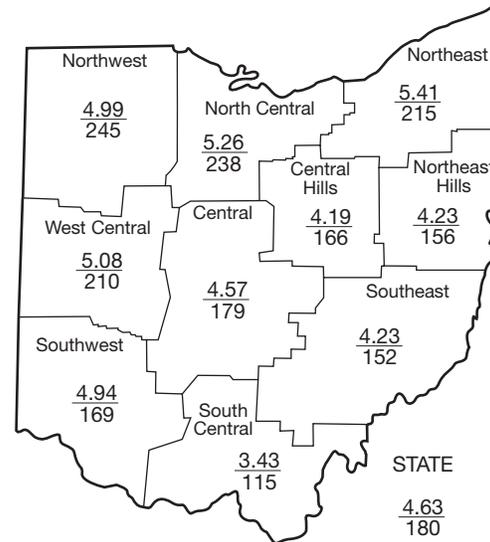
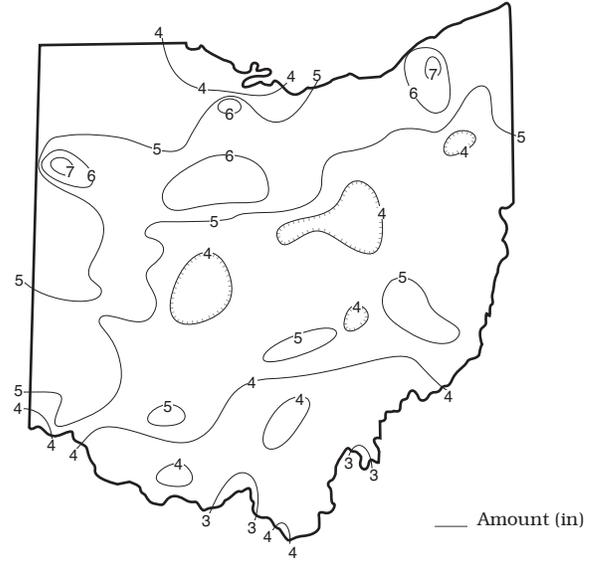
PRECIPITATION during January was above normal statewide with only a few locations in extreme south-central Ohio having below normal precipitation. The state average was 4.63 inches, 2.06 inches above normal. Regional averages ranged from 5.41 inches, 2.89 inches above normal, for the Northeast Region to 3.43 inches, 0.45 inch above normal, for the South Central Region. This was the 6th wettest January during the past 113 years for both the North Central and Northeast regions and the 7th wettest for the Northwest Region. Van Wert (Van Wert County) reported the greatest amount of January precipitation, 7.47 inches. Greenup Dam (Scioto County) reported the least amount, 2.30 inches.

Most of the January precipitation fell as rain during the first half of the month. Widespread rain across the state during January 4-5 was heaviest in northern Ohio, where generally 1-2 inches was reported, while 0.5-1.0 inch was reported in southern Ohio. Some minor flooding occurred in northern Ohio following this precipitation. Widespread rain during January 12-15 brought 1.5-3.0 inches across much of the state, but lesser amounts in extreme south-central and southeastern Ohio. Flooding occurred across many areas of the state, but most of the flooding was again minor. The flood threat decreased after January 15 as colder and much drier conditions prevailed during the second half of the month. Scattered precipitation, mainly in the form of snow, fell on several days during this period; however, total precipitation was rather light, with less than 0.50 inch reported across most of Ohio. The only significant snow fell on January 21 with 2-4 inches of snow reported across most of the state. The exception was in the northeastern Ohio snowbelt where monthly snow amounts were about twice the January average. Chardon (Geauga County) reported 49 inches of snow for the month. For the season, Chardon has received 81 inches of snow, about 129 percent of normal.

Precipitation for the 2007 water year is above normal statewide. The average for the state as a whole is 15.76 inches, 4.98 inches above normal. Regional averages range from 17.60 inches, 5.85 inches above normal, for the Northeast Region to 13.97 inches, 2.91 inches above normal, for the Southeast Region.

The 2007 calendar year is off to a good start as far as precipitation is concerned. Near-normal precipitation and other climatic conditions during the remainder of the recharge season will enhance the favorable position water supplies currently are in across the state.

PRECIPITATION JANUARY



Average (in)
Percent of normal

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	+2.95	+4.16	+6.43	+8.73	+7.22	+4.2
North Central	+3.05	+4.35	+6.56	+10.62	+12.78	+5.1
Northeast	+2.89	+2.81	+6.64	+12.69	+13.59	+5.8
West Central	+2.66	+3.44	+7.58	+10.03	+11.18	+4.9
Central	+2.02	+1.88	+8.44	+8.66	+8.09	+3.6
Central Hills	+1.67	+1.41	+4.15	+6.55	+5.72	+3.3
Northeast Hills	+1.51	-0.13	+3.86	+5.75	+5.78	+2.3
Southwest	+2.01	+1.64	+6.90	+7.51	+2.42	+3.4
South Central	+0.45	-1.48	+7.51	+3.14	-1.27	+2.8
Southeast	+1.45	-0.78	+5.53	+3.13	+2.59	+2.6
State	+2.06	+1.73	+6.35	+7.67	+6.80	+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

MEAN STREAM DISCHARGE

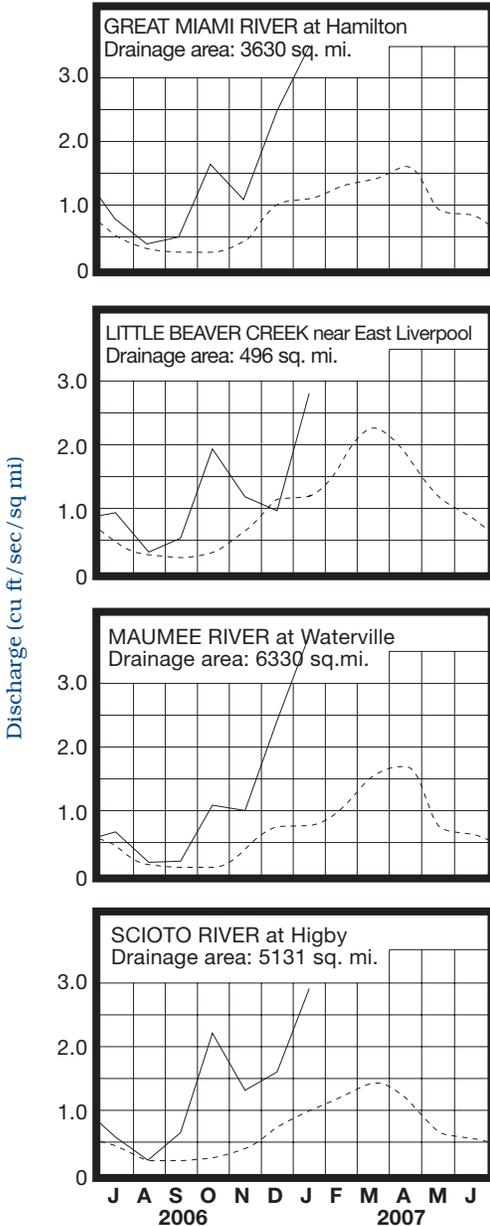
This Month

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	2,890	211	233	280	169
Great Miami River at Hamilton	3,630	12,720	318	236	232	145
Huron River at Milan	371	1,398	325	232	208	144
Killbuck Creek at Killbuck	464	1,215	231	169	157	125
Little Beaver Creek near East Liverpool	496	1,391	236	136	159	100
Maumee River at Waterville	6,330	23,830	487	273	253	137
Muskingum River at McConnelsville	7,422	22,590	245	255	269	102
Scioto River near Prospect	567	2,097	418	279	285	147
Scioto River at Higby	5,131	14,960	236	189	210	120
Stillwater River at Pleasant Hill	503	1,661	370	240	223	136

STREAMFLOW during January was above normal statewide. Flows were high enough to be considered excessive across most of Ohio. January flows were greater than the December flows throughout the state.

Streamflow at the beginning of January was above normal across most of Ohio. Flows increased following the precipitation that fell during January 4-5. Greatest flows for the month occurred around January 6 and 7 in some northeastern Ohio basins. Flows generally declined during the next week, then rose in response to the widespread precipitation that fell during January 12-15. Greatest flows for the month occurred between January 15 and 17 throughout the remainder of the state. Although flooding was widespread following this precipitation, no major flooding events occurred. Flows declined from these peaks throughout the end of the month, at which time the lowest flows for January were observed across most of the state. Streamflow at the end of the month had declined to below normal across nearly the entire state.

MEAN STREAM DISCHARGE



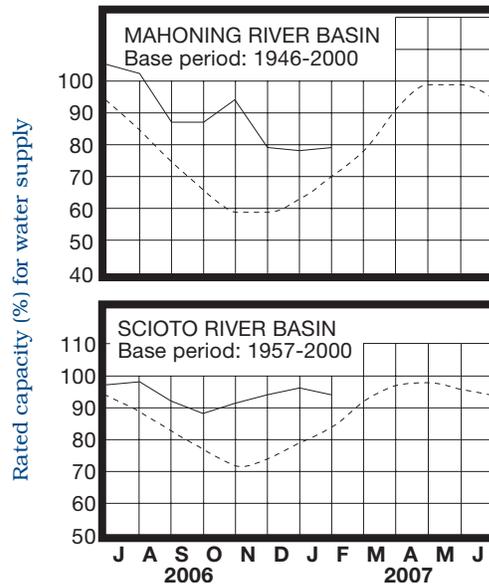
Base period for all streams: 1971-2000

Normal - - - - Current ———

RESERVOIR STORAGE during January increased slightly in the Mahoning River basin and decreased slightly in the Scioto River basin. Storage remained above normal in both basins.

Reservoir storage at the end of January in the Mahoning basin index reservoirs was 79 percent of rated capacity for water supply, compared with 78 percent for last month and 79 percent for January 2006. Month-end storage in the Scioto basin index reservoirs was 94 percent of rated capacity for water supply, compared with 96 percent for last month and 91 percent for January 2006.

RESERVOIR STORAGE FOR WATER SUPPLY



GROUND WATER levels during January rose statewide. Generally, net positive changes from last month's levels were greater than usually observed. Levels in most unconsolidated aquifers rose during the first half of the month and declined during the second half. Levels in consolidated aquifers rose during the first three weeks of January and then remained rather stable, beginning to decline in some aquifers near the end of the month.

Ground water supplies are in good condition throughout the state. Current ground water levels are higher than they were a year ago statewide, ranging from about 0.50 foot to more than 2.5 feet above the January 2006 levels. Ground water levels are above normal across most of the state. Index observation wells HN-2A (Hardin County), representing the carbonate aquifers of northwestern Ohio, and PO-1 (Portage County), representing the sandstone aquifers in eastern and northeastern Ohio, reached a record-high level for January. With near-normal precipitation and other climatic conditions during the next few months, ground water supplies should continue to improve and maintain their favorable condition.

LAKE ERIE level rose during January. The mean level was 571.88 feet (IGLD-1985), 0.46 foot higher than last month's mean level and 1.01 feet above normal. This month's mean level is 1.08 feet higher than the January 2006 level and 2.68 feet above Low Water Datum.

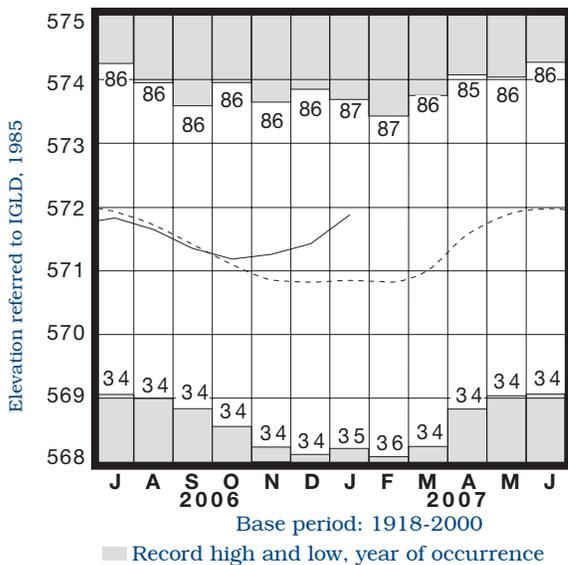
The U.S. Army Corps of Engineers (USACE) reports that precipitation in the Lake Erie basin during January averaged 4.18 inches, 1.71 inches above normal. For the entire Great Lakes basin, January precipitation averaged 1.91 inches, 0.30 inch below normal. In addition, the USACE reports that based on the current condition of the Great Lakes basin and anticipated weather conditions, the level of Lake Erie should fall from its current position of 12 inches above normal to about normal by late summer. Deviations in the anticipated weather patterns could result in the level of Lake Erie ranging from about 14 inches above to 11 inches below the normal seasonal average.

GROUND-WATER LEVELS

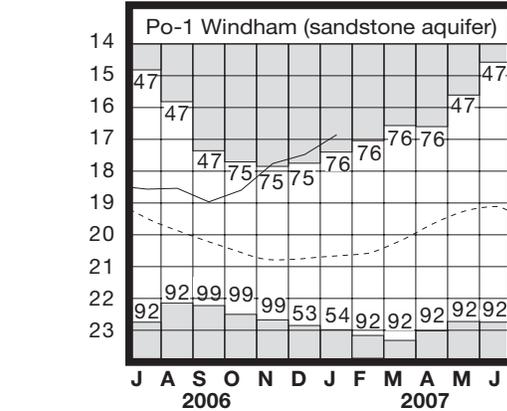
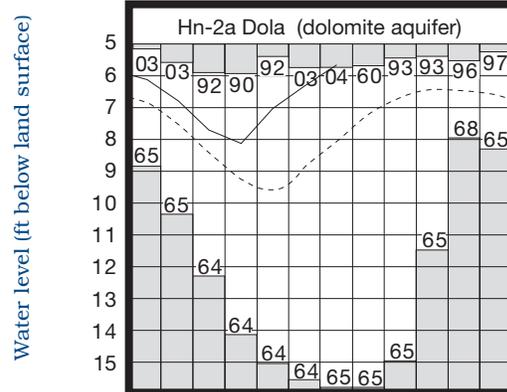
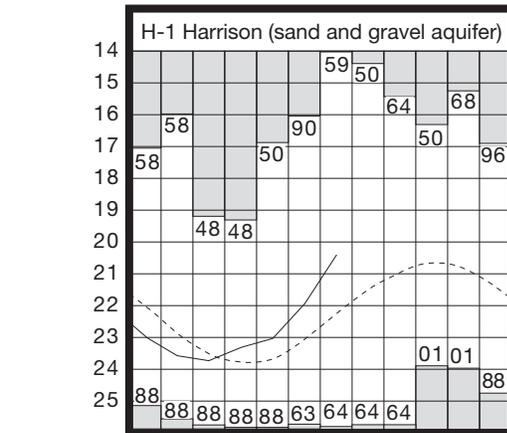
Based on daily lowest level in feet below land-surface datum

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	10.11	+5.68	+1.06	+2.49
Fa-1	Jasper Mill, Fayette Co.	Limestone	7.28	+0.24	+0.32	+1.42
Fr-10	Columbus, Franklin Co.	Gravel	43.56	-0.22	+0.72	+0.65
H-1	Harrison, Hamilton Co.	Gravel	20.40	+1.83	+1.55	+2.19
Hn-2a	Dola, Hardin Co.	Dolomite	5.66	+2.42	+0.65	+0.53
Po-1	Windham, Portage Co.	Sandstone	16.85	+3.82	+0.63	+2.49
Tu-1	Strasburg, Tuscarawas Co.	Gravel	11.77	+1.35	+0.88	+1.30

LAKE ERIE LEVELS



GROUND-WATER LEVELS



Base periods: H-1, 1951-2000. Hn-2a, 1955-2000.
Po-1, 1947-2000

Normal - - - - Current ———

SUMMARY

Precipitation and streamflow were above normal statewide during January. Reservoir storage increased slightly in the Mahoning River basin and decreased slightly in the Scioto River basin. Storage remained above normal in both basins. Ground water levels rose statewide and were above normal across most of Ohio. Lake Erie level rose 0.46 foot and was 1.01 feet above the long-term January average.

NOTES AND COMMENTS

New Director At ODNR

Sean D. Logan was appointed by Governor Ted Strickland as the new director of the Ohio Department of Natural Resources (ODNR), effective January 8. He is the 11th person to serve as director of ODNR since the department was formed in 1949. Mr. Logan follows Sam Speck, who served as the ODNR director for the past eight years.

Director Logan began his public-service career in 1990 with election to the Ohio House of Representatives, where he represented Columbiana County until 2000. During six of his years in the legislature, he served on the House Agricultural and Natural Resources Committee, developing a reputation as a strong supporter of ODNR and its programs. Most recently, he served as president of the board of commissioners in Columbiana County, where he had been a commissioner since 2001. From that service, he developed a particular interest in solid waste management and recycling issues. Until his appointment to ODNR, he had been a member of the Little Beaver Creek Wild and Scenic River Advisory Board and held an appointment to the Ohio Solid Waste Advisory Council. He is a past recipient of the Columbiana County Federation of Conservation Clubs Outstanding Service Award.

Director Logan, his wife and their three children live in a home on Guilford Lake – one of Ohio's historic canal reservoirs – near Lisbon in Columbiana County. He attended Muskingum College, where he received a bachelor's degree in political science and speech communication. He also earned his law degree from Capital University Law School in 2001.

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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